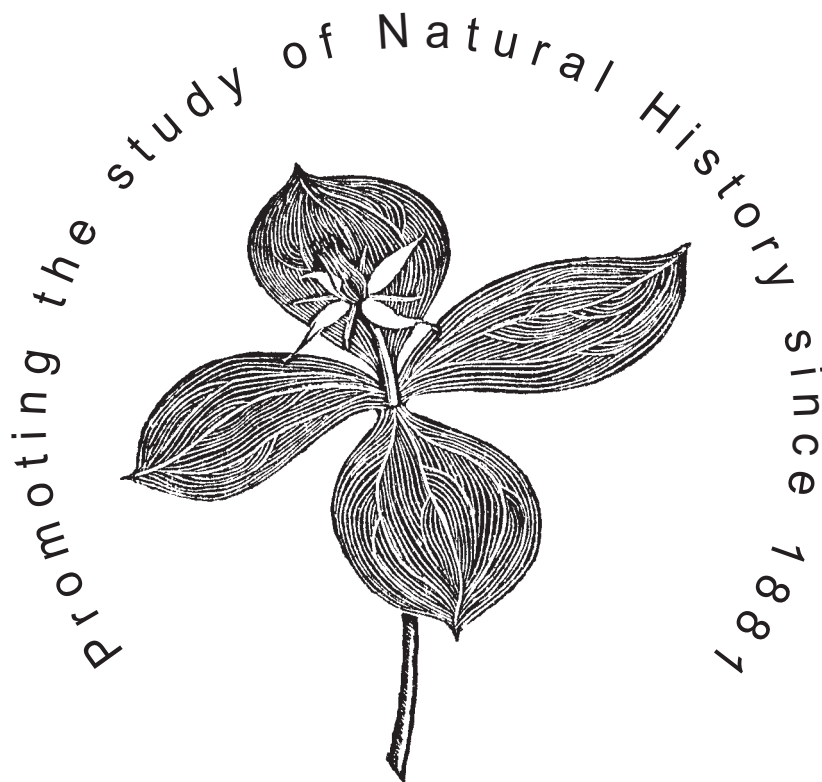


# The Reading Naturalist

No. 62



Published by the Reading and District Natural History Society

Report for 2009

(Published 2010)

Price to Non-Members £3.50



# **THE READING NATURALIST**

**No 62 for the year 2009**

**The Journal of the  
Reading and District Natural History Society**

## **President**

Mr Graham Saunders

## **Honorary General Secretary**

(vacant)

## **Honorary Editor**

Dr Malcolm Storey

## **Editorial Sub-committee**

The Editor, Mrs Janet Welsh  
Miss June M. V. Housden, Mr Tony Rayner

## **Honorary Recorders**

**Botany:** Dr. Michael Keith-Lucas

**Fungi:** Dr Malcolm Storey

**Lichens:** Dr James Wearn

**Lepidoptera:** Mr Norman Hall

**Entomology & other Invertebrates:** Mr Chris Raper

**Vertebrates:** Mr Tony Rayner

## CONTENTS

Obituaries		1
Announcement		2
Presidential Ramblings	Graham Saunders	3
Membership	Norman Hall	3
Members' Observations	Susan Twitchett & Colin Dibb	4
Excursions 2009	Jan Haseler & David Cliffe	6
Wednesday Walks		12
Indoor Meetings 2009		14
Photographic Competition	Chris Bucke	19
Presidential Address:		
Ancient Gardens	Graham Saunders	20
Herb Paris Project (April-July 2009)	Meryl Beek	26
A new Disease of Astrantia	Malcolm Storey	27
Vervain Downy Mildew - New to Science	Malcolm Storey	28
Bastions of beauty or dendrological disasters?	James Wearn	29
Shiplake churchyard lichens	James Wearn	32
Lesser Redpolls	Tony Rayner	38
Recorder's Report for Botany 2009	Michael Keith-Lucas	39
A Leaf-epiphytic Alga	Malcolm Storey	41
Recorder's Report for Mycology 2009	Malcolm Storey	42
Recorder's Report for Lepidoptera 2009	Norman Hall	47
Recorder's Report for Entomology and other Invertebrates 2009	Chris Raper	53
Recorder's Report for Vertebrates 2009	Tony Rayner	60
The Weather in Reading during 2009	Roger Brugge	64
Recorder's Report for Microfungi 2009	Malcolm Storey	* Supplement

\* The Microfungi Supplement is available from the Editor, or download from the Society's website:  
<http://rdnhs.org.uk>

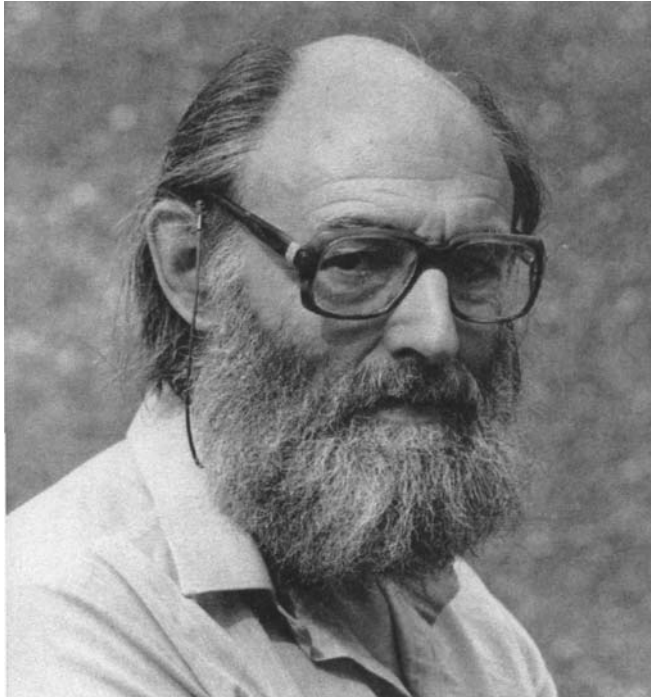
Welcome to another bumper issue! Despite the weather in 2009, our Recorders have been able to assemble long lists of records. A big "well done" to the membership for making this possible - don't forget to keep it up in 2010! A side-effect of all this is that there has been no room for black and white pictures in the text. Let me know if you feel this makes it too turgid.

Ken Spiers has written *The Weather in Reading* since 1996. He is now retiring and has passed the baton to Dr Roger Brugge. We thank Ken for his hard work over the years and wish him well in his retirement. We are grateful to Roger for agreeing to continue the series.

Malcolm Storey  
Hon. Editor

Copyright © 2010 Reading & District Natural History Society.

Copyright of photographs is indicated in the captions.



## OBITUARIES

### Hugh Carter

With the passing of Hugh Carter on 27<sup>th</sup> February, 2009, the Society has lost one of the last of its old time “greats”. He was an amazing naturalist and a good authority on nearly every branch of natural history.

Past secretaries of the Society have commented that on receiving a message of a sighting of an unknown caterpillar, moth, spider or whatever, the first thing to do was contact Hugh Carter. Often he would go round immediately and try to identify the specimen. He was a man of few words, but what he did say was accurate and worthwhile.

Hugh was born in November 1928 in Oxted, Surrey. His father was a Church of England vicar and his mother a doctor. The family moved to Horsington in Somerset in

1932 and he attended Sherborne prep. and public schools from 1934-46, and then went on to Oxford University, where he studied “Greats”. He met his future wife, Elizabeth, at university and graduated in 1950. After National Service he started work in Birmingham’s Science and Natural History Museums.

He married Elizabeth in August 1955, and by 1960 they had three children. It was during this period that he studied for his science A-levels which he passed in 1958.

In 1959, Hugh started a new job in The Natural History Section at Reading Museum where he remained for the rest of his working life. At first he lived in Caversham, then later moved to Sonning Common where his fourth child was born. Meanwhile he completed his part-time degree course in Natural History at London University and obtained his BSc in 1963.

With Hugh and Brian Baker, another of our ex-presidents, both working at Reading Museum, even stronger links were forged between the Society and the Museum. Until the 1980s, winter meetings were held in the Museum’s Art Gallery. Even after retirement in 1989, Hugh continued to work part-time at the Museum until the mid-nineties, and entered a lot of early natural history records onto their computer.

He held the post of Vertebrate Recorder for the Society between 1966 and 2002, and he was President from 1972-74. His first presidential address reflected his local knowledge and was titled: “The Present State of the Mammals of the Reading Area”. The second address showed another deep interest and was just titled “Flies” (Diptera) – a very large group!

During the 1990s he was elected an Honorary Member of the Society – a position which, with humility, he gladly received.

His latter days were sad as Elizabeth developed Alzheimer’s Disease in the late 1990s and Hugh himself was diagnosed with Parkinson’s Disease soon after. After Elizabeth’s death in 2003, Hugh eventually had to live at Northcourt Lodge Care Home.

Ever since the early days, he had been a loyal Methodist, and his deep Christian faith reflected his ability to share his faith with others by deeds and example. One only had to see him with young children to understand his kindness and love of others. These gifts, together with his vast understanding of the natural world, is how he will always be remembered.

### **Sir Alan Muir Wood 1921-2009**

Alan Muir Wood and his wife Winifred joined the Society in 2007. They lived in Pangbourne and became regular attendees at our indoor meetings. They had been friends with Alan and Ivy Brickstock for many years sharing a common interest in music and wildlife; at the age of nine Alan learnt to identify birds by their song. He studied Mechanical Sciences at Peterhouse College, Cambridge and then entered the Royal Navy as an engineer. Professionally he was one of Britain's most eminent tunnelling engineers having a long and distinguished career with his expertise in demand all round the world: he played a leading role in many of the major 20<sup>th</sup> Century tunnelling projects. In recognition of his services to Civil Engineering, he was knighted in 1982. He was the author of many books and a respected lecturer all over the world. Many of us will remember when he addressed the Society at our AGM in 2008 seeking our support for the extension to Pangbourne Village Hall; the article on "Hornets" which he and his wife wrote appearing in the 2007 edition of *The Reading Naturalist*. Alan was a kind man, a gentleman, very approachable, friendly and courteous. Towards the end, he suffered from sclerosis of the lung due to his exposure to asbestos in the Royal Navy. His wife and three sons shared his enthusiasm for natural history.

### **Lady Winifred Muir Wood 1922-2009**

Winifred Leyton Lanagan was born to elderly parents. She met Alan at Cambridge, where she read Mathematics and they married in 1943. After gaining her doctorate she worked under the professional name of Dr W. L. Wood at GCHQ as a cipher expert until their three sons were born. She was determined to have her children whilst she was young, preferably before the age of 30! GCHQ was keen for her to continue to work on codes, but she was determined to raise her children herself and answer all of their searching questions: she said that she learnt a lot!

Winifred had a fascinating life, visiting many remote parts of the world, travelling with Alan who was much in demand as an international expert in tunnel construction. As the children became more independent, Winifred obtained a post at Reading University in the Mathematics department, lecturing as a theoretical mathematician, a post she held until she was 79 years old. Winifred possessed a keen intellect taking an interest in current events, people, family and our Society right up to her last days. She was a delightful companion and a remarkable woman. When I visited her in hospital the day before she suddenly passed away, she asked me to tell her in detail about the RDNHS meeting she had missed that week. Winifred continued to be active, attending concerts and our indoor meetings, after the death of her husband in February 2009. However, she became more physically frail and fell at home one Sunday night, damaging her hip. She passed away suddenly, after a hip replacement operation, nine months after her husband.

### **Announcement**

We regret to report the death of Betty Newman, who passed away at the end of January. She held the post of Botany Recorder for nearly 40 years, from 1962 to 2000. A full obituary will appear in next year's issue.

## **Presidential Ramblings**

### **Graham Saunders**

What an eventful year! First the government and the bankers bankrupt the country, then just as we were thinking we would never need to go to Spain again for the sun, we have the coldest winter in almost living memory, and Global Warming turns out not to be so warm after all. Being a youngster, I don't remember the winter of 1947, but I certainly remember the 3 months of snow and sub-zero temperatures in 1963 as I cycled to school. Winters were definitely colder and it seems that spring in recent years is getting earlier. Bumble bees come out in any month over winter when it's sunny, Red Admirals survive the winter and Dartford Warblers have spread to places like Silchester Common, although I haven't seen them there since last winter.

We happy band of natural history enthusiasts keep records of our 'Observations' from the winter meetings and send other records to the recorders. These are valuable to see what is present in our locality, but also what is changing. Simple records, like the first Blackthorn blossom of the year, the first flowers and the first catkins of the year (and catkins are coming out on the Hazel as I'm writing this) are incredibly valuable evidence as to whether the Reading area (it's a bit presumptuous to expand the Reading results to the world!) is growing warmer by the year. We can then balance our information with the views on "the news" and of "the experts. Trees are probably a good index, especially records from individual trees or bushes as they live a long time. Perhaps you could persuade your children or grandchildren to carry on recording – now that's what you call continuity of records!

On a slightly different (and perhaps worrying) note, there seem to be a lot of dead oaks between Tadley and the Shinfield area. Do we think this is dry summers, cold winters or "Sudden Oak Death"? Something to keep our eyes on. Also, as I drive into Reading, I am confronted by the M4 J11 road works (they seem to be vast and have gone on forever) and the new housing at the south end of Shinfield Road. What was once grassland and woodland is now covered by bricks and concrete. This is not the only area in Reading to have been developed, but you need look no further than this to see the consequences of increases in population.

I was struck by a report in the Reading Chronicle about residents in a new development who were objecting against a natural pond that had been left by the developers. Some of the residents wanted to fill the pond in, being natural it was probably "a bit of a mess", but living in it was a colony of Great Crested Newts. (Would I like GCNs in my pond – you bet I would!). So, they were propagandizing the horrible slimy creatures to gain support to fill the pond in. This, I thought, is our equivalent to the tropical rain forest. If we can't protect our wildlife, then it is rather ironic to object to other countries chopping down their rain forest. I bought a Chronicle the next week to see if anyone had written in to say how fantastic and tropical looking the GCNs are, how we need to preserve our wildlife for our children, how lucky these people were to have GCNs on their doorstep. But there was no letter. I should have written that letter.

Looking ahead, Jan has organised an interesting and varied set of summer walks. There's nothing better than getting out in the fresh air and with a dozen pairs of eyes there's always something new spotted, whether a bird, flower or insect (or even mosses and lichens). And it's the best learning experience you can have. So, do come and join us.

## **MEMBERSHIP**

### **Norman Hall**

14 ordinary members were welcomed to the Society in calendar year 2009, plus 3 juniors within a family membership:

Anita Bhojwani, Shinfield  
Janet Breeze, Reading  
Kit Brownlee, Reading (rejoining)  
Barry & Jeanette Carter, Pangbourne  
Ruth Crowch, Tilehurst  
Wynne Frankum, Upper Bucklebury  
Terry Hemmett, Tilehurst

Elizabeth Jones, Pangbourne  
Brian Marchant, Newbury  
Fay Newbery, Reading  
Valerie Newman, Pangbourne  
Romilly Swann, Nephela (age 13), Merewyn (11)  
& Thalia (9), Goring Heath  
Mrs Chris Wearn, Upminster

## MEMBERS' OBSERVATIONS

### Susan Twitchett & Colin Dibb

Before each evening talk, members & visitors are invited to announce their recent observations. Here is a selection, particularly of the birds since others tend to be incorporated into the recorders' reports shown elsewhere in this publication. Where provided, the precise date and grid reference is quoted.

- 6<sup>th</sup> Jan      Jan Haseler reported 2 Waxwings on a birch tree in her garden (Tilehurst SU666742) on Christmas Eve 2008.  
Tony Rayner reported that he saw a female Blackcap feeding on apples in his garden (Cholsey) He has seen this Blackcap daily for the past 3 weeks up to and including today. Also a Fox crossing the road between Moulshord and Cholsey on 6th January.  
Martin Sell reported that he had seen a male Blackcap, and a Woodpecker feeding on ants in his lawn.  
Colin Dibb observed a female Blackcap in his garden in Tilehurst, RG31 on 1<sup>st</sup> January.  
Dot Lincoln reported having seen both a male and a female Blackcap in her garden several times.  
Graham Saunders reported a Lapwing in woodland near Tadley which was very unusual habitat.  
Susan Twitchett saw a Scarce Umber moth indoors (RG8 8NT) on 20<sup>th</sup> December 2008
- 3<sup>rd</sup> Feb      Jan Haseler said that even though it was very cold, the Hazel catkins were out.  
Alice Ayers reported that she had seen 2 Reed Buntings in her back garden.  
Beryl had counted up to 10 Blackbirds in her garden on the Reading Road in Pangbourne.  
Martin Sell stated that this winter for the first time he had seen large numbers of Goldcrests feeding on the ground. They were eating pieces of fat-ball that had fallen to the ground as well as sunflower seeds.  
Fred Taylor reported that he had seen a pair of Ravens starting their mating flight in Crowsley Park.  
Renée Grayer had observed 20 Shovelers on Whiteknights Park Lake.
- 17<sup>th</sup> Feb      Jan Haseler had seen Primrose and Celandines in flower at Shinfield Park.  
Ray Lush reported a Red Kite over his garden in Wokingham, his first sighting there.  
Tricia Marcouse has seen some fox cubs.  
Ruth saw 2 Tawny Owls in Swallowfield.  
Martin Sell mentioned a Short-eared Owl and a Barn Owl on the Downs.  
Graham Saunders had a Blackcap singing in his garden at Pamber Heath, Tadley at the weekend.
- 3<sup>rd</sup> March      Meryl Beek had seen a Brimstone butterfly on 25<sup>th</sup> February; other members reported further sightings.  
Martin Sell mentioned a Goldcrest on 21<sup>st</sup> February and commented that they had been numerous this winter.  
Renee Grayer had seen Coltsfoot in flower.  
John Lepiniere saw an Adder and Common Lizard.  
Chris Bucke had seen Ravens at Swyncombe.  
Graham Saunders had counted 13 Egyptian Geese at Wokefield Park.  
Colin Dibb reported 8 new nests built during the past fortnight in a rookery in Tilehurst where only one nest had survived the winter. One bird was picking up apparently discarded twigs on a pavement under the tree.



- 17<sup>th</sup> March     Many members had seen Brimstone butterflies.  
 Julia Cooper saw a Peacock butterfly on her allotment in Tilehurst on the 15<sup>th</sup>.  
 Alice Ayers reported 2 comma butterflies in her garden in Earley.  
 Tony Rayner had counted 35 Slowworms in his garden at Cholsey.  
 Ken Thomas had seen a pair of Frogs in his garden pond in Purley-on-Thames.  
 Meryl Beek saw Frog spawn in her garden pond in Caversham on the 10<sup>th</sup>.  
 Michael Keith-Lucas had seen Frogs in his pond in Reading.  
 Colin Dibb reported Frog spawn in his pond in Tilehurst (RG31) on the 16<sup>th</sup>, the latest date for 15 years. There has been a dichotomy this spring with some frogspawn produced early before the cold weather and now some late. The pond is shaded and cold which delays things.  
 Veronica Vincent saw a Red-legged Partridge on the 13<sup>th</sup>. The first Crowthorne sighting for 40 years.  
 Heather Baker had seen a Pheasant on Highmoor Road, Caversham.  
 Heather also saw the first Moschatel (Town Hall Clock) at Greenham Common.  
 Roger Frankum reported 2 Brown Hares at Stanford Dingley.
- 6<sup>th</sup> Oct         Heather Baker reported that a Mink had been seen under a van at the Caversham Court allotments at the end of July.  
 Heather also reported that a Roe Deer had jumped down from St Peter's Churchyard into the Caversham Court allotments and then swim across the Thames.  
 Roger Kemp had recently seen a mating pair of Common Darters in Buckinghamshire, which seemed a late date for this species.  
 Tony Rayner had watched Rooks stripping the nuts from his Walnut tree.  
 He had also seen a Toad crossing the road at Streatley as he was driving to Pangbourne.  
 Jan Haseler had noted Painted Lady, Red Admiral, Peacock and Comma butterflies on Ivy blossom at Shinfield Park in the previous week.  
 Martin Sell reported that his Walnut crop was better than usual, perhaps helped by the shortage of Grey Squirrels in his part of Caversham.
- 20<sup>th</sup> Oct        On the 8<sup>th</sup>, Colin Dibb had seen a Little Owl flying approx 1 mile north of Stanford Dingley.  
 Jan Haseler accidentally dug up a baby Slowworm in her vegetable patch on October 18<sup>th</sup>.  
 Cath Butcher reported that a family of Foxes had chewed an electricity cable in her garden.  
 Ken Thomas had seen Foxes in his garden.  
 Graham Saunders had seen Hedgehogs in his garden.  
 Chris Bucke observed a Red Admiral in his garden.  
 Fred Taylor watched Fallow Deer rutting, and a young Badger at Binfield Heath.  
 Dot Lincoln described how in August a crop of sweetcorn was broken down and eaten by Badgers in her husband's allotment.
- 3<sup>rd</sup> Nov         Martin Sell observed two Red Admirals in display flight on 22<sup>nd</sup> October. He also reported an Azorean Yellow-legged Gull at Appleford on 2<sup>nd</sup> November, an unusual bird that had already been here for almost a month and might well overwinter there.  
 Chris Bucke had seen a Red Admiral and a Painted Lady on 2<sup>nd</sup> November; the latest time in the year he had ever seen a Painted Lady.  
 Meryl Beek had seen a Peacock butterfly in her garden on 30<sup>th</sup> October.  
 A Buzzard had been observed in Thatcham.  
 Roger Kemp had seen a Southern Hawker in Aylesbury.  
 Tricia Marcouse saw a Magpie carrying nest material in Silverdale Road and this phenomenon had also recently been observed by Veronica Vincent.

- 17<sup>th</sup> Nov Last week, Jenny Greenham had watched a charm of Goldfinches on Silver Birch in Hampstead Norreys.  
Tony Rayner had seen Red Admiral, Painted Lady and 2 Redpolls in his Cholsey garden.  
Roger Frankum reported a Crossbill in Upper Bucklebury on the 12<sup>th</sup>.  
Ricki Bull had seen a flock of 30 Fieldfare over Lavell's Lake.
- 1<sup>st</sup> Dec Roger Frankum reported 3000+ Lesser Black-backed Gulls at Bucklebury pig farm.  
Chris Bucke had seen a Bullfinch on Nov 27<sup>th</sup> at Basildon, 30 Pied Wagtails at Caversham Bridge and had been picking Field Mushrooms until c. Nov 20<sup>th</sup>.  
Graham Saunders counted about 50 Redwings at Aldermaston.  
Susan Twitchett had snowdrops in flower in her garden, although they might be an autumn flowering variety.  
Colin Dibb had seen 3 bumblebees visiting *Mahonia*.  
Fred Taylor had observed an all black bumblebee.  
Romilly Green has thousands of Harlequin ladybirds in clusters in every room. Along the Thames 4 acres of poplar trees have been removed and the stumps 'munched' – asked whether this will affect the Loddon Lilies.  
Jan Haseler mentioned that the River Loddon is over its banks, leaving Shinfield deep under water.
- 15<sup>th</sup> Dec No observations.

## EXCURSIONS 2009

### Jan Haseler & David Cliffe

The first walk of the year was on Sunday 11<sup>th</sup> January, when Michael Keith-Lucas led a field trip to Aston Rowant National Nature Reserve in the Chilterns. 12 members attended on a very cold and windy day. Gorse bushes, *Ulex europaeus*, near the car park indicated pockets of acid, wind-blown sands. A sunken ancient track-way provided welcome shelter from the cold wind and Hard Shield Fern, *Polystichum aculeatum*, and Lady Fern, *Athyrium filix-femina* were found growing on its banks. The track opened up onto species-rich chalk grassland, where Carlina Thistle, *Carlina vulgaris*; Wild Thyme, *Thymus polytrichus*; Wild Marjoram, *Origanum vulgare* and Wild Basil, *Clinopodium vulgare* were identified. Elder bushes, *Sambucus nigra*, and Deadly Nightshade, *Atropa belladonna*, marked the disturbed soil of former rabbit warrens. Both male and female Juniper bushes, *Juniperus communis*, were found, but the only surviving young plants were those which were protected by rabbit-proof fences. Red Kites, *Milvus milvus*, were very much in evidence throughout the walk. Michael pointed out the difference between the Beech trees, *Fagus sylvatica*, with spreading lower branches which had started life in sheep-grazed pasture and those with single straight trunks, which had always been in woodland. The uncommon Wood Barley, *Hordelymus europaeus*, was found growing in the wood at the top of the reserve.

Meryl Beek organised a trip to the Wildfowl and Wetlands Trust's Slimbridge reserve in Gloucestershire on Thursday 12<sup>th</sup> February. It was another cold day and the coach drove through some very snowy countryside on the way. From the hide looking out over the salt-marshes, it was possible to compare Greylag Geese, *Anser anser*, with a pale leading edge to the wings, White-fronted Geese, *Anser albifrons*, with black belly markings and a single Brent Goose, *Branta bernicla*. Next to the Redshanks, *Tringa totanus*, was a single paler Spotted Redshank, *Tringa erythropus*, with longer legs and bill and a prominent eye stripe. A Peregrine, *Falco peregrinus*, perched motionless on a log, with a pair of Ravens, *Corvus corax*, nearby. There were surprisingly good views of a Water Rail, *Rallus aquaticus*, on the ground below one of the bird feeders. In the late afternoon, huge numbers of wild ducks, geese and swans gathered for the daily feeding session in front of the observation window. The ranger reported that there were still about 150 Bewick's Swans, *Cygnus columbianus*, on the reserve. Two weeks earlier, there had been more than 180 and within another two weeks, they would all be gone. Finally, at dusk an enormous flock of Starlings, *Sturnus vulgaris*, gave a spectacular swirling pre-roost flight.

On Saturday 7<sup>th</sup> March, Jan Haseler led a field trip to Inkpen which was attended by 14 members. The walk started in bright sunshine at the Crocus Field reserve of the Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT). Several thousand crocus flowers were poking up through the grass and there were many more plants which were not in flower. The field appears to have benefited from the grazing efforts of 4 Dexter cows. The far side of the reserve is wetter, with springs and damp flushes. Plants identified there included Pignut, *Conopodium majus*; Devil's-bit Scabious, *Succisa pratensis*; Betony, *Stachys officinalis* and Lesser Spearwort, *Ranunculus flammula*. James Wearn helped with the identification of various lichens on bushes and a big old tree stump. The group then walked through the woods to BBOWT's Inkpen Common reserve. Various ferns, including Hard Fern, *Blechnum spicant*, and Soft Shield Fern, *Polystichum setiferum*, were seen in the woods, together with a collection of lichens and liverworts. Gorse and Creeping-Jenny, *Lysimachia nemorum*, were in flower on the reserve and frogspawn was found at the edge of one of the ponds.

Colin Dibb led a walk in the lower Pang valley on Saturday 4<sup>th</sup> April. The sun shone brightly as 23 members set out from Little Heath in Tilehurst down a steep path through the woods where spring flowers included both Common Dog-violet, *Viola riviniana*, and Early Dog-violet, *Viola reichenbachiana*; Wood Anemone, *Anemone nemorosa* and Wood-sorrel, *Oxalis acetosella*. Wild Cherry trees, *Prunus avium*, and Blackthorn bushes, *Prunus spinosa*, were covered in blossom and Brimstone, *Gonepteryx rhamni*, and Peacock, *Inachis io*, butterflies were flying in the sunshine. The group paused to admire the wonderful display of primroses and violets in Sulham churchyard. The walk continued past new-born calves in the fields next to the Sulham Brook. Cowslips, *Primula veris*, were in flower in the drier parts of Corner Meadow in BBOWT's Moor Copse nature reserve, while in the wetter parts, the bright green leaves of Great Burnet, *Sanguisorba officinalis*, contrasted with the darker green of Meadowsweet, *Filipendula ulmaria*. The route then led along Nunhide Lane, before climbing steeply back up through the woods to Tilehurst.

On Saturday 18<sup>th</sup> April Renée Grayer led a field trip to Morgaston Wood, near Sherborne St John in Hampshire. Thirty-six species of plants were recorded, including Town-hall Clock, *Adoxa moschatellina*; Common and Early Dog-violets; Wood Anemone; Wood Sorrel; Wood Speedwell, *Veronica montana*; Wood Spurge, *Euphorbia amygdaloides*; Goldilocks Buttercup, *Ranunculus auricomus*; Sanicle *Sanicula europaea* and the uncommon Spurge Laurel, *Daphne laureola*. A Coprinus fungus was growing on dung, Comma, *Polygonia c-album* and Orange-tip, *Anthocharis cardamines*, butterflies were seen in the fields and woods and Chiffchaffs, *Phylloscopus collybita*; Willow Warblers, *P. trochilus*; Wrens, *Troglodytes troglodytes*; Great Spotted Woodpeckers, *Dendrocopos major*; Song Thrushes, *Turdus philomelos*; Chaffinches, *Fringilla coelebs*; Great Tits, *Parus major*; Blue Tits, *P. caeruleus*, and Robins, *Erithacus rubecula*, were heard. On the lake there were Coots, *Fulica atra*, with their young.

The first evening outing of the year was on Thursday 7<sup>th</sup> May, when Martin Sell led a walk in cool and cloudy conditions at Aston Upthorpe in the Berkshire Downs. The starting point was the grain store, where a rat was watched as it fed nearby. Cowslips were abundant, particularly in the grassland surrounding Juniper Valley. Six plants of Field Fleawort, *Tephrosia integrifolia*, were just about to come into flower. The fence around the Pasqueflower, *Pulsatilla vulgaris*, enclosure was no longer rabbit-proof and there were no flowers to be seen. Two plants outside the enclosure were examined carefully and both were found to have suffered grazing damage. Three big Barberry, *Berberis vulgaris*, bushes were in flower. Two pairs of Lapwings, *Vanellus vanellus*, were seen on bare ground above the top of the valley. What appeared to be a dark spiky caterpillar walking across the track was identified as the larva of a Glow-worm, *Lampyrus noctiluca*. As the group returned in the dusk, Tawny Owls, *Strix aluco*, were calling in the adjacent woodland.

On Sunday 17<sup>th</sup> May, Janet and Jerry Welsh led a field trip to Crowsley Park and Kent's Hill. The management of the Sonning Common Herb Farm had kindly given permission for members to use their car park. 16 people set out in light drizzle but fortunately the weather improved as the afternoon progressed. A large colony of Bee Orchids, *Ophrys apifera*, was found in a nearby field, together with Narrow-leaved Vetch, *Vicia sativa* ssp. *nigra*, and Changing Forget-me-not, *Myosotis discolor*. Tormentil, *Potentilla erecta*; Heath Speedwell, *Veronica officinalis*, and Sheep's Sorrel, *Rumex acetosella*, were typical flowers of the acid grassland at the top of Crowsley Park, while Common Bird's-

foot trefoil, *Lotus corniculatus*, became abundant as the path dropped down onto the underlying chalk on the side of the hill. White Helleborines, *Cephalanthera damasonium*; Adder's-tongue Ferns, *Ophioglossum vulgare*; Twayblades, *Listera ovata*, and a Small Heath, *Coenonympha pamphilus*, butterfly were seen in a grassy clearing on the chalk hillside at Kent's Hill and a spider with a prominent longitudinal white stripe was identified as *Pisaura mirabilis*. On the way back, Orpine, *Sedum telephium*, was found on a roadside bank. There was an interesting contrast between the north-facing bank of the lane, where the Bluebells, *Hyacinthoides non-scripta*, were still in full flower, and the south-facing bank, where they were already past their best.

Malcolm Storey led a field trip to BBOWT's Dry Sandford Pit nature reserve near Abingdon on Sunday 31st May. It was a hot and sunny afternoon and the walk was enjoyed by 18 members. The target species were solitary bees and wasps, which mine into the exposed sides of the former sand pit. Chris Bucke spotted a small ginger moth on Common Bird's-foot Trefoil and caught it in his hands. It was later identified from photographs by the County Moth Recorder, Martin Harvey, as a Rannoch Looper, *Itame brunneata*, – a new species for VC22 Berkshire. A web on a spindle bush contained the white caterpillars of the Spindle Ermine moth, *Yponomeuta cagnagellus*. A few Painted Lady butterflies, *Vanessa cardui*, were seen, stragglers from the mass invasion of the previous week. The group then walked across to BBOWT's nearby Parsonage Moor reserve, where various rare fen flowers were found, including the insectivorous Common Butterwort, *Pinguicula vulgaris*; Marsh Lousewort, *Pedicularis palustris*; Grass-of-Parnassus, *Parnassia palustris*; Marsh Valerian, *Valeriana dioica* and Southern Marsh Orchid, *Dactylorhiza praetermissa*. A Cuckoo, *Cuculus canorus*, called nearby.

Chris Bucke led a walk in the Farley Hill area on 2<sup>nd</sup> June. Eight members met on a lovely sunny evening and explored the lanes and riverside paths along the Blackwater to its confluence with the Whitewater, then along the Broadwater, returning past Sandpit Farm and Jouldings Farm. The late spring flowers expected were seen, with Honeysuckle, *Lonicera periclymenum*, and Elderflowers prominent in the woodland areas. The riverside provided the most memorable sight, hundreds of demoiselle damselflies shimmering among the vegetation. The resident Mute Swans, *Cygnus olor*, had produced four cygnets and the birders were satisfied by sighting Reed Buntings, *Emberiza schoeniclus* and Reed Warblers, *Acrocephalus scirpaceus*. The rivers, which were surprisingly full after a period of dry weather, had a water crowfoot in abundance and the Common Bulrush, *Scirpus lacustris*, was very conspicuous, particularly in the Broadwater. All agreed that it was a very pleasant outing to an area that is not often visited.

Approximately twenty people gathered by the roadside between Fingest and Frieth near the head of the Hambleden Valley on June 7<sup>th</sup>, about half of them members of the Reading society, and the other half from the Frieth Natural History Society. The expert and genial guide was Alan Gudge from Frieth, and it was good to have some children among the party. The main purpose of the visit was to see a colony of Herb Paris, *Paris quadrifolia* – a continuation of the survey begun in 2008. With special permission from the landowner, the group diverged from the public footpath through Mousells Wood, and after no great distance at all came upon the largest colonies of Herb Paris that any of those present had ever seen. The plant was no longer flowering, and the fruits were developing. There were a couple of unexpected botanical finds in the wood – a Bee Orchid, *Ophrys apifera*, in flower, and Dragons Teeth, *Tetragonolobus maritimus*. The group then crossed the road near the Prince Albert pub at Moor End to set foot on the Common, where the clays on top of the chalk gave rise to a more waterlogged and acid environment. There was a colourful show of Lesser Spearwort, Ragged-Robin, *Lychnis flos-cuculi* (some with white flowers); Heath Spotted Orchids, *Dactylorhiza maculata*; Southern Marsh Orchids, and some very large hybrid orchid plants. The number of birds seen was rather disappointing, though there was at least one Red Kite visible for much of the time. Alan was thanked warmly for arranging things, and for leading the walk.

The annual coach outing, on 13<sup>th</sup> June, was to Kenfig National Nature Reserve, near Bridgend in South Wales. The reluctance of the driver to turn the coach round in Pangbourne led to a somewhat longer journey than anticipated, but eventually 36 members arrived in warm sunshine at an outstanding reserve. Michael Keith-Lucas led the party out through the dune slacks, where there were splendid displays of Early Marsh Orchid (subsp *coccinea*) and Southern Marsh Orchid. Other sightings included the white flowers of Burnet Rose, *Rosa spinosissima*, and the Welsh Polypody Fern, *Polypodium*



*cambricum*. Small Heath, *Coenonympha pamphilus*, and Common Blue, *Polyommatus icarus*, butterflies were widespread and a Small Blue, *Cupido minimus*, was spotted on a flower-head of Kidney Vetch, *Anthyllis vulneraria*. Most of the group enjoyed a picnic on the top of a sand dune. Others went back to The Prince of Wales pub, where landlord Gareth gave a brief history of the Medieval Borough of Kenfig and of the pub building, which had served as both courthouse and mortuary in the past. In the afternoon, Renée Grayer led a group across the dunes to the long sandy beach. Maiden Pink, *Dianthus deltoides*, and Bog Pimpernel, *Anagallis tenella*, were interesting sightings in the dunes, while Sea Stock, *Matthiola incana*; Sea-holly, *Eryngium maritimum*, and Sea Bindweed, *Calystegia soldanella*, were found close to the beach. Other plants seen on the reserve included Common Broomrape, *Orobanche minor*; Marsh Helleborine, *Epipactis palustris*; Dune Fescue, *Vulpia fasciculata*; Sand Cat's-tail, *Phleum arenarium*; Lesser Water-plantain, *Baldellia ranunculoides*, and Isle-of-Man Cabbage, *Coincya monensis*.

On Saturday 27<sup>th</sup> June, Malcolm Storey led a field trip to Ashridge Wood, by kind permission of the George Palmer Trust. The walk started from a lay-by near the A34, just to the north of Beedon and then went eastwards along a track through arable fields. Large numbers of Narrow-bordered 5-Spot Burnet moths, *Zygaena lonicerae*, were seen on the Common Knapweed, *Centaurea nigra*, flowers in the field margins. Alsike Clover, *Trifolium hybridum*; Musk Mallow, *Malva moschata*, and Hedgerow Crane's-bill, *Geranium pyrenaicum*, were all found in the corner of one of the fields. Annual plants identified in another field included Dwarf Spurge, *Euphorbia exigua*; Small Toadflax, *Chaenorhinum minus*; Round-leaved Fluellen, *Kickxia spuria*, and Scarlet Pimpernel, *Anagallis arvensis*. The path then went through a grassy area where Marbled White, *Melanargia galathea*, butterflies; Pyramidal Orchids, *Anacamptis pyramidalis*, and Upright Hedge-parsley, *Torilis japonica*, were seen. Spiked Star-of-Bethlehem, *Ornithogalum pyrenaicum*, was growing in good numbers in Ashridge Wood, although it was thought that the clearing was rather overgrown, compared with former visits. Large numbers of Peacock caterpillars were feeding on webs on the nettles and it was good to see a Small Tortoiseshell, *Aglais urticae*, butterfly. Narrow-leaved Everlasting-pea, *Lathyrus sylvestris*, was another speciality of the wood. Fox-and-cubs, *Pilosella aurantiaca*, and Wild Pansy, *Viola tricolor*, were spotted on the walk back to the cars.

Led by Chris Bucke, nine intrepid members met in pouring rain with the occasional flash of lightning to stroll around the downland and admire the chalk grassland plants at Lardon Chase on 7<sup>th</sup> July. Fortunately, the rain gradually gave way to watery sunshine. Most of the species anticipated were found, with rather fewer Pyramidal Orchids than expected but plenty of Squinancywort, *Asperula cynanchica*; Common Centaury, *Centaureum erythraea*; Yellow-wort, *Blackstonia perfoliata*; Dwarf Thistle, *Cirsium acaule*; thyme and scabious. An area disturbed by rabbit activity was investigated without success in the hope of rediscovering the White Horehound, *Marrubium vulgare*, noted in 2006. It did however produce several plants of Common Gromwell, *Lithospermum officinale*. Moving round to the north-facing Lough Down, the group were impressed by the different appearance of the grassland. Salad Burnet, *Sanguisorba minor*, was plentiful and there were many anthills. Detailed inspection of these showed that each had its own ecology, some had a mixture of plant species, some had mainly Common Rock-rose, *Helianthemum nummularium*, some mainly thyme.

Lodge Hill is an isolated chalk hill in the Chilterns, situated between Bledlow and Saunderton Lee. Although not a nature reserve, it is access land and the Ridgeway Path runs across it. Led by Chris Bucke, four members visited on a dry but cloudy afternoon on 11<sup>th</sup> July and explored three areas of the hill - land that had been cultivated but was now reverting to scrubland, a small area surrounded by trees and shrubs, away from the Ridgeway Path, and the much more trodden and rabbit-grazed terrain beside the Ridgeway Path. A very large number of species of plant was noted, with many Pyramidal Orchids in the first area and both Bee and Frog Orchids, *Coeloglossum viride*, in the second area. The show of bloom was excellent throughout with Greater Knapweed, *Centaurea scabiosa*, and Lady's Bedstraw, *Gallium verum*, providing plenty of colour. Plants in one colony of Lady's Bedstraw had cream, rather than the usual yellow blooms. A few very fine specimens of Clustered Bellflower, *Campanula glomerata*, were noted and, in areas where rabbits had disturbed the soil, Wild Candytuft, *Iberis amara*. Many butterflies were on the wing, none of them great rarities but enough of them to give

great pleasure. New second-generation Painted Ladies were particularly beautiful. The area merits further visits.

Tony Rayner organised the Society's annual recording day at Withymead Reserve, between Goring and South Stoke, on Saturday 18<sup>th</sup> July. During the afternoon, warden Brian Shaw showed members round the reserve. A Kingfisher, *Alcedo atthis*, was sheltering by the riverside, well away from the disturbance of the Goring and Streatley Regatta on the south bank of the Thames. While the group watched it from the new hide, a copper underwing moth, *Amphipyra* sp., was spotted inside. Other sightings included a Grass Snake, *Natrix natrix*, a Slow-worm, *Anguis fragilis*, and a family of Kestrels, *Falco tinnunculus*. James Wearn recorded a number of lichens and fungi during the afternoon. As dusk fell, the moth-trappers set up their equipment. 2 lights were run on the boardwalk at the edge of the marsh. The enormous Drinker Moths, *Euthrix potatoria*, were very much in evidence here. Apparently their caterpillars are a favourite food of the Cuckoos which haunt the reedbeds. Norman Hall set up another 5 lights in the car park and orchard area. Highlight of the catch was a splendid Garden Tiger, *Arctia caja*, a moth which is rarely seen in our area nowadays. In all, 130 species of moth were recorded.

On Saturday 1<sup>st</sup> August, Sally Rankin led a walk round Nettlebed Common. The recent wet weather had brought out an early flush of fungi. The group was alerted to the presence of a Stinkhorn, *Phallus impudicus*, by a strong and unpleasant smell – it was covered with flies, which obviously found the scent attractive. The clay cap on Nettlebed Common used to be mined for the local brick industry and this has left a network of ponds. Acid soils are rare in Oxfordshire and this is one of the few sites in the county where Hard Fern and heather can be found. A Hard Fern plant with 2 kinds of fronds was found – sterile evergreen outer fronds and narrower inner fertile fronds. Another interesting find was Common Yellow Sedge, *Carex viridula* subsp. *oedocarpa*, identified by Janet Welsh. This is a strict calcifuge and Nettlebed Common is its only known site in the south of the county. The group was shown areas on the Common where volunteers had opened up clearings and scraped away the bracken litter to enable the heather seedbank to regenerate. A Common Lizard, *Zootoca vivipara*, which had lost its tail was spotted in one of the clearings.

On the evening of 4<sup>th</sup> August, 13 members and guests met at the rather improbable starting point of Morrison's supermarket car park in Whitley, Reading for a walk led by Chris Bucke. They then made their way to the path between the Foudry Brook and the A33 to look at the plants in and near the brook and in the rough land beside the road. The most instantly striking observation was the extent to which the Foudry Brook was clogged by the water plant Floating Pennywort, *Hydrocotyle ranunculoides*, one of the four most noxious aliens introduced to the UK. Work is under way to attempt to eliminate this but that procedure will threaten the native water plants, of which there was a fine display. Conspicuous among these were Flowering Rush, *Butomus umbellatus*, surely one of Britain's most spectacular native plant species; Arrowhead, *Sagittaria sagittifolia*; Water-plantain, *Alisma plantago-aquatica*; Galingale, *Cyperus longus* and Branched Bur-reed, *Sparganium erectum*. An unexpected find was Dittander, *Lepidium latifolium*, on the river bank close to the entrance road to Kennet Island. Also beside the path was a large population of a slender umbellifer that, after some discussion, was agreed to be Stone Parsley, *Sison amomum*. Refreshment was provided by some particularly luscious blackberries. The stroll was thoroughly enjoyed in spite of the dull, humid conditions.

Norman Hall led the Society's annual mothing night, which this year was held on Saturday 15<sup>th</sup> August at the National Trust's Basildon Park. The lights were run at the top of the park in an area of mixed woodland, with mature oak and ash trees nearby. 77 species were identified, including a single specimen of the nationally-rare Square-spotted Clay, *Xestia rhomboidea*. Pretty Chalk Carpet, *Melanthia procellata*, is a moth which, as its name implies, is only found on the chalk. White-point, *Mythimna albipuncta*, used only to be found as an immigrant, but in the last few years has become established as a locally-breeding species. The thorn moths are particularly attractive – they have jagged wing edges which they hold in a characteristic partly-open position. Three different kinds were recorded - Dusky Thorn, *Ennomos fuscantaria*; September Thorn, *E. erosaria*, and Canary-shouldered Thorn, *E. alniaria* - the latter particularly attractive with mottled orange wings and a furry canary-yellow body. Peach Blossom, *Thyatira batis*, and Black Arches, *Lymantria monacha*, were also very attractive and distinctive moths. The event was attended by 11 members.

On 29<sup>th</sup> August, 16 members met at the Control Tower car park for a walk on Greenham Common led by Jan Haseler. Plants at the nearest pond included Water-plantain; White Water-lily, *Nymphaea alba*; and also, regrettably, the invasive New Zealand Pigmyweed, *Crassula helmsii*. Brown China-mark, *Elophila nymphaeata*, moths were found in the waterside vegetation. The white spiral flowers of Autumn Lady's-tresses, *Spiranthes spiralis*, though sometimes hard to spot initially, proved to be widespread and abundant. The Common was very colourful, with the yellow of Dwarf Gorse, *Ulex minor*, and the pinks and purples of Ling, *Calluna vulgaris*, and Bell Heather, *Erica cinerea*. Tall Devil's-bit Scabious, *Succisa pratensis*, flowers were indicators of damper patches of ground. The commonest butterfly was the bright orange Small Heath and the group were also lucky to find a Grayling, *Hipparchia semele*, a large heathland specialist butterfly which was coming to the end of its flight season.

On 5<sup>th</sup> September, there were wonderful views across the Kennet Valley when Graham Saunders led a walk at Cottington's Hill, near Kingsclere. The route started across recently-harvested corn fields which had an interesting collection of arable weeds. A sheltered clump of White Dead-nettle, *Lamium album*, flowers was attracting many bees. Hounds-tongue, *Cynoglossum officinale*, was found in soil which had been disturbed by rabbits. The path on the north slope descended through ancient-looking shrubby bushes of Blackthorn, Buckthorn, *Rhamnus cathartica*; Spindle, *Euonymus europaeus*; and Wayfaring Tree, *Viburnum lantana*, which were all covered in berries. Small Scabious, *Scabiosa columbaria*, was found next to the path. Autumn Gentian, *Gentianella amarella*, and Clustered Bellflower were seen on the steep climb back to the car park, together with a mixed flock of Long-tailed Tits, *Aegithalos caudatus*, and Great Tits.

On Sunday 20<sup>th</sup> September Michael Keith-Lucas led a field trip to Snelsmore Common. More than 40 species of higher plants were recorded, including several bog species such as Cross-leaved Heath, *Erica tetralix*; Round-leaved Sundew, *Drosera rotundifolia*; cotton grass, *Eriophorum* sp.; Bog Asphodel, *Narthecium ossifragum*, and several rush species. Drier areas had Common and Bell Heather; Wood Sage, *Teucrium scorodonia*, and Bilberry, *Vaccinium myrtillus*. Ferns included Bracken, *Pteridium aquilinum*; and Narrow Buckler Fern, *Dryopteris carthusiana*, while mosses included at least six species of *Sphagnum* which varied in colour from whitish green to yellow, ochre and red. A number of fungi were seen such as species of *Scleroderma*, *Boletus*, *Russula* and *Amanita*, and insects included crickets and ladybirds. The round holes of solitary bees were also observed.

Members gathered in the churchyard of St Peter and St Paul, Shiplake, Oxfordshire on Saturday 17<sup>th</sup> October 2009 to look at lichens. James Wearn explained that different species could be found on acidic and basic stone. He showed lichens with different structures, including shrubby, leaf-like and crust-forming types. The colours of lichens in the churchyard ranged from white, bright yellow and orange to shades of green, blue-green, grey and black. Using hand lenses, the group examined the different reproductive structures, which are important for determining the lichen families or species. They learned about the ecology of lichens, including the effects of environmental factors such as light levels and precipitation. Grey Cushion-moss, *Grimmia pulvinata*, was growing on the tops of many of the basic tombstones. Wall Rue, *Asplenium ruta-muraria*, and Pellitory-of-the-Wall, *Parietaria judaica*, were identified and an interesting fossil, which looked like a lower jaw with teeth, was found in the church wall. An unspotted form of Harlequin Ladybird, *Harmonia axyridis*, was resting on a tombstone. The group then walked along the track next to the Thames to look at lichens on trees. The hairy caterpillar of a Ruby Tiger, *Phragmatobia fuliginosa*, moth was moved from the centre of the track to a safer location in the nearby vegetation.

Nettlebed Wood was the venue for the Society's annual fungus foray on Sunday 15<sup>th</sup> November. Recent mild weather and heavy rain had led to a bumper crop of fungi in the beech woods. Leader Gordon Crutchfield was kept very busy, identifying fungi of a great variety of colours and structures. Amongst the commonest species were Butter Cap, *Collybia butyracea*, and Clouded Agaric, *Clitocybe nebularis*. Ivory Waxcaps, *Hygrophorus eburneus*, were pure white with slimy caps, while the Amethyst Deceivers, *Laccaria amethystea*, were a deep purple. Braver members tried a piece of the bright red Beechwood Sickener, *Russula nobilis*, on the tongue – after a few seconds it released a fiery taste. It took sharp eyes to spot the thin club-like fruit body of *Clavariadelphus fistulosus*, while the creamy *Ramaria stricta*

had a coral-like form. Several moths, including a Feathered Thorn, *Colotois pennaria*, were identified. The field trip was attended by 18 members.

The final outing of the season was on Saturday 12<sup>th</sup> December, when Chris Bucke led a walk along the Thames from Caversham. The sun was shining, but it was a very cold morning when 9 members set out from Hills Meadow car park. In a small meadow area on View Island, Goldfinches, *Carduelis carduelis*, were feeding on the seeds of Chicory, *Cichorium intybus*, and there were still a few plants in flower. The river was very full and fast-flowing. At Caversham Lock, there were Zebra Mussels, *Dreissena polymorpha*, on the raised sluice gates and Hart's-tongue Fern, *Phyllitis scolopendrium*, was growing on the concrete walls. The big Black Poplar hybrid in Kings Meadow was inspected. It had very pointed buds and there were numerous exit holes of the nationally scarce Hornet Moth, *Sesia apiformis*, around the lower section of the trunk. 2 Black Swans, *Cygnus atratus*, were swimming close to the bank in the stretch of river close to Tesco. The walk continued through the riverside meadows to the nature reserve next to Thames Valley Business Park. A Kingfisher and several Grey Herons, *Ardea cinerea*, were seen and the little warbler in the Alders was probably a Chiffchaff, *Phylloscopus collybita*. On the way back, Chris informed the group that the ash from steam trains used to be dumped near the Tesco site. Plants on the former ash pits included Wild Mignonette, *Reseda lutea*; evening-primrose, *Oenothera* sp.; Wild Teasel, *Dipsacus fullonum*, and Great Mullein, *Verbascum thapsus*.

I would like to take the opportunity to thank all the members who have led walks in 2009 and especially thank Chris Bucke, Renée Grayer, Janet Welsh, David Cliffe, Ricki Bull and James Wearn for their contributions to this report.

### WEDNESDAY WALKS

Chris Bucke led the first walk of the year on 21<sup>st</sup> January, a cold, frosty and bright morning, just right for a brisk walk round Watlington and Christmas Common. There were good views from up above, with large clumps of Mistletoe and Velvet Shank fungus on some of the trees.

On 18<sup>th</sup> February, Ken Thomas led 14 people on a pleasant walk round Woodcote, Elvendon and Dean Wood. The paths were muddy paths and it was a dull and foggy day. There was time for a short lesson on identifying some of the more distinctive mosses in the woods, and a rather sinister Yellow Brain fungus was spotted.

On 18<sup>th</sup> March, twelve members, led by Colin Dibb, met at The Sun Inn at Hill Bottom for a walk in springlike weather down to Whitchurch Hill recreation ground and then across the Crays Pond road to the track towards Beech Farm. This gave access to field and woodland paths to Coombe End Farm and Stapnalls Farm before the route descended into Great Chalk Wood then up through Bottom Farm to Blackbird's Bottom. The way back to the pub lunch lay close to the Oratory School and through Great Oaks Wood. Early spring flowers included Primroses and white Sweet Violet and the Chiff-chaff was heard. A field of *Miscanthus* grass provoked a discussion on growing fuel versus food.

Ken Thomas took 10 people on a very interesting walk on 15<sup>th</sup> April. It started at The Bull at Riseley, via paths and lanes, to the Fritillary fields at Stanford End. The Fritillaries were seen in abundance, and in perfect condition. Some people saw Kingfishers by the River Loddon.

Gordon Crutchfield led the party on May 20<sup>th</sup>, starting and ending at The New Inn, Kidmore End. Though so close to Caversham and Reading, their proximity did not intrude - except, perhaps, for the stretch along the edge of a golf course. That extraordinary parasitic plant, Toothwort, was seen in two locations on the walk, past its best, but unmistakable.

On June 17<sup>th</sup>, a bright, warm day, Ken Thomas led 18 people from Hartley Wintney, over the River Hart, and onto Hartley Heath, where Heath Spotted Orchids, Bell Heather and Cross-leaved Heath brightened the turf. Despite wind and the threat of rain, various butterflies, including the Silver-washed Fritillary, were on the wing, and a Grey Wagtail and chick were watched on the ground. Goat's Rue grew on the edge of a wood, and there were large colonies of Peacock butterfly caterpillars on Nettles by the path. This proved to be a walk with lots of variety and interest.



At the Warren Bank BBOWT reserve at Hailey, the stars of the show were the insects, for a change. Despite strong winds and the threat of a storm on July 15<sup>th</sup>, some 18 members explored the area, led by Rod d'Ayala. The expected flowers of chalk grassland were there in all their glory - and one or two unexpected ones, such as Betony, Devil's-bit Scabious, and Deadly Nightshade. There were Red Kites, Buzzards and Slow-worms, but it was the insects which were the most memorable finds. The various species of butterfly and moth paled into insignificance beside the showy Black-and-yellow Longhorn beetle (*Rutpela maculata*), feeding on thistle flowers. For sheer size, the Great Green Bush-cricket (*Tettigonia viridissima*) was unrivalled, and another of the bush crickets, Roesel's (*Metrioptera roeselii*), was present in some abundance. One specimen, unusually with wings, was obviously about to set out to seek new territory.

It was sad to think that property developers had their eyes on the fields through which sixteen members were walking on August 19<sup>th</sup>, and that in all probability the walk would not be possible for much longer. From School Green, Shinfield, Ken Thomas led the party of 17 to St. Mary's Church, through the old site of the National Institute for Research in Dairying (now under houses), and across fields to Mary Russell Mitford's village, Three Mile Cross. It was a very hot day (30°C) but nothing very unusual was found, although there were some interesting weeds and alien plants. Many of the narrow lanes still had old hedges with large trees in them, and open ditches, and a number of small ponds were passed. The most spectacular field had views over distant Reading in one direction, with the wind turbine and the football stadium prominent, and in the other, an extensive mass of Hoary Ragwort, running up the slope towards the former Shire Hall on the skyline.

Alice and Eric Ayers led a walk on 16<sup>th</sup> September round Shottesbrooke Park via Waltham St Lawrence village when 20 of us enjoyed a general interest walk. A small group stayed in the park to explore the church and its surroundings whilst the rest went on to White Waltham. It was too dry for there to be much in the way of fungi, but amongst other things we saw Chicory flowers, a Buzzard and in White Waltham cricket ground a young *Sequoiadendron giganteum*, planted for the millennium, which was a seedling of a mature one in the churchyard, the latter having been struck by lightning in 1998.

On 21<sup>st</sup> October, eleven members met at The Blade Bone, Chapel Row, and walked through Ironmongers Copse, Withy Copse and Greyfield Wood. In some years this area has been so rich in fungi that a walk got no further but this year there were few fungi to be seen. The walk continued alongside High Wood and into Beenham village, down to Beenham church to admire the view, then back through Butler's Farm, up to Gunnell's Farmhouse and back along the road.

Fungi seen included the occasional Fly Agaric, Sulphur Tuft, Birch Polypore, *Ganoderma applanatum*, various *Coprinus* and *Mycena* species. Some brilliantly orange fungi very close to the end of the walk proved to be Spectacular Rustgill, *Gymnopilus junonius*, and an oak tree nearby was infected with *Griffola frondosa*. A tiny waxcap was found – probably these will become more plentiful, and larger, as the season progresses.

The most noteworthy species seen were a Brown Hare, between Butler's Farm and Gunnell's Farmhouse, and fine displays of Corn Marigolds (*Chrysanthemum segetum*) (between Beenham Church and Beenham Stocks) and Sharp-leaved Fluellen (*Kickxia elatine*) in a very weed-rich field between Greyfield Wood and High Wood. One of the Fluellen plants was a metre wide. Red Admiral and Painted Lady butterflies were noted.

On 18<sup>th</sup> November, a cloudy and windy day, 17 members, led by Ken Thomas, met at The Red Lion in Upper Basildon. After a visit to a very beautiful and interesting modern church, the group walked through suburban and country lanes past Blandy's Farm and through Harley Hill Wood down to Hood End Farm, then up the lane and around Rushdown and back to the pub for lunch.

23 species of plants were found in bloom, just about all of them in the first half of the walk and none of them unexpected. After the recent wet weather, the walk starred fungi; over 50 different species were noted, a surprisingly good number bearing in mind that very little of the walk was through woodland. Some courageous members collected Blewits (*Lepista* sp), The Prince (*Agaricus augustus*) and Tawny Funnel Cap (*Lepista flaccida*) to eat (and very good they were!). 19 species of birds were spotted, including Marsh Tit, Redwing and Fieldfare. The walk was very enjoyable.

Seven members, led by Colin Dibb, met at Rushall Manor Farm on the crisp, frosty morning of 16<sup>th</sup> December. Soon after the party set off they were treated to the very Christmassy sight of large snowflakes falling through the branches of Holly. This soon became a steady light snowfall which severely interfered with plant discovery although a few late toadstools were spotted including

Clouded Agaric (*Clitocybe nebularis*) and Ugly Milk Cap (*Lactarius turpis*). Not surprisingly very few birds were seen. The woods to the north of Rushall Manor Farm were explored and the walk extended through fields down to the River Pang. The upwelling of underground water in the Blue Pool complex was admired and one intrepid welly-clad member waded into the river looking for crayfish, unsuccessfully. A possibly exciting specimen in the river proved to be a discarded sock. In spite of the accumulating snow, a good number of fungi were noted, all of them frozen solid. This was followed by a most welcome lunch by the fireside in the Old Bull at Stanford Dingley!

Thank you to all the members who have led Wednesday Walks and especially to David Cliffe for writing so many of the reports.

## **INDOOR MEETINGS 2009**

### **6<sup>th</sup> January - Chris Bucke - (Mis)adventures in Tien Shan**

Forty-four members attended on a very chilly evening to hear the first lecture of the year. Chris Bucke described an expedition which did not go totally as planned. Tien Shan is a mountainous area in the very south of the huge country, Kazakhstan, which has a huge flora in the same floral kingdom as Western Europe. Consequently, many of the plants appear familiar to British plant enthusiasts but turn out to be different species. It is visited by botanists in particular for tulips and *Eremurus* species but the alpine pastures are extremely rich in herbaceous species and there are magnificent displays of high alpine plants. The speaker showed many slides taken by himself and by a Kazakh photographer of choice plants and of some of the mammals, birds and reptiles. Kazakhstan is a country that could be a source of important new species for western gardens.

### **3<sup>rd</sup> February - Andy Tucker - The Wildlife of Peru and Ecuador**

Mr. Tucker started his talk by describing the different environments in Peru ranging from arid desert, mountains, cloudforest and the rainforest of the Amazon Basin which provide a rich and varied wildlife. The Ballestas Islands have large colonies of Sea Lions and sea birds including the Humboldt Penguin, Peruvian Pelican and the Inca Tern. The Amazon Basin is a vast expanse of lowland tropical rainforest. The Macaw clay lick on the banks of the Upper Tambopata River is one of nature's most spectacular sights. The Harpy Eagle and the Hoatzin are also seen in this area together with the Jaguar, Sloth and many species of monkey. The cloudforest of the Andes supports many birds among them the bright red Andean Cock of the Rock, tanagers and several species of humming birds, including the Giant and the Sword Billed. The history and culture of Peru and Ecuador were briefly discussed, in particular the ruins of Machu Picchu and the Nasca Lines. The speaker then gave a short talk on mainland Ecuador. It also has very different environments which have led to an amazing variety of bird life with many species of humming birds, toucans and tanagers unique to the area. An excellent talk enhanced with superb photographs. 30 members and 5 visitors attended.

### **17<sup>th</sup> February - Ken Norris - The Fall and Rise of Farmland Birds in Britain.**

#### **How can we make agriculture work for wildlife?**

Fifty-nine members and four visitors attended a talk by Professor Ken Norris, Director of the Centre for Agri-Environmental Research at Reading University.

Prof Norris began by talking about the worldwide importance of agri-environments, from plantations to subsistence farming, for the conservation of biodiversity. He gave examples of how ecological studies provide data which can be used to help to preserve biodiversity as the area of agricultural land

increases. Birds are often considered to be a good indicator of biodiversity and the general health of the countryside.

The decline in populations of our own farmland birds from a high point in the early 1970s, when the CAP was introduced, was highlighted by BTO surveys published in the 1990s. The index of 20 farmland birds had declined by around 50%, with some species eg Corn Bunting and Tree Sparrow dropping by 80-90%. The decrease has been attributed to the intensification of agriculture to increase (human) food production, associated with a range of management changes. These include the trends from spring to autumn sown cereals, and to large areas of monocultures and more frequent cutting of grassland.

Prof Norris used the Corncrake as an example where targeted measures had benefited an individual species. The breeding population of this summer migrant had collapsed and become geographically restricted in the UK. An extensive RSPB survey of the birds and their habitats was used to develop agri-environment scheme options, particularly later mowing of hay meadows. Monitoring showed that Corncrake numbers increased when these management changes were adopted.

Our bird species are affected by a wide range of issues, from the development of agri-environment initiatives (including the Environmental Stewardship Scheme in England), policy reform and new technology, to climate change. Agri-environment schemes which reimburse farmers for practices aimed at benefiting biodiversity are a key policy instrument, with an annual expenditure of 5.25 billion dollars in Europe and N America.

Prof Norris described a model which considers a bird's ecological requirements – diet, habitat and nest sites – and hence their reliance on farmland, which can be used to predict the effects of agricultural activities. This suggests that the red list farmland birds would benefit more from options for cropped area management, than from the hedgerow and margin options which are more popular with farmers under Entry Level Stewardship. Our government has set a target to reverse the long term decline in numbers of farmland birds by 2020. More effective targeting of management measures will be needed to meet this PSA target, and we will need to take difficult decisions on the balance between food production, and wildlife populations and the environment.

A lively Q & A session followed this thought provoking talk.

### **3<sup>rd</sup> March - Stephen Harris - Mad March Hares**

On 3<sup>rd</sup> March 2009, Professor Stephen Harris gave a talk to 58 members and visitors on “Mad March Hares”. He tantalised members with the controversial view that, although we have conservation plans for Brown Hares, which were introduced by the Romans, we persecute another introduced species, the Grey Squirrel. Most people are familiar with the Brown Hare, but few have seen our native Mountain Hare which has been pushed out of the lowlands and only survives on the Scottish highlands above 1500 feet, with one surviving English colony in the Peak District. The hare has been associated with pagan gods, such as the Saxon Eostre, and was thought to lay eggs as the leveret lay down areas are similar to ground nesting birds nests. Eostre became the Christian Easter with the Easter bunny and eggs. Hares weigh 3.5kg and 3 hares are equivalent in grazing pressure to one sheep. They provided good sport in days gone by, and were shown being hunted in Egyptian tomb paintings. Hundreds are still shot on large British estates in February and March. The females box the males to ward off unwelcome advances. They can give birth from end January till October.

### **17<sup>th</sup> March - AGM and Members Evening**

After the formal business was completed, Chris Bucke co-ordinated 3 mini-talks given by members. The first talk was given by Malcolm Storey on “Spots on Leaves”, the second by Graham Saunders on “Garden Bees” and the third by Jan Haseler who spoke on Cumbria Wildlife Trust's Smardale Gill National Nature Reserve, one of only 2 English sites for the Scotch Argus butterfly. 55 members attended.

## **20<sup>th</sup> October - Martin Sell - Antarctic to Ascension**

53 members listened to Martin Sell recount his adventures in the southern hemisphere: "For most people this would be the trip of a lifetime, and it certainly was just that for us. A certain limited number of vessels, of varying capacity, operate cruises in the Arctic and Antarctic, moving to opposite ends of the globe according to the season. We were invited by a friend to book early if we wanted to secure a place on the 5 to 6 week trip, known in the "circles" as the "repositioning" trip, or less prosaically, the "Atlantic Odyssey". Having flown from the U.K. via Madrid to Ushuaia, at the tip of Southern Argentina, we had time to explore, and visit Tierra del Fuego National Park, where Southern Beech is the dominant vegetation, just going into autumn colour. In one of the inlets in the Park, we saw Andean Condors, humming birds and even Albatrosses, the latter a taste of things to come.

The following day, we boarded our vessel, the m.v. Professor Molchanov, a small (1400 ton) Finnish-built Russian ice-strengthened research vessel, and sailed off towards the Antarctic Peninsula – two days crossing the Drake Passage, the stormiest piece of water in the world. Fortunately, the weather was kind, and we began to see an amazing variety of seabirds, including the first penguins of the trip. Two landings were made on the Continent itself, where there were some Adelie and Gentoo Penguins, and Snowy Sheathbills. All too soon, it was time to leave, and make the three-day crossing to South Georgia. Icebergs were all around, many the size of 10-storey office blocks, making our ship feel particularly small and vulnerable. Snow Petrels, beautiful white birds, flew round the ship, and one evening, in calm waters, we were pursued, or observed, by up to 30 Humpbacked Whales, and maybe 80-100 Orcas, or Killer Whales. Southern Right Whales and two Blue Whales were also observed on this leg of the trip.

South Georgia was probably the highlight of the voyage, with fine and sunny weather. We were able to spend a whole morning in the company of King Penguins, and some Elephant Seals on Salisbury Plain, where the rookery of King Penguins is reputed to contain 109,000 birds, which breed all year round. A visit to a colony of Wandering Albatrosses concluded a very eventful day. While there, we were also able to see former whaling stations at Stromness, and Grytviken, where we visited Shackleton's grave.

Five days at sea followed, before we sighted Gough Island, a World Heritage Site, with endemic albatross species, an endemic bunting, and an endemic flightless moorhen. It is not possible to land here, so we had to see all these species from the Zodiac boats. After breakfast, we ran straight into a Force 8 on our way to Tristan da Cunha, the most isolated inhabited island in the world. Often it is impossible to land due to rough seas, but we were lucky, having a beautiful sunny day, and even finding a pair of one of the rarest birds in the world, the Tristan Thrush. Unfortunately the weather deteriorated for the next two days, so we could not land on Nightingale or Inaccessible, so we cut our losses and set off for St. Helena, a further 5 days' sailing.

St. Helena is very different from Tristan, being about 20 million years old, compared to Tristan's one million, and is richly vegetated. Unfortunately most of the species are alien, but remnants of the original vegetation remain, mostly in the cloud forest at the top of the island. These are predominantly in the daisy family and mostly shrubs or small trees. One endemic bird, the Wirebird, or St. Helena Plover, still exists, and we were shown several. Napoleon's bungalow and grave were also visited, and to my surprise, several butterflies, including a Long-tailed Blue, were seen. We also took this opportunity to release a stowaway, a Cattle Egret which had come aboard after leaving South Georgia, and had been with us for 2,800 nautical miles!

And so to the last stage of our journey – 2 days sailing to Ascension – calmer seas, and much warmer – a bleak volcanic cone, with a huge American airbase. Here the weather had been unusually rough and we had difficulty getting ashore, but finally our epic voyage was at an end, a total of 5,556 nautical miles, or 6,431 statute miles. After an overnight flight from Ascension to Brize Norton with the R.A.F. we were home. Other hardy companions would have another 6 days' sailing to Cape Verde before their voyage was finally over."

### **3<sup>rd</sup> November - Prof. David Mabberley - Flowers and fumigants**

Tonight's talk, attended by 76 people, was subtitled "a brief history of the Royal Botanic Gardens, Kew". Prof. Mabberley told the audience that the Gardens at Kew are celebrating their 250<sup>th</sup> anniversary this year, but some parts of the Gardens and buildings are even older, such as Kew Palace, which was built in 1631 by a Flemish merchant and then called "the Dutch House". The Gardens were founded by Princess Augusta, the wife of the Prince of Wales at that time, and William Aiton was appointed as the first head gardener in 1759. Important people for the development of the Gardens were Sir Joseph Banks, the first unofficial director and Sir Joseph Hooker, the 2<sup>nd</sup> director, who travelled far to collect plants and wrote important books such as "*Genera Plantarum*" together with Bentham. This classification of the flowering plants was used until very recently in all herbaria and botanical gardens in the world. Charles Darwin was a good friend of Hooker and assisted him updating the standard list of plant names.

In the 19<sup>th</sup> Century many glasshouses were built, including the Palm House in 1845, and also the scientific institutes (the Herbarium and Library in 1852 and the Jodrell Laboratory in 1877). At present the Gardens cover 800 acres of land, 300 at Kew and 500 at Wakehurst Place, and there are many grade I and II listed buildings, 43 on the Kew site. In 1841 there were *ca.* 9,000 visitors, which increased to 1.24 million in 1882 and since then the number of visitors has fluctuated around the 1 million mark, the record year being 2006 with 1.31 million visitors.

The Herbarium contains *ca.* 8 million specimens of which 350,000 are type specimens. The latter are now being digitised, so that they do not have to be sent out to other herbaria any longer. In the past pest control took place with arsenic or mercury poisoning, but now by freezing the incoming specimens to -40°C, which kills both insects and their eggs. Plant collection is still taking place, especially in Africa, South America and SE Asia. Duplicate specimens and DNA samples are left in the country of origin. To make one herbarium specimen costs on average £100 (collecting, freezing, identification, mounting, labelling and inserting in the collection = "laying in").

Darwin left money to Kew to start making an index of all the Latin plant names, which was called the Index Kewensis and grew to many volumes. This was recently converted to a computer database, called the "International Plant Name Index" (IPNI).

The second scientific institute at Kew is the Jodrell Laboratory, where experimental research is carried out on the relationships among plants. Nowadays this involves mainly DNA work, but there are also research groups dealing with systematic anatomy, chemotaxonomy and cytogenetics. After the latest extension some five years ago, the mycology collection was transferred to the Jodrell and now includes more than 1 million specimens. Recently the collections of CABI were also incorporated.

The Millennium Seed Bank opened in 2000 in Wakehurst Place, with the aim that the seeds of 10% of plant species will be stored here by 2010, and 25% by 2020. The country of origin gets duplicate seeds for every collection. It is hoped that these seeds will help habitat restoration in the future, e.g. after droughts.

### **17<sup>th</sup> Nov - Roy Davies - The Darwin Conspiracy**

Roy Davies has been a producer for history programmes on the BBC (he was one of the producers for Timewatch.) His talk began with the traditional story of Darwin's publishing of his theory of evolution: his interest in the Galapagos, in the creatures he saw, his writing of his paper 6-7 years later and his publication of it 20 years thereafter (due to his respect for his wife's faith and/or his worry about civil disobedience because of the impact of the idea on current beliefs.) The supporters of Darwin were also introduced: Charles Lyell, the most important geologist of the time, who became his patron.

Although Darwin had an interest in natural history and was famed for the collections he sent back to England, upon his return from his voyage on the Beagle, he gave away the natural history specimens from the trip, keeping only the geological specimens and concentrated on writing geological papers. His original Beagle journal from 1836 gave no evidence for the later ideas on natural selection; however, he published two later editions of the journal – that of 1839 had very little evidence but the edition of 1845



included claims that the journey had given him ideas about how new species came into existence, but still no hint of any ideas on natural selection.

In an 1844 essay, Darwin concluded that species are perfect for their environment and cannot change unless geological conditions change, at which time they migrate to new environments, or, since they are no longer perfect for their environment have to 'jump' to a different form (*per saltum*). Darwin, in fact, said that an anonymously written publication, 'Vestiges,' claiming that the simplest organisms give birth to the type above them and that this process continues and has done so up to the present, was wrong. Darwin gave his own ideas, stated in the 1844 essay, to Joseph Dalton Hooker in 1846 who informed him that these ideas were not workable.

Alfred Russel Wallace, in contrast to Darwin, was a young working class man from the borders of Wales who, at the age of 21, believed that 'Vestiges' was correct but that it needed additional facts. He and his friend, Henry Walter Bates (who was already a published contributor to scientific journals), set off for the Amazon in 1848 to discover more about the origins of species and returned in 1852 with some evidence of species changing. In Borneo in 1854 Wallace immediately discovered connections between local species and South American ones and considered that species had diverged. In 1855, after looking at the characteristic structures of birds, he published a paper stating that all the gaps between species of birds resulted from the extinction of the intervening species during former periods. In other words, he saw the species as existing on a continuum. Two months after this publication, Darwin's theories began to change. Wallace, thereafter, informed Darwin of his discoveries and theories by direct communication, and these can be shown to have directly influenced both the content of Darwin's theory and the speed with which it was published. Through looking at the dates or writing of letters from Wallace and the delivery of those same letters to Darwin, Roy Davies showed that Darwin had, without doubt, received the ideas and theories of Wallace and that these theories had heavily influenced, perhaps even formed, his 'Origin of Species.'

Both Wallace and Darwin presented papers to be read at the Linnean Society. Through the influence of Lyell and Hooker, Darwin's paper was given pre-eminence and Wallace believed what Darwin told him - that Darwin had come up with his theory separately to Wallace. Wallace was grateful that his name was conjoined with Darwin as the originators of the theory of natural selection. 53 members attended.

Roy Davies' controversial book is available for free download online at: <http://www.darwin-conspiracy.co.uk>

### **1st December - Prof. Jane Lewis - Arsenic and Old Lace**

Dinoflagellates are single-celled plants, from 10-70microns ( $\mu\text{m}$ ) in size and can exist in varied shapes – both singly and in chains. They are recognised by colour and nucleus. Unfortunately current trends in universities concentrate on the molecular level and there is a danger of losing sight of the organisms themselves.

The life cycle of dinoflagellates includes both motile and resting stages. The resting stages of some may be very elaborate, hence the 'old lace'. Most of their life is spent in the sediment but at certain points when both the temperature and the light are right, they come out into the water and divide. Their behaviour in the water follows a circadian clock – e.g. their swimming behaviour shows them forming clusters in the morning and spreading out at night, with 'flashing' or bioluminescence at night. Bioluminescence is of concern to the military since dinoflagellates will flash in response to passing submarines rendering the latter detectable at night. The use of bioluminescence by dinoflagellates may be related to predator deterrence either by startling them or by lighting up the water so the predator itself may be seen and eaten by a larger predator.

There are different dinoflagellates in different nutrient conditions. *Lingulodinium polyedrum* is a dinoflagellate which exists in conditions with high nutrients. This is one of the organisms causing "red tides". These occur, not because the organisms grow particularly quickly, but because they aggregate; as mentioned above, their daytime behaviour is to form clusters. Where nutrient levels are high, very large populations can build up, even being visible from satellites. The main issue with red tides is that so much vegetation is in one place, decaying at the same time, that it can deplete the oxygen in a body of water, thus depriving other organisms of that which they require for healthy conditions. Red tides will

disappear naturally in conditions of favourable offshore winds, where viruses and parasites attack them and where they are eaten by micro-zooplankton.

Some dinoflagellates produce toxins, one of which has been explored as a biological weapon! The old adages

- not to eat shellfish when the month does not contain an 'r'
- not to eat shellfish when the sea is shining

are actually useful pointers. Dinoflagellates tend to grow in the summer and bioluminescence indicates high density. Their presence in shellfish can cause serious poisoning in humans and shellfish beach procedures are well-regulated to prevent this.

Dinoflagellates can also be found in the fossil record. The size of the spines may correlate with salinity at particular periods of the past; measurements have been made in the lab to correlate spine growth with the salinity of the nutrient water. Spine size does also relate to temperature, however. Different species in fossil samples may relate to different eras. 45 members attended.

### **15<sup>th</sup> Dec – Christmas Party**

It is amazing how a successful Christmas party is put together. Everybody brought some food and there was more than crisps and mince pies, in fact quite a spread of meats, quiches, salads and savouries. Meryl Beek produced a superb mammals quiz to tax the grey cells, So what mammal "Carries a trunk" or "Idle chatter" or "Raised temperature"?

Chris Bucke looked after the photographic competition (see below).

Three talks were given. We went down Memory Lane as Jan Haseler took us through the summer excursions with slides of earnest and puzzled looking naturalists (must be trying to identify violets!). Chris Bucke introduced and amused us with a couple of poems by T.E. Brown. He was a Manxman who taught at Clifton College, Bristol, and wrote his poetry during the second half of the 19th Century. He is revered in the Isle of Man for many narrative poems written to be read in the Manx dialect. Graham Saunders showed slides of the Kruger Park in South Africa with some grumpy elephants getting tough with Impala at a watering hole (just because they are BIG!!) 50 members attended.

Thank you to all the members and speakers who volunteered to write the above accounts of the meetings.

## **PHOTOGRAPHIC COMPETITION 2009**

### **Chris Bucke – competition coordinator**

The entries were of high quality but fewer photographs were presented than in previous years: more than one potential entrant experienced technical problems immediately before the event.

The picture judged best overall by the audience was Laurie Haseler's photograph of a Scarce Swallowtail butterfly from the non-UK class. The best image of a vertebrate was an Adder photographed at Decoy Heath by Laurie Haseler and the best invertebrate was Jan Haseler's picture of a Mint Leaf Beetle (*Chrysolina menthastri*) on mint, its food plant, taken at Moor Copse. Other winners were a Large Wall Brown (Laurie Haseler), the Giant Funnel toadstool (*Leucopaxillus giganteus*) (Jan Haseler) taken at Spencer's Wood and Chiltern Gentian photographed at Bald Hill, also by Jan Haseler.

For 2010 the rules will be modified and it is hoped that the quality of images will be maintained and the numbers of entries increased.

The winning entries are shown on page 23.

## ANCIENT GARDENS

### PRESIDENTIAL ADDRESS – by Graham Saunders

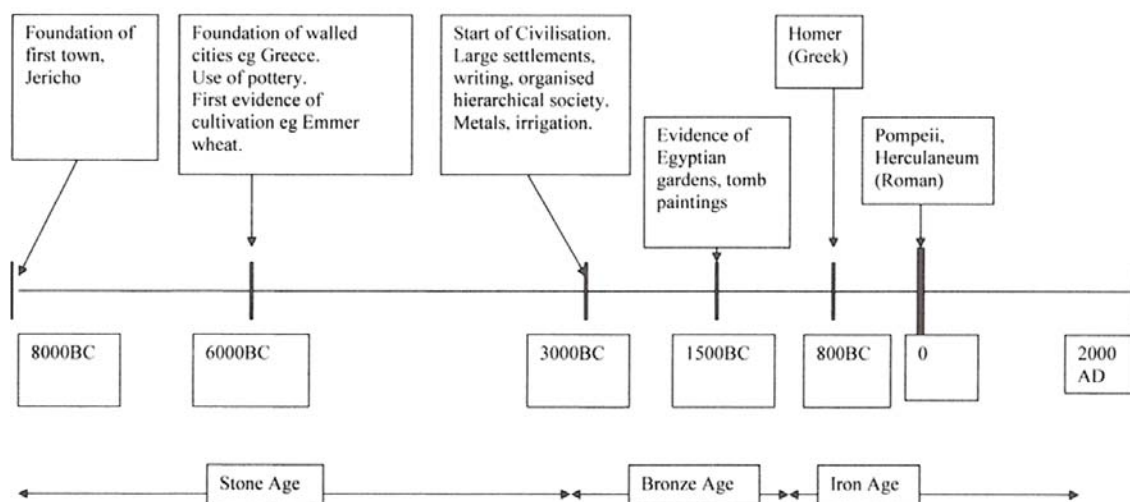
#### Introduction

When we are young we take gardens for granted. We see different gardens with different plants, big plants, small plants, lawns, green leaves, flowers of almost every colour, flowers that come out in spring, or summer, or autumn. But what happens when we get a garden of our own and we start trying to grow fruit, veg and flowers? Half the seeds and plants we put in don't grow, or sulk, and the other half succumb to strange spots and moulds and the infernal munching of a million tiny teeth!

We find we need to prepare the soil ("The answer lies in the soil" - Kenneth Williams), good exercise or back-breaking work depending on your outlook, work it so it is the right texture and contains the right organic matter and minerals. Then plant the seeds and nurture them and water and keep off the pests and feed them. And this goes on for months. And for perennials it goes on for years. Plants are like spoilt children, they need constant attention and they never go away!

Today, we have thousands of plant species and from them we have bred hundreds of thousands of cultivars of all colours and sizes. Millions of us tend our own gardens, and get great pleasure from them. The more gardening we do, the more there seems to learn. I think gardeners are special people. It needs planning and an empathy with the plants. We need to know what they need and how to give it to them. We need to be very caring, and artistic and like colour and form and we need to think ahead, sometimes years ahead when planting trees. And our minds must be curious and open to new knowledge

So, how have we arrived where we are? We have made a journey from grunting and running around naked or in animal skins to the Botanic Gardens at Kew. Let's go back in time to see if there are any clues. 40,000 years ago *Homo sapiens* evolved as a separate species and became top of the food chain. There is no evidence of a settled culture for a long time. These were times without stone buildings, no large settlements, no metal working and no pottery, but there was fire and stone tools. It was probably also a fairly insecure age where, if the tigers and mammoths didn't get you, then your warring neighbours would come and steal your goods. The same principles applied then as now – it is much easier to steal than to produce goods yourselves.



The figure above, Fig 1, shows our civilisation timeline. We need to move on to some sort of organised and stable society. "And the walls of Jericho come a tumbling down". Yes, Jericho lays claim to the first city with evidence of stone walls. Around 6000BC, there is evidence at Sesklo in Greece of walled cities, organised agriculture in the middle east and pottery becomes widespread. There are the foundations of a society that has a reason to stay in one place (to tend crops), has some sort of security behind defensive city walls and is able to store the produce in storage jars away from pests. These "cities" were settlements of a few thousand people, hence, more like large villages, than cities. There is no evidence of gardens, although there is evidence of the crops that were grown.



The next big invention was the use of metals. Gold was worked in Greece from around 4000BC and copper pins and tools were made from around 3600BC in Egypt. There were some significant settlements at this time in Egypt. If you go to Hierakonpolis today the ground is littered with broken pottery shards from this date. The first large settlements are appearing with a hierarchical society. What do we mean by this? Well, Upper Egypt has the great advantage that it never rains, hence all sorts of material which would rot away in England is actually preserved. Thus, we know they had pottery kilns, they brewed beer. They had kings, middle class artisans and the poor. And how do we know? Because they were buried in different ways. The rich had rock-cut tombs. One was painted and the owner was buried with his private zoo including two elephants and baboons. Any gardens? They certainly grew crops and certainly wild flowers grew, just as today, but any evidence has been churned over in 5000 years of agriculture.

## Egypt

Copper is fairly soft but around 3000 BC the first bronze tools appeared and this can be used in ploughs and gardening tools. Also, society becomes far more organised with the introduction of writing. Society become stratified with Kings becoming like gods and countries like Egypt becoming unified. The King could thus command the resources of millions of people. The King appointed officials to rule and the temples, and hence, priests, become immensely rich. As today, the rich spent their money on big houses and the priests on big temples.

The first real evidence of a garden comes from the temple of Sneferu (2613-2589 BC). This is a temple garden which is situated next to his pyramid at Dahshur, near Cairo.

Another great king was Mentuhotep II (2055 – 2004 BC). He built a temple complex at the base of the cliffs on the West bank at Thebes. The temple is about 1 km from the Nile and the ground rises gently up from the river to the temple.

When it was completed it must have been a magnificent structure with courtyards, columns and a pyramid. Mentuhotep was buried behind the temple along a 150 m passage. Imagine a wide avenue leading from the river up to the temples. On either side was a wall, then a row of trees, then a row of statues every few metres. This was used for lively ceremonial processions in which a whole entourage of priests carry statues of the gods accompanied by singing, dancing and the townspeople (eg Festival of the Valley). The pharaohs were thought to join the gods when they die and the ceremonies were like a gods' reunion. In front of the temple were 2 rows of Sycamore Figs which formed an avenue by the ramp. Outside them were 2 rows of Tamarisk trees. Between the Sycamores there were two flower beds of 2 by 7 metres with roots still remaining.

Another part of the garden was described by the excavators as: "Outlined by two concentric circles of brick. ... The whole garden had a diameter of about 13.5 metres. The bricks of the outer circle were laid end to end and their outside was plastered. The interior of the circle consisted of a coherent mass of mud much cracked from watering. A large tree stood at the centre and deep and very large roots are still preserved. Leaves found here seem to prove it was a Sycamore Fig". The Sycamore Fig was a holy tree for the ancient Egyptians as it was associated with the goddess Hathor.

To plant the *Tamarix aphylla*, there were 56 large pits. Each one was filled with Nile mud which had to be transported up hill over 1 km. The trees were planted, then watered by hand. The water had to be brought from the canal. You can imagine the quantities of water required to keep the trees alive and to keep the flower beds watered. It all had to be carried by hand!

Next to Mentuhotep's was Hatshepsut's temple (1473-1458BC). Hatshepsut was the first and only woman pharaoh, so she must have been quite a gal! Hatshepsut also had a garden. Again she had trees, planted in 3 metre holes filled with Nile mud. She also had two T-shaped pools with Papyrus still visible when they were excavated.

Her temple also shows scenes from an expedition she took to the land of Punt, thought to be in Ethiopia, in which she brought back some trees, possibly Myrrh, with root balls (fig 2).

The trees in containers are thought to have been placed on the terraces of Hatshepsut's temple. Further evidence of temple gardens is from excavations at the funerary temple of Ramesses III at Medinet Habu

(Thebes) which according the Ramesseses, he “surrounded with gardens, trees and filled with fruit and flowers ... and dug a lake before them filled with lotus flowers”.

There are some tomb paintings of other gardens. There is one (fig 3) in the tomb of Sennufer, Theban tomb 96, who was a general of Amenophis III, around 1500BC. He was also “Overseer of the gardens of Amun” and this garden is probably one around the temple of Karnak. His duties were to bring flowers and to present “The scent of the marshes’ flowers and...all kinds of plants from amongst the finest of the orchard”.

It shows an extensive garden of pools containing lotus lilies (*Nymphaea lotus*) and ducks and surrounded by flowers and reed beds, palm trees (Date and Doum Palm) and other trees, possibly Sycamore Figs. In the centre are grape vines. There is a house and two shelters with seats to sit on to relax and admire the view. A clue as to what grew around the pools is an inscription found in Karnak on some garden doorposts “His Majesty sanctified the pool, adorned with reeds, and planted with sedges, lotuses, herbs, rushes and lotus buds”.

One of the purposes for painting gardens in tombs was so the deceased could enjoy it in the afterlife.

Fig 4 is from the tomb of Nebamun, (now in British Museum) again showing a pool with lotus and ducks, surrounded by flowers, Date Palm, Common Fig and Sycamore Fig. A tree goddess, (Hathor?) is emerging from one of the trees as she is seen to provide for the deceased in the afterlife. Gives a whole new meaning to tree hugging!

On a smaller scale, we have a model walled domestic garden (fig 5) found in the tomb of Meketre, Thebes, which sensibly shows trees for shade, wood, fuel and possibly produce, like olives and figs.

An ancient Egyptian poem gives a flavour of the gardener’s life:

The gardener carries a yoke  
His shoulders are bent as with age  
There’s a swelling on his neck  
And it festers.  
In the morning he waters vegetables  
The evening he spends with his herbs  
While at noon he has toiled in the orchard  
He works himself to death  
More than any other profession.

## Greece

We have two descriptions of ancient Greek gardens. The first from Homer in *The Odyssey* (800BC)

### *The Palace of Alcinous*

“Outside the courtyard but stretching close up to the gates, and with a hedge running down on either side, lies a large orchard of 4 acres, where trees hang their greenery on high, the pear and the pomegranate, the apple with its glossy burden, the sweet fig and the luxuriant olive....and a fruitful vineyard. Vegetable beds of various kinds are neatly laid out beyond the farthest row and make a smiling patch of never failing green. The garden is served by two springs, one led into rills to all parts of the enclosure, while the one opposite, after providing a watering place for the townsfolk, runs under the courtyard gate towards the great house itself.”

The second from Asia Minor (Greek) – Longus in *Daphnis and Chloë* (Lesbos): (100AD)

“The garden was a very beautiful place and bore comparison with royal gardens. Around it was a narrow fence. It was 200 yards long, lay on elevated ground, and was 100 yards wide. It had every kind of tree – apple, myrtle, pear, pomegranate, fig and olive. On one side it had a tall vine, which spread over the olive and pear trees with its darkening grapes ... and there were also cypresses, laurels, planes and pines. The fruit bearing trees were on the inside as though protected by the others. ... There were beds of flowers too, some produced by the earth itself and some by art. Roses, hyacinths, and lilies were the



Photographic Competition (p. 19) – winning photographs



Scarce Swallowtail (*Iphiclydes podalirius*)  
Best Overall Photo – © Laurie Haseler



Large Wall Brown (*Lasiommata maera*)  
Best Captive or Non-UK – © Laurie Haseler



Giant Funnel toadstool (*Leucopaxillus giganteus*)  
Best Fungus – © Jan Haseler



Chiltern Gentian (*Gentianella germanica*)  
Best Plant – © Jan Haseler



Adder (*Viperus berus*)  
Best Vertebrate – © Laurie Haseler



Mint Leaf Beetle (*Chrysolina menthastri*)  
Best Invertebrate – © Jan Haseler



## Presidential Address



Fig 2: Trees, possibly Myrrh, with root balls, being brought back from expedition to Punt (Ethiopia?). Hatshepsut's temple, Thebes



Fig 3: Painting of garden in the tomb of Sennufer (a general of Amenophis III). Theban tomb 96. Around 1500BC



Fig 4: Painting of a garden from the tomb of Nebamun, (now in British Museum.)

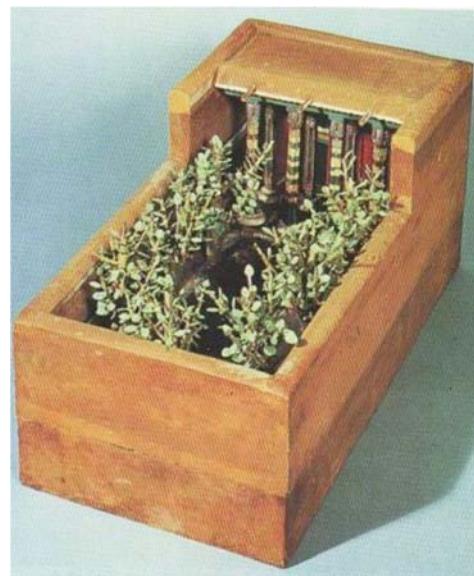


Fig 5: model walled domestic garden found in the tomb of Meketre, Thebes

(Figs 2-5 taken from *The Garden in Ancient Egypt* (see p26) and used with the publisher's permission)

work of human hands: violets, narcissi and pimpernels were produced by the earth itself. There was shade in the summer, flowers in the spring, grapes for picking in the autumn, and fruit in every season”.

I'd now like to introduce you to Columella who was writing in the first century AD at the height of the Roman Empire. He wrote 12 books on agriculture (*De re rustica*) including Book 10 on gardening. This book described the complete cycle of gardening such as how to prepare the soil, when and how to plant and care for seeds, when to transplant, when to pick the crop, pests and diseases and storage (pickling).

Thus, the best gardens have rich soil and are adjacent to rivers. You need to “enclose the garden with walls or thick set hedge”. When do you do things? Well, you “dig the garden with a spade when the thirsty Dog-star has drunk deep of the ocean”. These were the days when there were no newspapers or TV and the Roman calendar was somewhat inaccurate, but the stars always moved on an annual cycle. The Dog-star is Sirius, the brightest star in the sky. When the “swallows hail spring” is the time to dig in rich mould and asses dung”. Sound familiar?

And how do we know the Romans grew flowers? Because Columella tells us how and when to plant snowdrops, marigolds, antirrhinum, narcissus, lilies, hyacinths and more. Some plants were medicinal. He tells us to plant poppies which will “bind elusive sleep”. Has anyone tried it? He doesn't tell us what type of poppy, so we are left to speculate. He tells us about the herb garden and how to grow mint, dill, rue, mustard and alexanders (*Smyrniolum olusatrum*) and more.

If you want vegetables, we have onions which “sharpen men's desires and fit them for the girls” and colewort (*Brassica erica*) which “may rouse up sluggish husbands to make love”. So I don't know if anyone has tried this. You can imagine Roman wives either giving their husbands colewort or making sure their husbands don't eat colewort, depending on their mood!

They also had 5 different kinds of lettuce, 3 different kinds of peaches (Persian, Gaul and Asia), and an almost infinite number of grape vine cultivars, which may hint at their priorities! That's the benefit of having an empire stretching to half the known world.

Amongst all this civilised activity, it seems strange that “To prevent creatures horrible from eating crops” they “hung aloft night flying birds on crosses”. I doubt if that was effective, but it shows the sort of thing that people could believe in.

Columella was writing around 70 AD, so you can imagine, just as we sit down to read “The Garden” from the RHS, the ladies of Pompeii were sitting in their gardens reading Columella and planning what they, or more likely their slaves, should be doing over the weekend.

Another Roman writer was Virgil in The Georgics. He describes

A Corycian who laid out his kitchen garden in rows amongst the brushwood  
Bordering it with white lilies, verbena and small seed poppy  
He was happy as a king. He would go indoors at night  
To a table full of dainties he never had to buy.  
His, the first rose of spring, the earliest apples of autumn  
And in grim winter, cutting his soft haired hyacinths.  
He had limes and a wealth of pine trees.  
He transplanted in rows the far flung elm  
The hardwood pear, the blackthorn bearing its weight in sloes  
And the plane that already offered a pleasant shade for drinking.

Virgil (Georgics II) also gives us

Grafting and budding are two different operations.  
When buds push out from the bark  
And burst their delicate sheaths, you should make a narrow slit  
In the actual knot: it's here that you enclose a bud  
From another tree and train it to grow in the sappy bark.  
Grafting's different – it's done by cutting a smooth trunk



Splitting the wood deeply with wedges, and inserting the fertile scion: before long  
The tree ascends to heaven in a wealth of happy branches  
Surprised at its changeling leaves and fruit that are not its own

### ***Pompeii and Herculaneum***

So, on to Pompeii. Luckily for us (unlucky for them!), the volcanic eruption of Vesuvius in 79AD preserved Pompeii in a time capsule. Pompeii and Herculaneum are on the fertile slopes of Vesuvius. This has one big advantage as water can be supplied to the top of the town and be led down through pipes by gravity. There was thus a constant supply of water to the water troughs in the streets and to the houses and this was routed to the gardens, the ponds and the fountains. There were about 5000 people living within the walls. The streets divided the town into "insula" as at Silchester and there were houses or just one house per insula. Pompeii was quite a green city. Jashemski has catalogued 450 gardens. These make up 5.4% of the town's area with a further 9.7% being used for food production, such as vineyards.

All gardens of Pompeii and Herculaneum are different, but a typical garden would consist of a central rectangular area with a pool, fountain and statues, a herb section, used either for cooking, medicine or for aroma, and possibly vegetables, grape vines, and also, some trees for shade, wood or fruit or olives. The garden was surrounded by colonnades with trellis between the columns and a gate into the garden. There was a roof over the colonnade and the back walls were either painted or had mosaics. The family could enjoy eating outside either in the garden under the trees or under the colonnade and very pleasant it must have been!

Pompeii also contains spectacular wall paintings with birds, fountain, domestic and wood pigeon, magpie, swallow, plane tree, trellis fence.

I hope I have opened a window on the ancient gardens and shown you that people have been enjoying their gardens for thousands of years.

### **References:**

1. *The Natural History of Pompeii* by Wilhelmina Feemster Jashemski and Frederick G Meyer, Cambridge University Press, 2002.
2. *The garden in Ancient Egypt* by Alix Wilkinson, Rubicon Press, 1998.

### **Acknowledgements:**

Our grateful thanks to Rubicon Press (now Marketing Stacey) for allowing us to reproduce photographs from the above work (see p. 24)

## **Herb Paris Project (April-July 2009)**

### **Meryl Beek**

No new sightings were reported in 2008, so it was very exciting to get news of two new locations in 2009. They are both in Buckinghamshire and within the 20 mile radius of Central Reading.

1. On April 22<sup>nd</sup>, Meryl Beek, Chris Bucke, June Housden, Roger Kemp and Alice Vinden met Alan Showler (warden of BBOWT's Millfield Wood) and Alan Gudge (Frieth Natural History Society) to investigate Branch Wood, Downley, West Wycombe. At SU 83835 94710 they found 200+ plants in bloom. The site is away from the general dog walkers' path. The surrounding wood is very overgrown and quite dense in places. Dog's Mercury is nearby, together with an overhanging Wych Elm and a cherry tree. According to Roy Maycock, 1987 was the last confirmed sighting. It is not known, to date, who owns this small sloping site near new suburban houses.

Later in the afternoon, a return visit was made to Millfield Wood at SU870954 where Herb Paris continues to do well. Details were recorded in the 2006 Reading Naturalist (No 59). On the present visit the plants were just coming into flower. They are scattered over a wider area than at Branch Wood. The 1100+ plants were more mature than when seen 3 years ago.

2. On 7<sup>th</sup> June, a party from the Society met members of the Frieth Natural History Society for a combined walk with Alan Gudge as leader to Mousells Wood, Frieth, meeting at SU789912. About 20 people were able to see the three distinct patches of the plant in fruit. The leaves were beginning to turn brown as the season was advancing. Some plants had from 3-6 distinct leaves, the rest were typical *quadrifolia*.

In July 2008 Alan and Juliet Gudge had counted 2000 plants altogether and about 1/3 of these had been fruiting.

It is interesting to note that originally this was a serendipitous find by Alan, who, as a local, is able to walk his dog through these private woods. The dog got off the route and this caused Alan to trip over a stick. Then he noticed Herb Paris growing at his feet!

Hopefully there are other patches in many local woods waiting to be discovered, but don't fall over a stick on the way!

Keep searching and report back to Michael Keith-Lucas as the Botany Recorder or Meryl Beek who continues as self-appointed "Herb Paris Coordinator".

## **A new Disease of Astartia**

### **Malcolm Storey**

If you grow Masterwort (*Astartia major*) in your garden, perhaps by your pond, you may have noticed that in recent years it has developed a lot of yellow leaves around midsummer. If you looked at these more closely you might have noticed swarms of little pin pricks and occasional tiny, pale, cup fungi fruitbodies on the undersides. This is now known to be the minute ascomycete (cup fungus) *Leptotrochila astartiae*. It grows only on this host, where it is probably quite common.

This is a newly recognised disease in the UK, (see Plant Clinic News, Oct 09) so a fuller description might be useful. The following details were taken from infected plants which I found in my garden, 13 Oct 09, Upper Bucklebury, SU542683, soon after reading the above account. This is presumably the first Berkshire record.

On the under surface of dark brown necrotic areas beside yellow patches on fading leaves of *Astartia major*. The green, yellow and necrotic areas of the leaf are often peppered with small brown holes of unknown origin. These sometimes go right through the leaf. They don't appear to contain fungal material and may be where apothecia have dropped off.

Apothecia up to 0.3mm diam, pale, erumpent, with sparse erect hairs arising from brownish patches on sides of apothecium (reminiscent of *Anthrachia* but with proper hairs). Under the microscope, the thickened tips of the asci are weakly, diffusely blued in Melzer's iodine; the pore is not visible. Asci measure 52-60/11-12µm. The curved-fusiform ascospores are biserial and measure 17-20/5µm (measured in ascus). The paraphyses exceed the asci, and are twice divided dichotomously. They taper downwards from the apical section which is 2-4µm wide. The excipulum is composed of round, thin-walled, hyaline cells. The most remarkable feature is the excipular hairs which project 40-47µm by c. 4µm wide; they are grey and thick-walled, becoming thin-walled towards the 3µm wide tip. They have 1 septum in the lower part and another septum at the base, +/- parallel sided above the slightly swollen base; arising from a layer of dark grey, spherical to pyriform cells, c. 8/6µm diam. Material now at Kew.

### **References**

*Plant Clinic News*, Oct 09

<http://www.fera.defra.gov.uk/plants/plantClinic/documents/plantClinicNews/october09Issue.pdf>

### **Acknowledgements**

I am grateful to Dr. Brian Spooner (Royal Botanic Gardens, Kew) for elucidating the identity of the fungus.

## Vervain Downy Mildew - New to Science

### Malcolm Storey

The wildflower, Vervain (*Verbena officinalis*), is a late-flowering perennial, not coming into flower until July. It often grows in slightly disturbed places like beside paths and there is a colony beside the entrance track to BBOWT's Homefield Wood, near Marlow, Bucks. On 28<sup>th</sup> May 2009 the plants were still small with no sign of flower buds, but the lower leaves had yellowish patches with brown spots as though already senescent. Closer inspection revealed a downy mildew on the under surface.

Downy mildews are obligate plant parasites. At first glance they are similar to powdery mildews, but are actually completely unrelated. Powdery mildews are ascomycete fungi, whereas downy mildews are more closely related to algae – you can think of them as filamentous algae that have adopted a parasitic mode of life and lost their chlorophyll. Although unrelated, both types of mildew have traditionally been studied by mycologists.

Mildews of both groups are mostly very specific in their choice of host, which usually makes identification straightforward: if you know the plant there is only a short list of suspects. Consulting the literature it turned out that the list for *Verbena* was very short indeed - there was no British record of a downy mildew attacking *Verbena* or even its family, Verbenaceae. Turning to the web, there was a reference to *Plasmopara halstedii* attacking *Verbena*, but this species isn't known from Britain.

At this point I needed help, so I turned to the Food and Environment Research Agency (FERA), that part of DEFRA which has responsibility for plant health. Although most of their work concerns cultivated and crop plants, they're also interested in wild plants as these can be reservoirs of infection. I emailed them and Dr Charles Lane rang me back and asked me to send a sample. This I duly did. During the conversation it transpired that *Plasmopara halstedii* is a quarantine organism and if it was this species it would trigger a decontamination exercise at the site and my house! My mind replayed the scene from the 1982 movie, *E.T. - the Extraterrestrial*, where the CBW-suited government agents arrive at Elliott's house... He reassured me that it was most unlikely to be *P. halstedii* – if it gets to Britain it will be in a crop, probably Sunflowers – its main host.

A few days later Charles contacted me to confirm that it wasn't *Plasmopara halstedii*, but that it was an unknown species of *Peronospora*. By this time I'd also mentioned it to Dr Brian Spooner of the Mycology Section at Royal Botanic Gardens, Kew and he'd also asked for a specimen. Brian forwarded a piece to Dr Hermann Voglmayr, at the University of Vienna, the current expert on downy mildews. He promptly found more in his own botanic garden, ran the DNA on both samples and confirmed it was new to him too.

The infection causes yellowish or yellowish-green patches with brown necrotic (dead) spots on the lower leaves. Underneath with a dissecting microscope or a good hand lens you can see clumps of pale lavender sporangia. The spots are visible from spring onwards.

Since then, I've found it at Bentley Wood in South Wiltshire, and Weymouth in Dorset. Sandra Parkinson posted me some leaves from Chalkhills (previously Boze Down) in Oxfordshire, and these also had the mildew. I've yet to find it in my home county of Berkshire, but it seems to be pretty widespread. All my material is now at Kew.

At the time of writing it has not yet been formally published, so doesn't have a name.

### References

*Plant Clinic News*, Sept 09

<http://www.fera.defra.gov.uk/plants/plantClinic/documents/plantClinicNews/september09Issue.pdf>

### Acknowledgements

I am grateful to Dr. Charles Lane (Food and Environment Research Agency), Dr. Brian Spooner (Royal Botanic Gardens, Kew) and Dr Hermann Voglmayr (University of Vienna, Austria)



**Bastions of Beauty or Dendrological Disasters?**  
**A discussion of the US Catalpas (Bignoniaceae) in Britain**  
**with specific reference those in Berkshire**

**James A. Wearn**

A magnificent tree graces the forecourt of the British Petroleum station at the junction of Russell Street and Tilehurst Road in Reading, Berkshire. Adorned with large white flowers, lined with yellow and purple marks, it stands majestically alone (see photo p. 33). Another of a sister species, once as handsome but now a shadow of its former self, is the oldest of its species at over 150 years old, standing twisted and scarred in the churchyard of St Mary's Butts in the centre of the town. They are the catalpas.

The two *Catalpa* species in the Reading and District area, are *C. bignonioides* (the Indian Bean Tree or Southern Catalpa), of which there are a few individuals dispersed within Reading, (including the 150-year tree and a couple at the University of Reading) and *C. speciosa* (the Cigar Tree or Northern Catalpa), of which there are only two in Reading (the Tilehurst Road tree and one by Wells Hall in the University of Reading campus) with another in Swallowfield Park. Thus, the Northern Catalpa is a rarity in the county of Berkshire represented by only three individuals (D. Alderman pers. comm.)! Although non-native and originating from North America, they aesthetically enhance the townscape, while providing a micro-habitat for other groups of organisms. They are also a point of contention among horticulturalists and ecologists. It is in this vein that I dare to discuss species of introduced ornamentals within a naturalist journal. With the sad demise of the Reading Tree Club (founded by Catherine Olver, 1934-2003, late-member of the RDNHS), there is an opportunity for dendrological appreciation and discussion to fall within the remit of the society.

Catalpas are members of the Bignoniaceae, a family of plants with a generally tropical to subtropical distribution, although the genus itself has a somewhat disjunct distribution with two species native to North America, four in the West Indies and four in eastern Asia (Li 2008). Producing large showy flowers with an exotic appearance, many of the genera are cultivated as ornamentals. The history of the catalpa in Britain began in 1726 when *C. bignonioides* was introduced from south-eastern USA (Bean 1970). Originally, the North American catalpas were recognised as single species, and it was not until 1880 that a description was published to separate *C. speciosa* (Engelmann 1880). Although neither species is numerous in Britain today, *C. bignonioides* is by far the most widely-planted of the two. One is able to find a *C. bignonioides* with relative ease in large parks and gardens but has to investigate rather more attentively to see *C. speciosa*.

Specimens of these two species on herbarium sheets are often difficult to tell apart, especially as too much taxonomic importance has often been given to leaf shape. The author has found that cultivated trees in Britain can bear ovate to cordate leaves with either short or long-acuminate apices, independent of species. The key features by which one can separate the species are shown in the table below. I have focused upon vegetative characters as the trees only bloom for short periods.

The evolutionary development of the catalpa flower is one of intriguing complexity. In common with several other plant genera, for their protection, the stamens are held far inside the flower tube. However, in this position they cannot act as a signal to pollinators. Thus, a different visual stimulus is required. This has evolved in the form of 'imitation stamens', patches of colour (yellow in the case of these catalpas, Fig. 1) on the outer lobes of the flower, which serve as pollination guides. The colour of the patches on the lobes is therefore an indicator of whether a particular flower has been pollinated: if dark red (Fig. 2), the flower has been attended (Lunau 1996). Furthermore, research with *C. speciosa* has discovered that in order to prevent non-pollinator insects from stealing floral nectar, the trees use a chemical mechanism to stop nectar thieves. Chemicals known as iridoid glycosides incorporated into the nectar, cause regurgitation or other behavioural abnormalities in non-pollinators (e.g. moth larvae and certain ants) whilst not affecting legitimate pollinator species, for example, bees (Stephenson 1982). This is an amazing example of a long history of plant-pollinator co-evolution.

Introduced plant species seldom have a diverse associated flora and fauna owing to their short history in the country and inability for long-term co-evolution to have taken place between the species. Nevertheless, a total of 14 fungal species have been found on, or isolated from *C. bignonioides* and

four from *C. speciosa* in Britain; the latter most likely having less records as it is less common (Cook *et al.* 2006; FRDBI 2009). These fungi range from basidiomycete 'macrofungi' including *Laccaria bicolor* (the Bicoloured Deceiver) and *Trametes versicolor* (the common Turkeytail bracket) to ascomycete 'microfungi' such as *Nectria cinnabarina* (Coral Spot fungus) and of particular interest, *Phomopsis catalpicola* (a specialist on Catalpa). Among the fungi are four species of powdery mildew (*Erysiphe elevata*, *E. catalpae*, *Neoerysiphe galeopsidis* and *Oidium hiratae*). All four have been found on *C. bignonioides*, although only one record of *O. hiratae* exists from the Royal Botanic Gardens, Kew in 1978, which was formally described in 1982 (Braun 1982). Only *E. elevata* and *N. galeopsidis* have been isolated from *C. speciosa* (Cook *et al.* 2006). Catalpas in the US are frequently plagued by these mildews and it was in 2002 that *E. elevata* was reported to have arrived in Britain, being recorded on *C. bignonioides* trees in the Royal Horticultural Society garden at Wisley. Extensive patches of this fungal pathogen covered the leaves and spread to the fruits. The related *Erysiphe catalpae* has been here much longer (Cook *et al.* 2006) but while the threat of spread looms, the trees in Reading remain free of white mycelia for now. Catalpas are also mycorrhizal, so their below-ground root associations with these symbiotic fungi must also not be omitted from the list. Their insect fauna is less species-rich. Among the known herbivorous insects are three generalist aphids (*Aphis frangulae*, *Macrosiphon euphorbiae*, and the ubiquitous *Myzus persicae*) and a scale bug, *Pseudaulacaspis pentagona* (BRC 2009). Several common lichens have been recorded on the two Catalpa species; including *Hypogymea physodes*, *Parmelia sulcata*, *Physcia tenella* and *Xanthoria parietina* (author's records; FRDBI 2009) but more investigation is required in order to compile a complete species list.

Economically, *C. speciosa* was hailed as a perfect wood for fence posts and telegraph poles in the US from the 1880s. Also promoted as suitable for railroad construction, it was proven of insufficient durability when compared with harder woods like oak and chestnut (Del Tredici 1986). Its smaller sister however, is of no industrial value owing to its short and contorted trunk. The flowers of both species are similar, making them equally suitable as ornamentals (although *C. speciosa* has greater cold-tolerance). Nevertheless, their short flowering period not only makes them inherently vulnerable to fluctuations in the level of pollinator activity (Stephenson 1979) but can also negate their worth as ornamentals as their main asset is transient. Del Tredici (1986) stated: 'the catalpa has too many black marks against it to win favour with modern horticulturalists' and went on to say that their time (the late 1880s) has long passed. Contrary to this, an article in *The Independent* less than a decade later (Pavord 1995) promoted the catalpa as a 'star' specimen tree as a centrepiece for the modernist garden!

I believe that catalpas are magnificent specimen trees as town or garden centre-pieces and also provide a substrate for several other groups of organisms. In Reading in 2009 the large *C. speciosa* was in flower for nearly three weeks; much longer than the 'week or so' recorded by Del Tredici (1986) in North America (climate change?). Del Tredici (1986) argued that they create 'a major litter problem' but so do many other deciduous trees. Mildew may, in years to come, become a significant factor but to date it has not spread too far in Britain. In any case our own native trees are no less of a problem with respect to pests with examples ranging from the fungal disease of elms (causing widespread tree death) to the more current problem of the oak processionary moth (which not only harms the trees but causes alarming rashes to those unfortunate enough to come into contact with the hairy caterpillars). *Catalpa speciosa* is even on the list of most desirable trees for Keele University Arboretum in North Staffordshire (2009).

	<i>C. bignonioides</i>	<i>C. speciosa</i>
Tree form	Low crown, trunk of older trees often leaning or twisted.	Conic, on a straight bole. Dense branching.
Bark	Peeling into flakes vertically.	Fissured into often fairly regular ridges.
Petioles	Smooth and bright green, fairly shiny.	Minutely hairy, especially when young. sometimes tinged with dark pink.
Seed pods min-(average) -max by width*	Smaller, 14–(18)–40cm by 6–8mm, remaining on the tree from the previous year.	Larger, 20–(30)–45cm by 15mm.
Flowering time in southern Britain (in Reading, 2009 data*)	Beginning in late June (22 June to 11 July).	Beginning in early July (4 to 16 July)

\* Data from the author's personal notes.

### Acknowledgments

Thanks is extended to Brian Spooner (Kew) and Malcolm Storey (RDNHS) for information on the mildews associated with Catalpas. I am grateful to David Alderman (Tree Register of the British Isles) and Michael Keith-Lucas (University of Reading) for details regarding the distribution of the species within Berkshire. I also thank Christine Wearn (nee Greenwood) for inspirational comments during the preparation of the manuscript.

### References

- Bean, W.J. (1970) *Trees & shrubs hardy in the British Isles*. Eighth edition. Volume 1: A-C. M. Bean & J. Murray, London.
- Braun, U. (1982) Morphological studies in the genus *Oidium* (111). *Zentralblatt für Mikrobiologie* 137: 321.
- BRC (2009) Biological Records Council Database of Insects and their Food Plants. <http://www.brc.ac.uk/dbif/> Search for insects associated with *Catalpa* performed on 26 June 2009.
- Cook, R.T.A., Henricot, B., Henrici, A. & Beales, P. (2006) Morphological and phylogenetic comparisons amongst powdery mildews on *Catalpa* in the UK. *Mycological Research* 110: 672-685.
- Del Tredici, P. (1986) The great *Catalpa* craze. *Arnoldia* 46: 2-10.
- Englemann, G. (1880) *Catalpa speciosa* Warder. *Botanical Gazette* 5: 1-3.
- FRDBI (2009) The Fungal Records Database of Britain and Ireland. <http://www.fieldmycology.net/FRDBI/assoc.asp> Search for organisms associated with *Catalpa* performed on 29 June 2009.
- Keele University Arboretum, North Staffordshire (2009) Donating a tree: most desirable <http://www.keele.ac.uk/university/nathist/misc/donating%20a%20tree.pdf>
- Li, J. (2008) Phylogeny of *Catalpa* (Bignoniaceae) inferred from sequences of chloroplast *ndhF* and nuclear ribosomal DNA. *Journal of Systematics and Evolution* 46: 341-348.
- Lunau, K. (1996) Unidirectionality of floral colour changes. *Plant Systematics and Evolution* 200: 125-140.
- Pavord, A. (1995) The very model of a modernist garden. *The Independent*: 11 February 1995.
- Stephenson, A.G. (1982) Iridoid glycosides in the nectar of *Catalpa speciosa* are unpalatable to nectar thieves. *Journal of Chemical Ecology* 8: 1025-1034.

# Shiplake: an assessment of lichens in a geographically-prominent churchyard in south Oxfordshire (VC23)

James Wearn

During February and May 2009, I carried out an assessment of the lichen biodiversity in the Churchyard of St Peter and St Paul, Shiplake (SU 767782). The work formed part of my county-level contribution to the national *British Lichen Society Churchyard Lichens Recording Project*. Churchyards in southern England are of critical importance to lichen conservation as they provide a refuge for rock-inhabiting (saxicolous) lichens in the absence of natural rock outcrops. The number of species and diversity of forms at the site provided an opportunity to extol the virtues of lichens and to encourage those interested in learning about lichenology. The last person to have undertaken an explanatory walk in the churchyard was the renowned botanist Francis Rose, during the late 1970s – very large footsteps to follow. Nevertheless, the mini-workshop I led on 17 October 2009 was pleasingly well-attended and enjoyed by all as a novel learning experience.

The early history of the village of Shiplake in Oxfordshire was recorded in a book by Emily Climenson, published in 1894. The church can be traced back to 1163, although it is likely that before this date a wooden chapel existed on the site. The current flint and mortar building was restored in 1822 and during the 1870s. During the 19<sup>th</sup> century an ‘enormous specimen’ of Ivy grew up the tower, some of which was clipped during repairs of the stonework and the remainder removed during the 20<sup>th</sup> century. Although Climenson (1894) lamented the demise of the ‘ivy tree’, it would have been beneficial for lichens as it exposed new illuminated surfaces for colonization (see church images in Fig. 1, from c.1822 and 2009). Even by the late 1800s the tombstones in the churchyard were mostly illegible, owing to weathering and, although not mentioned in Climenson’s book, lichen growth. Gratifyingly, lichens do feature in the list of ‘flora’ at the end of the text, albeit represented by only four names for the entire village. These were *Lecanora tartarcea* ‘Rock Moss Lichen’ [= *Ochrolechia tartacea*], *Peltidea canina* ‘Dog Lichen’ [= *Peltigera canina*, but this was probably actually *P. membranacea* as the general perception of the species was incorrect and not as the describer intended], *Ramalina fastigiata* [the only name that still stands!] and *Erema* ‘Grey Lichen’ which is clearly a misprint for the very common *Evernia* (*prunastri*). In this report I comment only upon species found within the churchyard.

The churchyard is in a prominent position atop a chalk cliff, rising from the outer bend of the River Thames, from around 30 to 60m in altitude. The elevated riverside position is likely to create a microclimate rather different from churchyards in nearby villages. This was demonstrated by some of the species that were recorded. Names used here follow the new account of the lichens of Britain and Ireland (Smith et al. 2009). A total of 55 species were recorded, including two lichenicolous fungi (i.e. fungi which live in or on lichens). Common species were recorded by field identification. Where the identity could not be ascertained with certainty in the field, small specimens were removed carefully for microscopic examination, with permission from Shiplake and Dunsden Parish Council. All specimens collected during the fieldwork have been accessioned into my herbarium (Herb. J.A. Wearn) and duplicates of lichenicolous fungi have been deposited in the Mycology Herbarium at the Royal Botanic Gardens, Kew.

Name	Notes
<i>Acarospora fuscata</i>	Siliceous headstones
<i>Amandinea punctata</i>	Timber of churchyard bench
<i>Arthonia apotheciorum</i>	Fungus in apothecia of <i>Lecanora dispersa</i> on south buttress of church wall
<i>Aspicilia calcarea</i>	Tops of calcareous headstones
<i>Aspicilia contorta</i> ssp. <i>contorta</i>	Calcareous headstones and top of chest tomb
<i>Belonia nidarosiensis</i>	Basic headstones and north and east-facing sides of church, confirmed by John Skinner
<i>Bilimbia sabuletorum</i>	On moss on boundary wall, facing northeast (previously <i>Myxobilimbia</i> )
<i>Caloplaca citrina</i>	Tops of calcareous headstones near porch and boundary wall
<i>Caloplaca flavescens</i>	Basic headstones and church





*Catalpa speciosa*: Fig. 1. flower before pollination  
See p. 29 - © J. A. Wearn 2009



*Catalpa speciosa*: Fig. 2. flower after pollination  
See p. 29 - © J. A. Wearn 2009



Shiplake Lichens: Fig.1 – Two images of Shiplake Church, the first showing it covered in ivy (c. 1822, courtesy of H. McDonnell and J. Crawford) and the second as it is today (2009, © J. A. Wearn).



Fig. 2 – *Xanthoria aureola* growing on the top of a calcareous headstone in the exposed southern side of the churchyard (© James Wearn)

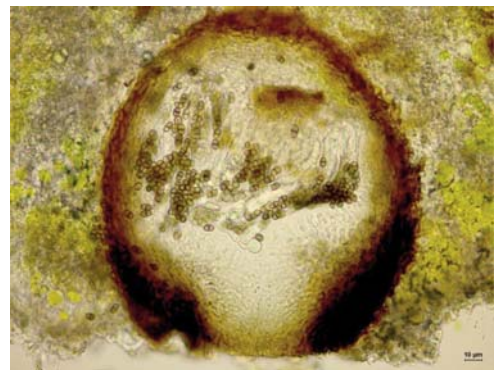


Fig. 3 – Perithecium, asci and spores of the lichenicolous fungus *Muellerella pygmaea* var. *athallina* (© James Wearn)



Fig. 4 – Central buttress on south side of the church and (inset) *Lecanora dispersa* with normal cream discs and black patches where colonized by the fungus *Arthonia apotheciorum* (© James Wearn)



*Steatoda grossa* - a false widow spider (© Chris Raper)  
see the Entomology and Other Invertebrates Report





*Tuber rufum* - Summer Truffle (© John Notton)  
see the Mycology Report



*Tuber rufum* - Summer Truffle - cross section  
(© John Notton) see the Mycology Report



*Bombus hypnorum* - a bumblebee (© Chris Raper)  
see the Entomology and Other Invertebrates Report



*Abia sericea* - a club-horned sawfly (© Chris Raper)  
see the Entomology and Other Invertebrates Report



*Sturmia bella* - a parasite fly (© Chris Raper)  
see the Entomology and Other Invertebrates Report



*Chrysolina americana* - Rosemary Leaf Beetle  
(© Chris Raper)  
see the Entomology and Other Invertebrates Report

<i>Caloplaca teicholyta</i>	Top of basic chest tomb
<i>Candelariella coralliza</i>	Only on two siliceous headstones, west-facing side, confirmed by Holger Thüs
<i>Candelariella medians</i>	Top of basic headstones in front of porch
<i>Candelariella vitellina</i>	Acid substrata, headstones and coffin tomb
<i>Catillaria chalybeia</i>	Top of siliceous headstone
<i>Cyphelium inquinans</i>	Timber, top of gatepost
<i>Diploicia canescens</i>	Church building and boundary wall
<i>Diplolechia albostratum</i>	Church building and boundary wall
<i>Flavoparmelia caperata</i>	Timber of churchyard bench
<i>Hypogymnea physodes</i>	One specimen on fallen twig from tall cedar ( <i>Cedrus</i> ) tree, so difficult to assess abundance
<i>Lecanora albescens</i>	Church wall and buttresses, calcareous headstones
<i>Lecanora campestris</i>	Basic headstones, boundary wall
<i>Lecanora campestris</i> ssp. <i>dolomitica</i>	Single basic headstone, west-facing side, identity confirmed by Jack Laundon
<i>Lecanora chlorotera</i>	Branches of lime ( <i>Tilia</i> ) tree within churchyard
<i>Lecanora conizaeoides</i>	Siliceous headstones
<i>Lecanora dispersa</i>	Church building, especially buttresses on south side
<i>Lecanora muralis</i>	Concrete path
<i>Lecanora polytropia</i>	Siliceous headstones
<i>Lecanora sulphurea</i>	Boundary wall, on brick
<i>Lecidella elaeochromma</i>	Branches of lime ( <i>Tilia</i> ) tree within churchyard
<i>Lecidella stigmata</i>	Basic headstones
<i>Lepraria incana</i>	Deciduous tree in churchyard
<i>Lepraria vouauxii</i>	Sheltered areas of boundary wall, on flint and mortar
<i>Melanelixia fuliginosa</i> ssp. <i>fuliginosa</i>	Siliceous headstones (previously in genus <i>Melanelia</i> )
<i>Melanelixia subaurifera</i>	Branches of lime ( <i>Tilia</i> ) tree (previously in genus <i>Melanelia</i> )
<i>Muellerella erratica</i>	Fungal perithecia in thallus of <i>Lecanora campestris</i> subsp. <i>dolomitica</i> . Determined with Begoña Aguirre-Hudson
<i>Ochrolechia parella</i>	Boundary wall, on brick
<i>Parmelia sulcata</i>	Branches of lime ( <i>Tilia</i> ) tree and tops of a couple of siliceous headstones
<i>Physcia adscendens</i>	Tops of nutrient-enriched basic headstones
<i>Physcia caesia</i>	Tops of basic headstones and cross, fruiting confirmed by B. Aguirre-Hudson
<i>Physcia tenella</i>	Branches of lime ( <i>Tilia</i> ) tree within churchyard
<i>Physconia grisea</i>	Basic headstones
<i>Placynthium nigrum</i>	Basic headstones
<i>Porpidia tuberculosa</i>	Siliceous substrata, headstones and coffin tomb
<i>Protoblastenia rupestris</i>	East and south-facing sides of church, on mortar
<i>Psilolechia lucida</i>	Acid headstones and cross
<i>Rhizocarpon reductum</i>	Siliceous headstones
<i>Tephromela atra</i>	Boundary wall, on brick
<i>Verrucaria baldensis</i>	Basic headstones
<i>Verrucaria hochstetteri</i>	Church wall and monument
<i>Verrucaria muralis</i>	Church wall and basic headstones
<i>Verrucaria nigrescens</i>	Basic headstones
<i>Xanthoparmelia mougeotii</i>	Sloping top of siliceous headstone
<i>Xanthoria aureola</i>	Tops of two nutrient-enriched calcareous headstones, confirmed by Holger Thüs. (Previously <i>X. ectaneoides</i> .)
<i>Xanthoria calcicola</i>	Tops of basic headstones and porch tile
<i>Xanthoria parietina</i>	Branches of lime ( <i>Tilia</i> ) tree within churchyard



Numbers of lichens recorded in British churchyards vary from less than 10 to over 100 (e.g. 122 in the churchyard of St. Peter and St. Paul, Deddington, N. Oxfordshire). The lowest counts are in city centres like London, although as pollution levels have dropped, more lichens are returning to the capital (Waterfield 2007). The highest counts are generally in the north and west of Britain; resulting from a combination of lower pollution and greater moisture. For a churchyard to contain over 100 species is rare, with national average counts in the upper thirties (Gilbert 2000). Thus, the churchyard at Shiplake can be considered as somewhat above average in terms of lichen diversity.

Of the 53 lichens recorded at Shiplake, the most noteworthy are *Candelariella coralliza*, *Lecanora campestris* subsp. *dolomitica*, *Physcia caesia* and *Xanthoria aureola*. Due to historical confusion in identification of *C. coralliza* and *X. aureola*, I examined specimens in the cryptogamic collections at the Natural History Museum, London, with which I compared my collections and the latest national account (Smith et al. 2009). Although generally restricted to upland areas, I confirmed that *C. coralliza* (voucher specimen Wearn L079) was indeed present at Shiplake. The closest previous record of this species is at Pirbright Churchyard, near Woking, Surrey (NBN 2008) and there are only a handful of other databased observations of this species from southern England (significantly more from Scotland). Similarly, *X. aureola* is considered rare inland but common in wind-swept coastal habitats. My collection from Shiplake (Wearn L073, Fig. 2) has been confirmed as this species. It was found only on the tops of two headstones, in an exposed position above the river at the front of the church. Although calcareous, the headstones had been significantly nutrient-enriched by bird droppings on their tops (where the lichen occurred) and so their basic nature was likely to have been much-reduced. These were among the oldest stones in the churchyard, being more than two centuries old. Few inland records of this species exist with none previously in Oxfordshire (VC23); the nearest is in Wiltshire. Fungi and lichens, like plants, have undergone many name changes and collation of species records, in order to assess distribution and rarity, is often hampered by historical use of several different names for the same thing. Often these have been sunk into simple synonymy, so if one possesses a list of all the names that have been used, one can compile a list of records via simple addition. However, where species concepts change (as here for *X. aureola*), records of a species prior to the date of change reflect the distribution of an entirely different species: this is where extreme care must be taken so as not to cause severe confusion.

*Physcia caesia* is not remarkable for its presence as it is a commonly encountered species, especially associated with nutrient-enriched (i.e. those with bird droppings) tops of headstones. Instead, it is the occurrence of a fruiting state that is the rarity. Two headstones near the western boundary wall bore fruiting thalli (one vouchered as Wearn L115).

*Lecanora campestris* subsp. *dolomitica* has been reported from locations in Derbyshire and South Yorkshire, where it was described 25 years ago (Gilbert 1984), and since, from Staffordshire (a single record), Suffolk and also southern Scotland. Thus, it appears to have a rather disjunct distribution so a record from southern Oxfordshire may not be out-of-place. Seaward (2005) lists three 10km grid squares in which the species occurs in Berkshire, but notes that it is rare. The present record from Shiplake, to my knowledge, is the first from Watsonian Oxfordshire (i.e. VC23). An interesting technicality is that two of the Watsonian Berkshire (i.e. VC22) grids listed by Seaward (2005) fall within the post-1974 administrative boundary for Oxfordshire, but for the purposes of recording this does not count – so perhaps it is rather a lucky ‘new county record’ for this one! A recent review (Crespo & Pérez-Ortega in press) discusses lichen species which differ in their reproductive structures, with one form reproducing sexually, the other vegetatively, or occasionally displaying both reproductive modes, depending upon the suitability of the environment. This is a groundbreaking avenue of research in which *L. campestris* and its subspecies should be included in order to determine if they fit within this modern concept. Thus, the ‘*dolomitica* subspecies’ could in reality be a rare species, separate from the common *Lecanora campestris*, or may only be an under-recorded form, not genetically distinct from *L. campestris* (D. Hawksworth pers. comm.), subject to DNA analyses, yet to be published. For now, at least, it is a new county record for VC23.

It is apparent that many lichens are under-recorded due to their often-cryptic form and the general lack of expertise but the fungi that grow upon lichens (‘lichenicolous fungi’) are even more frequently overlooked (Hawksworth 2004). Two such fungi were examined in detail during this survey and one, *Muellerella pygmaea* var. *athallina* (Wearn L112 voucher specimen at Kew as K(M)163296, see Fig.



3), has a new host record for Europe in addition to the new county record for its host, the aforementioned *L. campestris* subsp. *dolomitica* (Wearn in press). The second, *Arthonia apotheciorum*, was abundant in the reproductive discs (apothecia) of *L. dispersa* covering the central buttress of the southern church wall: visible with a hand lens as black areas in the otherwise cream-coloured discs (inset, Fig. 4). One might pass by the entire buttress without seeing the lichen, let-alone the fungus within it (see background photo in Fig. 4)!

Micro-scale environmental conditions are of great importance to lichens. This was very obvious at Shiplake, shown by the contrast between the lichen communities on the shadier and damper northern and western faces of headstones and the church building, and the species on the warmer and lighter eastern and southern-facing sides (see Gilbert 2000 for more information). Awareness of the significance of microclimatic factors is critical to maintenance of lichen communities. During the history of churchyard management in Britain, slipped headstones have been laid on the ground or moved and propped against a wall, killing their lichens as a result. Management of habitats must be carefully executed in order to conserve species diversity (not only of lichens but also the invertebrates they support), especially where refuge status is high (as at Shiplake). Fig. 1 shows the removal of ivy from the church walls; undoubtedly lichen conservation was at the forefront of the minds of the 19th century parishioners! The range of early and late colonizers in the churchyard demonstrates that colonization over time has built up the present day lichen community. Species such as *Lecanora dispersa* on the now-exposed church buttresses are considered early colonizers (since the ivy removal) while species like *Aspicilia contorta* and *Diploicia canescens* are late calcareous colonizers on surfaces which have been exposed for centuries (e.g. Waterfield 2003).

The British Lichen Society's strategic approach to the dissemination of churchyard lichen information to Parishes has aimed to increase awareness and help to conserve lichens in these important habitats. With recorders 'preaching the lichen gospel' locally and elected Diocesan representatives co-ordinating at regional-level (generally responsible for more than one county, depending on size), hopefully the future for these organisms will be brighter.

### Acknowledgements

I extend my thanks to Begoña Aguirre-Hudson (Royal Botanic Gardens, Kew), Jack Laundon (ex-Natural History Museum, London), Holger Thüs (NHM, London) and John Skinner (Southend Museum, Essex) for help with identifications during this survey. I am also grateful to David Hawksworth (Universidad Complutense de Madrid) for discussion of species concepts in lichenology, Ana Crespo (Universidad Complutense de Madrid) for sending to me a copy of her manuscript, Janet Simkin (British Lichen Society Database Manager) for checking records of rare species and Amanda Waterfield (London Natural History Society) for discussion of spatial and temporal trends. Finally, but not least by any measure, I thank Hector McDonnell and John Crawford ([www.shiplake.net](http://www.shiplake.net)) for permission to use the c. 1822 illustration of the church and the Shiplake & Dunsden Parish Council (especially Julian Morse) for permission to carry out the survey and sampling, and for the positivity with which my recommendations for conservation were met.

### References

- Climenson, E. (1894) *The history of Shiplake*, Oxon. Eyre and Spottiswoode, London.
- Crespo, A. & Pérez-Ortega, S. (in press) Cryptic species and species pairs in lichens: a discussion on the relationship between molecular phylogenies and morphological characters. *Anales del Jardín Botánico de Madrid*.
- Gilbert, O. (1984) Lichens of the magnesian limestone. *The Lichenologist* 16: 31-43.
- Gilbert, O. (2000) *Lichens*. The New Naturalist. Harper Collins Publishers.
- Hawksworth, D.L. (2004) Fungi living on lichens: a source of unexplored diversity. *British Wildlife* 15: 192-199.
- NBN (2008) Dr Francis Rose Notebook Project, records from 1994. *Field Notebook Records of Dr Francis Rose 1950s to 1990s*, updated 7 Feb 08, sourced through the NBN Gateway website <http://data.nbn.org.uk> (accessed 7 Dec 09).
- Seaward, M. R. D. (2005) Lichens. In: *The Flora of Berkshire* (ed. M. J. Crawley). Brambleby Books, Harpenden. Pp. 1241-1256.
- Smith, C. W. et al. (2009) *The Lichens of Great Britain and Ireland*. British Lichen Society, London.

Waterfield, A. (2003) Lichens in the 'Magnificent Seven' cemeteries – a baseline survey of seven cemeteries in London. *The London Naturalist* 82: 51-58.

Waterfield, A. (2007) Foliose and fruticose lichen records and a checklist of crustose lichens in the London area. *The London Naturalist* 86: 143-174.

Wearn, J. A. (in press) A new host record for Europe and new regional records for Oxfordshire. New, rare and interesting lichens. *Bulletin of the British Lichen Society*.

## **Lesser Redpolls**

### **Tony Rayner**

We have just experienced a true winter with dipping temperatures; icy winds and roads; and periods of snow coverage. Our daily routines were affected, and so too were those of our wildlife. Survival becomes an even greater priority than usual, and birds flocked together and searched our gardens for a reliable food supply. Quite often these flocks are made up of invaders, fleeing from a more severe climate to the north or east.

The more observant may notice that the finches visiting our gardens include the occasional stranger. Siskins and Bramblings are two species you may have seen. The Siskin vaguely resembles a small Greenfinch and Bramblings can be difficult to distinguish from Chaffinches.

This past winter brought another finch to notice locally. It is claimed that no two Lesser Redpolls are the same. Having had the opportunity to study these lovely birds at close quarters, this doesn't seem an exaggerated claim. The birds have a tiny black bib, but are variable as to the amount of red on their breasts and head. Indeed younger birds show scarcely any red. In Britain the Lesser Redpoll is more of a northern bird that tends to move southward in winter. Their preferred food is seeds of Silver Birch, and Redpolls can often be seen hanging from the thin branches of these trees. In January and February this year, a flock of Redpolls became resident in our Cholsey garden. At the time of writing they have been seen easily from the kitchen window for every one of the last 22 days. The attraction is the nyjer seed feeders, put out principally for Goldfinches. The number of Redpolls seen at a time has steadily increased, and our most recent count is 11.

Meanwhile Brian Shaw at Withymead Reserve near South Stoke is catching Redpolls in his mist netting. In early February he has recorded peak counts of 18 and 25 birds. These birds are being ringed at Withymead, but interestingly none of the Cholsey birds appear to have rings. All of this would suggest quite a large local population during February. Other records are being reported from Woodcote and from Chris Raper's garden in Tilehurst. In addition some of these flocks, especially at Withymead, have on occasions included one or two Mealy Redpolls. This species probably comes to us from Scandinavia where it breeds, and is slightly larger than the Common Redpoll and has a whitish rump. January 28<sup>th</sup> saw one of these birds in our garden – my first ever sighting of a Mealy. The cold weather certainly has its benefits!

Members may not be familiar with the sounds made by Lesser Redpolls, but put a couple of pound coins in a loose pocket and gently shake it – you have just imitated their call!

## RECORDER'S REPORT FOR BOTANY 2009

Michael Keith-Lucas

2009 started with a mild winter, a promising spring and then some record temperatures in June. July and August were then exceptionally wet, but were followed by an Indian Summer, with bright sunny days and cold nights, particularly in October, resulting in some of the best autumn colours for many years. Before the New Year, it was a comparatively mild winter, but the real cold will be in next year's report!

The plant names follow Stace, C. (1997). *The New Flora of the British Isles*, Second Edition. Cambridge University Press.

### Ophioglossaceae

*Ophioglossum vulgatum* Adder's-tongue  
17 May 09 Kent's Hill. SU724810 (JW & JDW)  
28 May 09 'Hidden Valley' in Basildon Park.  
Some dozens of plants. SU606772 (CB)  
Much reduced in Oxfordshire.

### Dryopteridaceae

*Polystichum setiferum* Soft Shield-fern  
7 Mar 09 In the wood between Crocus field and  
Inkpen Common. SU378639 (JH)

### Berberidaceae

*Berberis vulgaris* Barberry  
7 May 09 Aston Upthorpe Downs. SU546837  
(MS) Not recorded by Crawley from this site,  
though a single bush has been known there for  
many years.  
17 May 09 Frieze Farm Lane. SU725795 (JW &  
JDW)  
31 May 09 Dry Sandford Pit SU468995 (MWS)  
Infrequent and in small numbers in Oxfordshire.

### Brassicaceae

*Cardamine amara* Large Bitter-cress  
29 Apr 09, Ashford Hill Headows, SU56216190,  
drain, (MWS)

*Iberis amara* Wild Candytuft  
11 Jul 09 Lodge Hill, The Ridgeway, Bucks.  
SP791001 (CB).  
Nationally a rare species.

*Lepidium latifolium* Dittander  
4 Aug 09 Foudry Brook, near Kennet Island,  
SU711705, New locality (CB)  
A recent arrival in Berkshire, mainly in disturbed  
sites in SW Reading.

### Crassulaceae

*Crassula helmsii* New Zealand Pigmyweed  
29 Aug 09 Greenham Common. Precise location  
not recorded (JH)  
A rapidly spreading water weed – new locality.

### Saxifragaceae

*Saxifraga granulata* Meadow Saxifrage  
21 Apr 09 Eastern end of Hungerford Common.  
In quantity. SU350680 (CB)

*Parnassia palustris* Grass-of-Parnassus  
31 May 09 Parsonage Moor. SU460996 (MWS)  
Lost from most known sites in Oxfordshire.

### Rosaceae

*Amelanchier lamarckii* Juneberry  
12 Apr 09 Cowpond Piece WHS, SU63576601,  
invading natural acid woodland, roadsides near  
entrance (MWS)

### Fabaceae

*Galega officinalis* Goat's-rue  
17 Jun 09 Hazeley Heath. Precise location not  
recorded. (KT) Rare, but increasing.  
Recorded from this site by Brewis et al.

*Anthyllis vulneraria* ssp. *vulneraria* Kidney  
Vetch  
29 Aug 09 Greenham Common. Precise location  
not given. (JH) First recorded in 2004, when the  
runway was taken up.

*Tetragonolobus maritimus* Dragon's-teeth  
7 Jun 09 Moussel's Wood, Frieth. SU790910  
(AG) A rare introduction.

### Rhamnaceae

*Frangula alnus* Alder Buckthorn  
25 Oct 09 Herbert Plantation, SU47646228, Main  
Track (MWS)

### Apiaceae

*Heracleum mantegazzianum* Giant Hogweed  
25 Jun 09 A34, SU49057790, at end of layby,  
near underpass (MWS)

*Hydrocotyle ranunculoides* Floating Pennywort  
4 Aug 09 Foudry Brook. No grid reference given  
(CB). New locality. A rapidly spreading alien.

*Sison amomum* Stone Parsley  
4 Aug 09 Foudry Brook (CB)  
Occasional, but rarely recorded.

*Smyrniololus atrum* Alexanders  
12 Apr 09, Ufton Nervet, SU63516764, along  
roadsides (MWS)

#### Gentianaceae

*Gentianella anglica* Early Gentian  
13 Apr 09 The Holies, Streatley. SW facing slope  
of valley on S side of the Holies. SU59257990  
(JH)

#### Solanaceae

*Atropa belladonna* Deadly Nightshade  
29 Aug 09 Cliveden, SU98 (RG)

*Datura stramonium* var. *stramonium* Thorn  
Apple  
1 Aug 09, Thatcham, SU51786747, on soil heap  
on building site, old barn near main traffic lights  
(MWS)

#### Boraginaceae

*Myosotis discolor* Changing Forget-me-not  
17 May 09 Field by the sewage works, Sonning  
Common. SU716795 (JW & JDW)  
Uncommon in Oxfordshire.

#### Lamiaceae

*Clinopodium acinos* Basil Thyme  
11 Jul 09 Lodge Hill. SP791001 (CB)  
5 Sep 09 Cottington's Hill. SU5256 (GS)  
Local in Hampshire.

#### Scrophulariaceae

*Odontites vernus* Red Bartsia  
27 Jun 09 Ashridge Wood (MWS)  
7 Jul 09 Lough Down SU588813 (CB),  
11 Jul 09 Lodge Hill SP791001 (CB)  
5 Sep 09 Cottington's Hill SU5256 (GS)  
A surprising number of records for an uncommon  
plant.

#### Orobanchaceae

*Orobanche elatior* Knapweed Broomrape  
5 Sep 09 Cottington's Hill. SU5256 (GS)  
New locality.

#### Dipsacaceae

*Dipsacus pilosus* Small Teasel  
28 Aug 09 Cliveden, SU98 (RG)

#### Asteraceae

*Carduus nutans* Musk Thistle  
27 Jun 09 Ashridge Wood (MWS)  
7 Jul 09 Lardon Chase SU587809 (CB)  
11 Jul 09 Lodge Hill SP791001 (CB)  
Increasing on chalk downland with rising,  
surface-living rabbit populations.

*Cirsium eriophorum* Woolly Thistle  
31 May 09 Dry Sandford Pit. SU468995 (MWS)

*Cirsium dissectum* Meadow Thistle  
31 May 09 Parsonage Moor. SU460996 (MWS)  
Probably decreasing as a result of drainage.

*Centaurea cyanus* Cornflower  
11 Nov 09 Field just west of Uftongreen Farm.  
SU623680 (CB) New record. Recorded by  
Crawley as rare or extinct in the Kennet Valley.

*Chrysanthemum segetum* Corn Marigold  
21 Oct 09 Between Beenham Church and  
Beenham Stocks. Grid reference not given. (CB)  
11 Nov 09 Edge of field with cornflowers just west  
of Uftongreen Farm SU623680 (CB)

*Tephrosia integrifolia* Field Fleawort  
7 May 09 Aston Upthorpe Downs. Six plants (ten  
plants in 1983, but not seen recently). Grid  
reference not recorded (MS)  
A rare plant of the chalk.

*Doronicum plantagineum* Plantain-leaved  
Leopard's-bane  
17 May 09 Frieze Farm Lane. SU725975 (JW &  
JDW).  
A very rare relic of cultivation, but known from  
this site.

*Bidens cernua* Nodding Bur-marigold  
21 Sep 09 Kennet Meadows, just south of  
Holybrook. Three plants in a shallow pool.  
SU694715 (CB).

#### Araceae

*Arum italicum* Italian Lords-and-Ladies  
17 Jun 09 Hartley Wintney. Which subspecies  
not recorded and grid reference not provided.  
(KT)  
New record and needs further investigation.

#### Cyperaceae

*Cyperus longus* Galingale  
17 Jun 09 Hartley Wintney. Grid reference not  
given (KT)  
4 Aug 09 Foudry Brook. No reference given (CB)

*Schoenus nigricans* Black Bog-rush  
31 May 09 Dry Sandford Pit. SU468995 (MWS)  
One of only two sites in Oxfordshire.



*Carex viridula* ssp. *oedocarpa* Yellow-sedge  
1 Aug 09 Nettlebed, in damp acid ground near Priests Hill. No grid reference given. (JH, confirmed by JW)  
Rare in Oxfordshire; the only site in the south of the county.

*Carex pilulifera* Pill Sedge  
1 Aug 09 Nettlebed, but no precise GR. (JH)

#### Liliaceae

*Ornithogalum pyrenaicum* Spiked Star-of-Bethlehem  
27 Jun 09 Ashridge Wood. No exact reference given. (MWS)  
A local speciality

*Paris quadrifolia* Herb Paris  
7 Jun 09 Moussel's Wood, Frieth. SU790910 (AG)

*Muscari armenaicum* Garden Grape-hyacinth  
6 Apr 09 Embankment of A33 relief road between Madjeski Stadium and Rose Kiln Lane, Reading. (CB)

#### CONTRIBUTORS:

Thanks are due to the following, who led walks or sent in individual records:

(AG) Alan Gudge, (CB) Chris Bucke, (CD) Colin Dibb, (GS) Graham Saunders, (JH) Jan Haseler, (JW & JDW) Janet and Jerry Welsh, (KT) Ken Thomas, (MS) Martin Sell, (MWS) Malcolm Storey, (RG) Renée Greyer and (YR) Yvonne Robertson.

#### REFERENCES (In addition to Stace, above)

Brewis, A., Bowman, P., & Rose, F. (1966) *The Flora of Hampshire*. Harley Books, Colchester.  
Crawley, M.J. (2005) *The Flora of Berkshire*. Brambleby Books, Harpenden.  
Druce, G.C. (1926) *The Flora of Buckinghamshire*. T.Buncle & Co. Arbroath.  
Killick, J. Perry, R. & Woodell, S. (1998) *The Flora of Oxfordshire*. Pisces Publications, Oxford.

*Galanthus nivalis* Snowdrop  
07 Mar 09 Crocus field, Inkpen. Single and double forms. SU370640 (JH)

*Ruscus aculeatus* Butcher's-broom  
4 Apr 09 Beal's Copse, Little Heath. SU651733 (CD)

#### Orchidaceae

*Epipactis purpurata* Violet Helleborine  
28 Jul 09 Bottom Wood, near Studley Green. Seven specimens, all in wire cages. SU795957 (CB)

*Epipactis helleborine* Broad-leaved Helleborine  
Two plants, date and grid reference not given. Yvonne Robertson's front garden (YR)

*Spiranthes spiralis* Autumn Lady's-tresses  
29 Aug 09 Greenham Common. No GR given. (JH)

*Coeloglossum viride* Frog Orchid  
11 Jul 09 Lodge Hill. SP791001 (CB)

## A Leaf-epiphytic Alga

### Malcolm Storey

Leaf-epiphytes, ie organisms that grow non-parasitically on the surface of living leaves, are much more a feature of the tropics and subtropics than temperate regions where they are almost unknown. We have less than a handful of species of leaf-epiphyte lichens and algae.

A Christmas day walk to BBOWT's Bowdown reserve found me examining the leaves of the bamboo (*Sasa palmata*) which grows just off the Bomb Dump plateau in Bowdon woods. To my surprise, the lower, shaded leaves had a smattering of *Phycopeltis arundinacea*. This is a distinctive "green alga" (even though it's orange!) which grows epiphytically as tiny flat plates on living leaves of Ivy, Rhododendron and bamboo. According to the books, it is confined to damp areas in the West Country. I first found it a couple of years ago on Rhododendron leaves at the Devil's Punchbowl in Surrey (hardly West Country!) Last summer it turned up on Ivy at Slapton Ley in Devon. Perhaps this species is spreading as our climate gets milder.

## RECORDER'S REPORT FOR MYCOLOGY 2009

### Malcolm Storey

A very promising early autumn, which dried out after a week or so. It then remained dry until the end of October. However this was followed by a mild November which was most productive. Again I am indebted to the Thames Valley Fungus Group (TVFG) that forays regularly in our area, for sharing their records.

My original full list of records included several pages of my own microfungi records. These are probably not of general interest so, with the exception of a few of particular interest, have been removed from the following account. The microfungi records will be issued as a separate supplement, available from the Editor or downloadable from the Society website.

#### Helotiales Helotiaceae

*Neobulgaria pura* var. *pura* Beech Jellydisc  
20 Feb 09, in woodland, Bayworth Lane, Boars Hill, Oxford, SP49650166 (RdA)  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

#### Pezizales Morchellaceae

*Verpa conica* Thimble Morel  
15 Apr 09, Standford End, SU708630 (RDNHS, Id: GC)

#### Pyronemataceae

*Aleuria aurantia* Orange Peel  
13 Dec 09, Group of good-sized fruitbodies covering c.25 by 10 cm, on edge of cinder / ash car park, Sutton Courtenay Environmental Education Centre, SU499918 (RdA)

*Geopora sumneriana* Cedar Cup  
30 Mar 09, under Deodar Cedar (*Cedrus deodara*), Vicarage Road, Henley, SU7682 (RAF)

#### Tuberaceae

*Tuber aestivum* Summer truffle  
22 Jul 09, Crawshay Drive, Caversham. Found in garden when digging a hole to plant a Michaelmas daisy. SU719773, see photo p. 34 (Coll/Id: JFN, Conf: MWS) Voucher: MWS, 22/07/09[A]  
2009, Graveney Drive, Caversham Heights. While digging in garden. SU700751 (MS, Id: MWS) Voucher: MWS, 09[TuberA]  
No records of truffles for years then two come along at the same time... Seems to be pure coincidence since others areas are not reporting unusual numbers.

#### Hypocreales

*Cordyceps ophioglossoides* Snake-tongue Truffleclub  
6 Sep 09, on ground under Heather, Heath Lake (TVFG)  
Parasitic on buried false truffles (*Elaphomyces*)

#### Xylariales

*Biscogniauxia nummularia* Beech Tarcrust  
7 Mar 09, on Beech trunk at the Mire, Inkpen Common Reserve, SU383641 (RDNHS)

#### Agaricomycetes Agaricales Agaricaceae

*Agaricus augustus* The Prince  
18 Nov 09, Upper Basildon (RDNHS)

*Agaricus moelleri* Inky Mushroom  
18 Nov 09, Upper Basildon (RDNHS)

*Lepiota castanea* Chestnut Dapperling  
15 Nov 09, Nettlebed Woods, SU704857 (RDNHS)

*Lepiota ignivolvata* (a dapperling)  
3 Nov 09, Lackmore Wood, Woodcote, SU662814 (GC)

*Lepiota magnispora* (a dapperling)  
29 Nov 09, Nuney Green, Oxon (TVFG, Id: MWS)

#### Bolbitiaceae

*Hebeloma crustuliniforme* Poisonpie  
26 Oct 09, Herbert Plantation, SU473623 (TVFG)

*Hebeloma radicosum* Rooting Poisonpie  
29 Nov 09, Nuney Green, Oxon (TVFG)

*Naucoria escharioides* Ochre Aldercap  
26 Oct 09, Herbert Plantation, SU473623, under Alder (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640, under Alder (MWS)

*Naucoria striatula* Striate Aldercap  
30 Oct 09, Paices Wood, SU585640, under Alder (MWS)

### Clavariaceae

*Clavulinopsis corniculata* Meadow Coral  
26 Oct 09, Sandham Memorial Chapel,  
SU462608 (TVFG, id:MWS)

*Clavulinopsis laeticolor* Handsome Club  
26 Oct 09, Sandham Memorial Chapel,  
SU462608, in grassland (TVFG, id:MWS)

*Macrotypophula fistulosa* var. *fistulosa* Pipe Club  
26 Oct 09, Herbert Plantation, SU473623 (TVFG,  
id:MWS)

*Macrotypophula juncea* Slender Club  
26 Oct 09, Herbert Plantation, SU473623 (TVFG,  
id:MWS)

### Cortinariaceae

*Cortinarius albobviolaceus* Pearly Webcap  
26 Oct 09, Herbert Plantation, SU473623 (TVFG,  
id:MWS)  
15 Nov 09, Nettlebed Woods, SU704857  
(RDNHS)  
26 Nov 09, Nettlebed woods (TVFG)

*Cortinarius calochrous* (a webcap)  
18 Nov 09, Upper Basildon, (RDNHS)

*Cortinarius infractus* Bitter Webcap  
15 Nov 09, Nettlebed Woods, SU704857  
(RDNHS)

*Cortinarius semisanguineus* Surprise Webcap  
8 Nov 09, under pine, Edgebarrow Woods  
(TVFG)

### Entolomataceae

*Entoloma sericellum* Cream Pinkgill  
26 Oct 09, Sandham Memorial Chapel,  
SU462608, in lawn (TVFG, id:MWS)

*Entoloma rhodopolium* Wood Pinkgill  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Entoloma pleopodium* Aromatic Pinkgill  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Entoloma porphyrophaeum* Lilac Pinkgill  
26 Oct 09, Sandham Memorial Chapel,  
SU462608, in law, (TVFG, id:MWS)

### Lycoperdaceae

*Calvatia gigantea* Giant Puffball  
18 Nov 09, Upper Basildon, (RDNHS)

### Marasmiaceae

*Baeospora myosura* Conifercone Cap  
26 Oct 09, Herbert Plantation, SU473623, on  
conifer debris (not cone!), (TVFG, id:MWS)

*Marasmius epiphyllus* Leaf Parachute  
26 Oct 09, Herbert Plantation, SU473623 (TVFG,  
id:MWS)

### Pleurotaceae

*Pleurotus cornucopiae* Branching Oyster  
5 Oct 09, dry specimen found on ground, Castle  
Hill Clump, Little Wittenham Nature Reserve,  
SU569925 (RdA)

### Pluteaceae

*Amanita echinocephala* Solitary Amanita  
11 Oct 09, under Beech, Bottom Wood, Oxon,  
(TVFG)

*Pluteus cervinus* Deer Shield  
10 May 09, Moor Copse BBOWT Reserve,  
SU637735, on fallen ?Alder tree, Wigley Copse,  
(JH, Id: MWS from photos).  
26 Oct 09, Herbert Plantation, SU473623 (MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Pluteus leoninus* Lion Shield  
25 Oct 09, Herbert Plantation, SU47766242, path  
down to stream (MWS) Voucher: MWS  
25/10/09[G]  
8 Nov 09, on dead wood, Castle Hill Clump, Little  
Wittenham Nature Reserve, SU569925 (RdA)

*Pluteus umbrosus* Velvet Shield  
11 Oct 09, on Ash stump, Bottom Wood, Oxon,  
(TVFG)

### Psathyrellaceae

*Coprinellus micaceus* Glistening Inkcap  
26 Oct 09, Herbert Plantation, SU473623 (TVFG,  
id:MWS)  
26 Oct 09, Sandham Memorial Chapel,  
SU462608 (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Psathyrella piluliformis* Common Stump  
Brittlestem  
26 Oct 09, Herbert Plantation, SU473623 (TVFG,  
id:MWS)

### Strophariaceae

*Hypholoma myosotis* Olive Brownie  
8 Nov 09, on damp ground, Edgebarrow Woods,  
(TVFG)

*Pholiota jahnii* (a scalycap)  
29 Nov 09, Nuney Green, Oxon (TVFG, Id: RAF)

*Pholiota squarrosa* Shaggy Scalycap  
26 Oct 09, Sandham Memorial Chapel,  
SU462608, at base of Apple tree (TVFG,  
id:MWS)

*Stropharia caerulea* Blue Roundhead  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Stropharia coronilla* Garland Roundhead  
1 Aug 09, Nettlebed Common (RDNHS)

*Stropharia inuncta* Smoky Roundhead  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

#### Tricholomataceae

*Arrhenia spathulata* (a toadstool)  
24 Oct 09, Growing in moss on top of on rotting Beech trees in spinney, Castle Meadows, Wallingford SU61158990 (RdA)

*Asterophora lycoperdoides* Powdery Piggyback  
6 Sep 09 On *Russula* fruitbody, Heath Lake (TVFG)

*Calocybe carnea* Pink Domecap  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

*Clitocybe fragrans* Fragrant Funnel  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG, id:MWS)

*Clitocybe geotropa* Trooping Funnel  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Clitocybe odora* Aniseed Toadstool  
15 Nov 09, Nettlebed Woods, SU704857 (RDNHS)

*Clitocybe vibecina* Mealy Funnel  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG)

*Hemimycena cucullata* (a toadstool)  
29 Nov 09, Nuney Green, Oxon (TVFG, Id: RAF)

*Hygrocybe pratensis* var. *pratensis* Meadow Waxcap  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

*Hygrocybe virginea* var. *virginea* Snowy Waxcap  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

*Hygrophorus chrysodon* Gold-flecked Woodwax  
15 Nov 09, Highmoor Trench, SU70368531, cluster of toadstools under Beech, by side of minor road (MWS) Voucher: MWS, 15/11/09[B]

*Hygrophorus eburneus* Ivory Woodwax  
15 Nov 09, Nettlebed Woods, SU704857 (RDNHS)

*Lyophyllum decastes* Clustered Domecap  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Melanoleuca arcuata*  
29 Nov 09, Nuney Green, Oxon (TVFG, Id: RAF)

*Melanoleuca polioleuca* Common Cavalier  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Mycena adscendens* Frosty Bonnet  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG, id:MWS)

*Mycena aetites* Drab Bonnet  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

*Mycena crocata* Saffrondrop Bonnet  
15 Nov 09, Nettlebed Woods, SU704857 (RDNHS)

*Mycena epipterygia* Yellowleg Bonnet  
26 Oct 09, Herbert Plantation, SU473623 (TVFG)

*Mycena flavescens* (a bonnet)  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn, (TVFG, id:MWS)

*Mycena inclinata* Clustered Bonnet  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Mycena leptcephala* Nitrous Bonnet  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG, id:MWS)

*Mycena luteoalba* Ivory Bonnet  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

*Mycena meliigena* (a bonnet)  
8 Nov 09, on Aspen trunk and wood, Edgebarrow Woods (TVFG)

*Mycena olivaceomarginata* Browndge Bonnet  
26 Oct 09, Sandham Memorial Chapel, SU462608, in lawn (TVFG, id:MWS)

*Mycena pelianthina* Blackedge Bonnet  
30 Oct 09, Paices Wood, SU585640 (MWS)  
15 Nov 09, Nettlebed Woods, SU704857 (RDNHS)

*Mycena polygramma* Grooved Bonnet  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)  
15 Nov 09, Nettlebed Woods, SU704857 (RDNHS)



*Mycena rorida* Dripping Bonnet  
26 Oct 09, Herbert Plantation, SU473623, on dead bramble (*Rubus*) stem (TVFG, id:MWS)

*Mycena rosea* Rosy Bonnet  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Mycena speirea* Bark Bonnet  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Mycena vitilis* Snapping Bonnet  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Panellus stipticus* Bitter Oysterling  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Tephrocyebe rancida* Rancid Greyling  
30 Oct 09, Paices Wood, SU585640, on soil (MWS) Voucher: MWS, 30/10/09[A]

*Tricholoma scalpturatum* Yellowing Knight  
30 Oct 09, Paices Wood, SU585640 (MWS)

### **Typhulaceae**

*Typhula quisquiliaris* Bracken Club  
8 Nov 09, on dead bracken stems, Edgebarrow Woods (TVFG)

### **Boletales Boletaceae**

*Boletus cisalpinus* (a bolete)  
26 Nov 09, Nettlebed woods (TVFG)

*Boletus impolitus* Iodine Bolete  
21 Aug 09, Broad Lane, Upper Bucklebury, SU54536861, 3 fruitbodies under Pedunculate Oak, roadside at eastern limit of village (MWS) Voucher: MWS, 21/08/09[B]

*Boletus legaliae* (a bolete)  
22 Aug 09, Broad Lane, Upper Bucklebury, SU54406858, 1 fresh, young and 3 old fruitbodies under Pedunculate Oak, by driveway at end of open area (MWS) Voucher: MWS, 22/08/09[A]

*Boletus luridiformis* Scarletina Bolete  
26 Nov 09, Nettlebed woods (TVFG)

*Boletus pruinatus* Matt Bolete  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Boletus radicans* Rooting Bolete  
26 Aug 09, under Oak, Warren Bank SU75308575. 1 fruitbody reported by Nigel Snell as being present every year.

Watling and Hills (BFF 1) state common in southern England on lime under Oak. (RdA)

*Leccinum scabrum* Brown Birch Bolete  
30 Oct 09, Paices Wood, SU585640 (MWS)

### **Gomphidiaceae**

*Gomphidius roseus* Rosy Spike  
8 Nov 09, on ground near its host, *Suillus bovinus*, Edgebarrow Woods (TVFG)

### **Hygrophoropsidaceae**

*Hygrophoropsis aurantiaca* var. *aurantiaca* False Chanterelle - orange form  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)  
09 Nov 09, Bucklebury Lower Common, SU55236880, on heathland among Pine fragments., opposite scout camp (MWS) Voucher: MWS, 09/11/09[C]

*Hygrophoropsis aurantiaca* var. *pallida* False Chanterelle - pale form  
09 Nov 09, Bucklebury Lower Common, SU55246888, around chopped and ground pine stump, between mound and crossroads (MWS) Voucher: MWS, 09/11/09[D]

### **Sclerodermataceae**

*Scleroderma areolatum* Leopard Earthball  
18 Oct 09, Horsepath Common, Shotover Hill, SP569055 (RdA)  
18 Oct 09, under oak and on dead Apple tree, Johnsons Piece (Upper), Shotover Hill, SP565059 (RdA)

### **Dacrymycetales Dacrymycetaceae**

*Calocera cornea* Small Stagshorn  
26 Oct 09, Herbert Plantation, SU473623, on decorticated hardwood (TVFG, id:MWS)  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG, id:MWS)

*Calocera pallidospathulata* Pale Stagshorn  
26 Oct 09, Herbert Plantation, SU473623 (TVFG)

### **Hymenochaetales Hymenochaetaceae**

*Hymenochaete rubiginosa* Oak Curtain Crust  
7 Mar 09, on large tree stump in field adjacent to crocuses, Inkpen Crocus Field SU370640, (RDNHS)

## Polyporales

*Antrodia xantha* (a bracket fungus)  
26 Nov 09, Nettlebed woods (TVFG)

*Ceriporiopsis gilvescens* Pink Porecrust  
11 Oct 09, on Beech log, Bottom Wood, Oxon (TVFG)

*Datronia mollis* Common Mazegill  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Dichomitus campestris* (a polypore)  
10 Oct 09, Bones Wood, near Binfield Heath, Oxon, single specimen of this scarce fungus (only 4<sup>th</sup> record for VC23) on fallen Oak (*Quercus robur*) branch, SU739795 (JAW, conf: MA)

*Grifola frondosa* Hen of the Woods  
3 Oct 09 on ground at base of oak, Great Copse, (TVFG)  
29 Oct 09, Maiden Erlegh LNR, SU75207109, at base of large English Oak, (girth of 4.2m at 1.5m), Old Pond Copse, next to path (AB, Id: MWS)  
29 Nov 09, Nuney Green, Oxon (TVFG, Id: RAF)

*Phlebia tremellosa* Jelly Rot  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Polyporus durus* Bay Polypore  
11 Oct 09, Little Wittenham Nature Reserve Wood North of Bridleway SU57109305 (RdA)

*Polyporus tuberaster* Tuberous Polypore  
11 Oct 09, deciduous woodland (between Broad Ride and bridleway), Little Wittenham Nature Reserve, SU57129293 (RdA)

## Russulales Auriscalpiaceae

*Auriscalpium vulgare* Earpick Fungus  
26 Oct 09, Herbert Plantation, on buried cones, SU473623 (TVFG, id:MWS)

## Lachnocladiaceae

*Scytinostroma portentosum* Mothball Crust  
11 Oct 09, on Beech log, Bottom Wood, Oxon (TVFG)

## CONTRIBUTORS

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

(AB) Anne Booth, (GC) Gordon Crutchfield, (JH) Jan Haseler, (JFN) John Notton, (MH) Mike Harrison, (MS) Martin Sell, (MWS) Malcolm Storey, (RAF) Richard Fortey, (RdA) Rod d'Ayala, (RDNHS) Society excursion & (TVFG) Thames Valley Fungus Group

## Russulaceae

*Lactarius glyciosmus* Coconut Milkcap  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Russula aeruginea* Green Brittlegill  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Russula claroflava* Yellow Swamp Brittlegill  
20 Sep 09 under birch, The Coombes (TVFG)

*Russula nigricans* Blackening Brittlegill  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Russula turci* (a brittlegill)  
13 Nov 09, under pine, Greenacre Leisure Centre, Newbury, SU481354 (TVFG, id:MWS)

## Stereaceae

*Stereum hirsutum* Hairy Curtain Crust  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)  
26 Oct 09, Sandham Memorial Chapel, SU462608 (TVFG, id:MWS)  
30 Oct 09, Paices Wood, SU585640 (MWS)

*Stereum rugosum* Bleeding Broadleaf Crust  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

*Stereum subtomentosum* Yellow Curtain Crust  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

## Tremellales Tremellaceae

*Tremella mesenterica* Yellow Brain, Golden Jelly Fungus  
26 Oct 09, Herbert Plantation, SU473623 (TVFG, id:MWS)

## Myxomycetes

*Lycogala terrestris* Wolf's Milk  
26 Oct 09, Herbert Plantation, SU473623, plasmodium, id by aethalial colour/spore mass colour (TVFG, Id: MH)

*Badhamia utricularis* (a slime mould)  
15 Nov 09, Highmoor Trench, SU703853, plasmodial fan on fallen wood (MWS)

## RECORDER'S REPORT FOR LEPIDOPTERA 2009

### Norman Hall

2009 was another disappointing year for butterflies and moths. The weather was quite good until early summer but then became cold and wet for long spells during the months when most individuals emerge. As I said last year, what the lepidoptera need is a cold winter to keep the predators away and reduce energy consumption in the overwintering stage, and then a summer when overcast nights with low windspeeds are frequent (for the moths), when sunny days are frequent (for the butterflies) and when the rainfall is fairly average (for the larvae). As we're having the cold winter, we can live in hope.

Many of the records in the systematic list are from the following sites, for which I give here a full name and OS grid reference. It should be obvious what corresponds to the slightly abbreviated names used in the list itself: Coddlesdon Lodge, Basildon Park SU60417770; Dinton Pastures Country Park SU78297177; garden of 44 Harcourt Drive, Earley SU73527096; Hartslock Nature Reserve SU61627954; Little Hidden Farm, Hungerford SU34907123; Padworth Common SU61806474; Red Cow, Cholsey SU59238688 [Red Cow is the house name. The site includes wildlife-friendly gardens and a 3 acre wildflower meadow created from unimproved agricultural land (NMH)]; garden of 99 Westwood Road, Tilehurst SU666742; Withymead Nature Reserve (The Anne Carpmael Charitable Trust), Goring-on-Thames SU60118274. For other sites, full names and OS grid references, where known, are given in the list.

For the national status of a species I am using the terms used in *Field Guide to the Moths of Great Britain & Ireland* by Waring & Townsend (qv for definitions)

#### Systematic List (Bradley Order)

##### LIMACODIDAE

0173 *Apoda limacodes* The Festoon  
28 Jun 09, 1 male, 1 female, Red Cow Cholsey (AR)  
29 Jun 09, 1, Padworth Common (NMH)  
A primitive moth, but treated as an 'honorary' macromoth. Nationally Scarce B.

##### BUCCULATRICIDAE

0270 *Bucculatrix frangutella* (=frangulella, which is a misspelling) (a micromoth)  
25 Oct 09, feeding traces, mines on leaves of Alder Buckthorn, Herbert Plantation (main track) SU47646228 (MWS)

0374 *Synanthedon vespiformis* Yellow-legged clearwing  
12 Jun 09, 1 at pheromone trap, Emmer Green, during a period which was rarely favourable for pheromone use (JN)

##### TORTRICIDAE

0963 *Cochylis flaviciliana* (a micromoth)  
14 Aug 09, 1, Hartslock (NMH)

0974 *Argyrotaenia ljugiana* (a micromoth)  
15 Apr 09 & 18 Aug 09, singles, Harcourt Drive Earley (NMH)

1248 *Cydia molesta* (a micromoth)  
30 Apr 09, 1 reared from a larva found on a Waitrose Peach (ex Italy) (JN)

##### PYRALIDAE

1321 *Thisanotia chrysonuchella* (Crambinae)  
24 May 09, 5, Lardon Chase SU588809 (JH)  
Nationally Scarce B.

1336 *Eudonia pallida* (Scopariinae)  
from 25 May 09 to 8 Sep 09 on 10 dates, singles, Harcourt Drive Earley (NMH)  
29 Jun 09, 2, Padworth Common (NMH)  
Increasing and particularly common in 2009

1366 *Pyrausta nigrata* (Pyraustinae)  
15 Jul 09, Warren Bank Nature Reserve SU65328572 (Rd'A)  
14 Aug 09, 2, Hartslock (NMH)  
Day-flying.

1375 *Ostrinia nubilalis* European Corn-borer (Pyraustinae)  
30 Jun 09, 1, Harcourt Drive Earley (NMH)  
10 Jul 09, 1, Dinton Pastures C.P. (BMG & BENHS)  
A migrant colonist.

1396 *Mecyna flavalis* (Spilomelinae)  
18 Jul 09, 3, The Holies SU594798 (JH)  
14 Aug 09, 2, Hartslock (NMH)  
Provisionally Red Data Book 2

1398 *Nomophila noctuella* Rush Veneer (Spilomelinae)  
Seen from 18 Jul 09, Withymead (NMH) to 30 Oct 09, Harcourt Drive Earley (NMH)  
Normally a common immigrant, but only in 1's and 2's this year.

1426 *Achroia grisella* Lesser Wax Moth (Galleriinae)  
30 Jun 09, 1, Harcourt Drive Earley A female with very long hindwings, looking rather like a grey Footman when set (NMH)

1461 *Assara terebrella* (Phycitinae)  
1 Jun 09, 1 & 28 Jun 09, 1, Harcourt Drive Earley. A speciality of my garden, but usually no more than one a year. Larvae feed in cones of Norway Spruce, but I know of no such cones in my vicinity (NMH)

#### PTEROPHORIDAE

1494 *Capperia britanniodactylus* (a plume moth)  
29 Jun 09, 2, Padworth Common (NMH)  
Larva on Wood Sage.

#### HESPERIIDAE

1526 *Thymelicus sylvestris* Small Skipper  
Seen from 28 Jun 09, Red Cow Cholsey (AR), GCN Pond, Sutton Courtenay Environmental Education Centre (Rd'A) & M4 Services, Burghfield SU6769 (JL) to 17 Aug 09, The Coombes, Arborfield, SU772677 (JH).

1527 *Thymelicus lineola* Essex Skipper  
Seen from 30 Jun 09, Red Cow Cholsey (AR) to 14 Aug 09, Wokefield (footpath off Lockram Rd) SU667658 (JH)

1529 *Hesperia comma* Silver-spotted Skipper  
16 Aug 09, 20, Shirburn Hill SU717953 (JH); 12 Sep 09, 1, Aston Rowant NNR (Bald Hill) SU724959 (JH)

1531 *Ochlodes sylvanus* Large Skipper  
Seen from 30 May 09, Rushall Farm, Bradfield SU587732 (JH, JL) to 20 Jul 09, St Mary's Churchyard Burghfield SU671684 (JH)

1532 *Erynnis tages* Dingy Skipper  
Seen from 2 May 09, 20, The Holies, Streatley SU594798 (JH) to 24 May 09, The Holies, Streatley (JH) & 6, Fognam Farm Lambourn SU297799 (JL)

1534 *Pyrgus malvae* Grizzled Skipper  
23 Apr 09, Decoy Heath SU6163 (JL); 26 Apr 09, 1, Education Pond Meadow, Sutton Courtenay Environmental Education Centre (Rd'A); 2 May 09, 2, The Holies Streatley SU594798 (JH); 18 May 09, 3, Decoy Heath SU6163; 21 May 09 Calcot SU657724 & 23 May 09, 7, Paices Wood Aldermaston SU5863 (JL)

#### PIERIDAE

1545 *Colias croceus* Clouded Yellow  
Seen from 18 Jul 09, Burghfield SU6868 (JL) to 26 Oct 09, Green Park Reading SU698699 (JH)

1546 *Gonepteryx rhamni* The Brimstone  
Seen from 11 Mar 09, Fair Cross SU693628, to 24 Sep 09, Westwood Road Tilehurst (JH)

1549 *Pieris brassicae* Large White  
Seen from 15 Apr 09, Fobney Lock Reading SU708710 (JH) to 25 Sep 09, High Wood LNR Woodley SU752723 (JH)

1550 *Pieris rapae* Small White  
Seen from 2 Apr 09, Elm Tree Inn Beech Hill, SU695641 (JH) to 24 Sep 09, Lambourn Valley Way Newbury SU463675 (JH)

1551 *Pieris napi* Green-veined White  
Seen from 3 Apr 09 White Shute, Lambourn SU3376 (JL) to 24 Sep 09, Lambourn Valley Way Newbury SU463675 (JH); Seen even earlier 'in March' at Howe Trust, Wheatley SP59280549 (Rd'A)

1553 *Anthocharis cardamines* Orange-tip  
Seen from 16 Mar 09 Purley SU655746 (JL) to 31 May 09, Dry Sandford Pit BBOWT Reserve SU467995 (JH)

#### LYCAENIDAE

1557 *Neozephyrus quercus* Purple Hairstreak  
Seen from 28 Jun 09, Moor Copse SU6373 (JL) to 17 Aug 09, 2 at The Coombes Arborfield SU772677 (JH)  
In the course of picking up fallen leaves from his lawn on 16 Aug 09 at Harcourt Drive Earley, NMH was surprised to pick up a dead Purple Hairstreak which he had thought was a leaf.

1561 *Lycaena phlaeas* Small Copper  
Seen from 13 Apr 09, Red Cow Cholsey (AR) to 26 Oct 09, Green Park Reading SU698699 (JH). Best ever year for this species at Cholsey (AR)

1569 *Cupido minimus* Small Blue  
2 May 09, 1, Lardon Chase SU588809 (JH); 24 May 09, 16, Lardon Chase (JH) & 8, Fognam Farm Lambourn SU297799 (JL); 8 Aug 09, 10, Wellbottom Down, Lambourn SU3182 (JL) 24 Aug 09, 1, Greenham Common SU500648 (JH)

1571 *Plebejus argus* Silver-studded Blue  
28 Jun 09, 5, & 13 Jul 09, 7, Broadmoor Bottom SU586628, 13 Jul 09, 4, Wishmoor SU8763 (JL)



1572 *Aricia agestis* Brown Argus  
Seen from 2 May 09, The Holies SU594798 (JH)  
to 12 Oct 09, Lardon Chase SU588809 (JH)

1574 *Polyommatus icarus* Common Blue  
Seen from 2 May 09, 8, The Holies SU594798  
(JH) to 8 Oct 09, The Grove Shinfield Park  
SU730689 (JH); 2 Aug 09, 138 counted at Red  
Cow Cholsey (AR)

1575 *Lysandra coridon* Chalk Hill Blue  
Seen from 15 Jul 09, Red Cow Cholsey (AR) to  
21 Aug 09 Watts Bank Lambourn SU3377 (JL);  
Chalk-hill Blue rarely visits Red Cow Cholsey  
(AR); 18 Jul 09, 74 counted, Lardon Chase (JH)

1576 *Lysandra bellargus* Adonis Blue  
24 May 09, 18, & 15 Aug 09, 20, The Holies  
SU594798 (JH); 22 Aug 09, 1 Hartslock BBOWT  
Reserve SU617795 (JH)

1580 *Celastrina argiolus* Holly Blue  
Seen from 14 Apr 09, Shinfield Park (ECMWF)  
SU730696 (JH) to 8 Aug 09, Westwood Road  
Tilehurst (JH)

1582 *Hamearis lucina* Duke of Burgundy  
24 May 09, 2, Cleeve Hill SU3376 (JL)

#### NYMPHALIDAE

1584 *Limenitis camilla* White Admiral  
25 Jun 09, 1, Beech Hill (East) SU707648 (JH);  
30 Jun 09, 1, Farley Hill SU746656 (JH); 18 Jul  
09 Hosehill SU646697 (JL)

1590 *Vanessa atalanta* Red Admiral  
Seen from 20 Mar 09, Swallowfield Churchyard  
SU731649 (JH) to 14 Nov 09 Burghfield SU6670  
(JL)

1591 *Vanessa cardui* Painted Lady  
Seen from 24 May 09, 32, The Holies SU594798  
(JH) & 4, Fognam Farm Lambourn SU297799  
(JL) to 6 Dec 09, Red Cow Cholsey (AR);  
Present in astonishing numbers.(NMH), 25/5/09,  
244 counted, Compton SE circular walk  
SU526797 (JH)

1593 *Aglais urticae* Small Tortoiseshell  
Seen from 19 Mar 09, Arborfield by-pass  
SU761658 (JH) to 21 Aug 09, 12, Watts Bank  
Lambourn SU3377 & 2, Fognam Farm Lambourn  
SU2979 (JL); Recorded on 43 days at Red Cow  
Cholsey - a modest recovery (AR)

1597 *Inachis io* The Peacock  
Seen from 2 Mar 09, Paices Wood SU588636 to  
16 Nov 09, West Woodhay SU395636 (JL)

1598 *Polygonia c-album* The Comma  
Seen from 27 Feb 09, Warren Wood  
Finchampstead SU793645 (JH) & Hosehill  
SU649697 (JL) to 13 Oct 09, Simms Copse  
Mortimer West End, SU645636 (JH)

1607 *Argynnis aglaja* Dark Green Fritillary  
9 Jul 09 & 10 Jul 09, 1, Red Cow Cholsey. The  
first fritillary ever recorded on the site (AR)

1608 *Argynnis paphia* Silver-washed Fritillary  
Seen from 16 Jun 09, Paices Wood SU6863 (JL)  
to 9 Aug 09, Park Wood Moor Copse, SU636741  
(JH) & 1 on Buddleia, Emmer Green. An  
uncommon visitor to the garden (JN)  
18 Jul 09, 1 in garden, Berrys Road, Upper  
Bucklebury (RWF).  
Note that I have not listed all sightings or  
localities.

1614 *Pararge aegeria* Speckled Wood  
Seen from 2 Apr 09, Elm Tree Inn Beech Hill,  
SU695641 (JH) to 16 Oct 09, Shinfield Park  
(ECMWF) SU730696 (JH)

1620 *Melanargia galathea* Marbled White  
Seen from 15 Jun 09 to 5 Aug 09, Red Cow  
Cholsey, max count 62 on 4 Jul 09 (AR)

1621 *Hipparchia semele* The Grayling  
13 Jul 09, 2, Broadmoor Bottom SU857628 & 1,  
Wildmoor SU840630 (JL); 3 Aug 09 Crookham  
SU5164 (JL); 24 Aug 09 & 29 Aug 09, singles,  
Greenham Common SU500648 (JH)

1625 *Pyronia tithonus* The Gatekeeper  
Seen from 28 Jun 09, 5, Westwood Road  
Tilehurst (JH) to 23 Aug 09, Woodlands St Mary  
SU328748 (JH)

1626 *Maniola jurtina* Meadow Brown  
Seen from 2 Jun 09 to 24 Sep 09, Red Cow  
Cholsey (AR)

1627 *Coenonympha pamphilus* Small Heath  
Seen from 24 May 09, 4, The Holies SU594798  
(JH) to 12 Sep 09, 4, Aston Rowant (Bald Hill)  
NNR, SU724959 (JH)

1629 *Aphantopus hyperantus* The Ringlet  
Seen from 16 Jun 09, St Mary's Churchyard  
Burghfield, SU671684 (JH) & Paices Wood  
SU6863 (JL) to 11 Aug 09, Gardeners Green  
Wokingham, SU821665 (JH) Best ever year for  
this species at Red Cow Cholsey (AR)

#### DREPANIDAE

1647 *Watsonalla cultraria* Barred Hook-tip  
15 Aug 09, 4, Basildon Park (RDNHS).  
Larva on Beech. Local.

1660 *Polyplocia ridens* Frosted Green  
 14 Apr 09 to 16 Apr 09, 10 individuals in total,  
 Harcourt Drive Earley (NMH)  
 22 Apr 09, 1, Red Cow, Cholsey. First for site  
 (AR)  
 Larva on Oak. Local.

### GEOMETRIDAE

1689 *Scopula marginepunctata* Mullein Wave  
 20 Aug 09, 1, in a garden in Wokingham Road,  
 now in coll. NMH (R.M.Bull)  
 Local, and mainly coastal.

1693 *Scopula floslactata* Cream Wave  
 31 May 09, 1, Parsonage Moor Cothill Fen  
 SU462998 (RDNHS) Local.

1699 *Idaea rusticata* Least Carpet  
 28 Jun 09 & 9 Jul 09, singles, Harcourt Drive  
 Earley (NMH)  
 10 Jul 09, 1, Dinton Pastures (BMG & BENHS)  
 18 Jul 09, 5, Withymead (NMH)  
 Local but spreading and becoming locally  
 common. Nonetheless, to see 5 together is still  
 quite exciting.

1715 *Idaea straminata* Plain Wave  
 29 Jun 09, 2, Padworth Common. Eggs obtained  
 ex female. 4 specimens bred, emerging 5-12 Sep  
 09, 4 more larvae overwintering (NMH)  
 Local and seldom numerous, but not unexpected  
 on good quality scrubby heathland.

1716 *Rhodometra sacraria* The Vestal  
 4 Jul 09, River Field, Moor Copse SU635738 (JL)  
 Immigrant.

1731 *Scotopteryx bipunctaria* Chalk Carpet  
 14 Aug 09, 6, Hartslock (NMH)  
 In calcareous localities, Nationally Scarce B.

1739 *Epirrhoe rivata* Wood Carpet  
 11 Jun 09, 14 Jun 09 & 27 Jul 09, singles, Red  
 Cow Cholsey (AR)  
 14 Aug 09, 1, Hartslock (NMH)  
 Probably under-recorded due to confusion with  
 the Common Carpet. Local.

1742 *Camptogramma bilineata* Yellow Shell  
 22 Oct 09, 1, Westwood Road Tilehurst (JH)  
 Common, but this was a very late record. Mostly  
 in one generation June-August.

1749 *Pelurga comitata* Dark Spinach  
 31 Jul 09, 1, Red Cow Cholsey (AR)  
 Frequent in London, but infrequent in our area.

1771 *Thera juniperata* Juniper carpet  
 14 Oct 09, 1, Emmer Green, at actinic light. (JN)  
 Increasingly found in gardens with cultivated  
 junipers.

1807 *Perizoma albulata* Grass Rivulet  
 10 May 09, 1, Watts Bank Lambourne (JL)  
 24 May 09, 1 Emmer Green. New for garden (JN)  
 28 May 09, 1, Aston Upthorpe Downs SSSI  
 SU546837 (JH)  
 30 May 09, 1, Westwood Road Tilehurst (JH)  
 5 Jun 09, Hungerford Newtown SU348714 (JL)  
 12 Jun 09, 1 Harcourt Drive Earley. New for  
 garden (NMH)  
 Garden records are normally few. Local.

1840 *Eupithecia subumbrata* Shaded Pug  
 20 Jun 09, 2, Little Hidden Farm (BMG)  
 18 Jul 09, 1, Red Cow, Cholsey, first for site (AR)  
 Local, but probably underrecorded.

1855 *Eupithecia phoeniceata* Cypress Pug  
 7 Sep 09, 1, Harcourt Drive Earley (NMH)  
 A colonising species that is spreading up from  
 the south coast. Still very few records in our area.

1870 *Odezia atrata* Chimney Sweeper  
 14 Jun 09, 2, Inkpen Crocus Field BBOWT  
 reserve SU370640 (JH)  
 Common in the Midlands and northwards, but not  
 in our area. This is only the fifth VC22 database  
 record. Larva on Pignut.

1878 *Minoa murinata* Drab Looper  
 This is a Nationally Scarce B day-flying species,  
 which is thought to be declining. The larva feeds  
 on Wood Spurge. A survey was carried out on 30  
 May 09 by the BMG, to increase knowledge of  
 numbers and distribution in Berkshire.  
 Participants split into 3 groups, which went to  
 separate areas from which previous records  
 existed or where it might occur. The Fence  
 Wood, Hermitage group saw a total of 4 at three  
 sites, the Eling Wood, Hampstead-Norreys group  
 14 at three sites, the Frilsham group 50 at six  
 sites. There were 12 on the same day at the  
 known site of Ashampstead Common (JH). The  
 moth is apparently doing quite well. The following  
 records were for other dates:  
 7 May 09, 1, & 23 May 09, 8, Paices Wood  
 SU5863 (JL)  
 9 May 09, 4, Ashampstead Common SU582753  
 (JH)  
 23 Jul 09, 1 flying in rain 7PM, no Wood Spurge  
 apparent, Ashampstead SU585748 (JL)  
 9 Aug 09 Rushall SU76 (JL)  
 27 Aug 09 Paices Wood SU584638 (JL).

1896 *Itame brunneata* Rannoch Looper  
 31 May 09, 1, Dry Sandford Pit BBOWT reserve  
 SU467995 (RDNHS) Found on Common Bird's-  
 foot Trefoil by Chris Bucke, photographed by Jan  
 Haseler, confirmed by Martin Harvey  
 1 Jun 09, 1, Windsor Forest SU95297176 (Les  
 Finch, BMG)

There was an immigration of this species into the south of England in May/June in a period of easterly winds. At least 4 were seen in our area. Though the species only breeds in the UK in the Rannoch area, these immigrants have probably come from Scandinavia, where it is common.

1912 *Ennomos quercinaria* August Thorn  
18 Jul 09, 4, Withymead (NMH)  
Much more local than the September Thorn. There were some beautiful forms of it at Withymead.

1914 *Ennomos fuscantaria* Dusky Thorn  
15 Aug 09, 8, Basildon Park SU604778 (RDNHS)  
Common but said to be decreasing. Needs monitoring.

### SPHINGIDAE

1984 *Macroglossum stellatarum* Humming-bird Hawk-moth  
28 May 09, 2 on valerian, Pierces Hill Tilehurst SU666743 (JL)  
15 Jun 09 & 31 Aug 09, singles, Red Cow Cholsey. Scarce this year (AR)  
22 Oct 09, Emmer Green, 1 nectaring at *Abelia* blossom for about 20 minutes (JN)  
10 Jul 09, Cleeve Hill SU333765 (JL)

1992 *Deilephila porcellus* Small Elephant Hawk-moth  
2 Jun 09, 1, Red Cow Cholsey. Usually common – the site has lots of Ladies Bedstraw (AR)

### NOTODONTIDAE

2009 *Ptilodon cucullina* Maple Prominent  
1 Jul 09, 1, Emmer Green (JN)  
It seemed to be increasing in number 2-3 years ago, but is getting scarcer again. Local.

### ARCTIIDAE

2035 *Thumatha senex* Round-winged Muslin  
10 Jul 09, Dinton Pastures (BMG & BENHS)  
18 Jul 09, Withymead Nature Reserve, (JH) Local.

2040 *Cybosia mesomella* Four-dotted Footman  
20 Jun 09, 4, Little Hidden Farm (BMG)  
9, 29 Jun 09, Padworth Common (NMH)  
Local, but not unexpected on good quality heathland.

2043 *Eilema sororcula* Orange Footman  
25 May 09, 27 May 09 & 9 Jun 09, singles, Harcourt Drive Earley (NMH)  
2 Jun 09, 1, Red Cow Cholsey. Recorded in 3 of the last 4 years, none before that (AR)

2045 *Eilema caniola* Hoary Footman  
12 Jun 09, 1 at MV light, Emmer Green. A first for the garden. (JN)  
On the increase in our area, but still scarce.

2057 *Arctia caja* Garden Tiger  
18 Jul 09, 1, Withymead (NMH)  
Now quite rare in our area. The reason for its decline is unknown.

2059 *Diacrisia sannio* Clouded Buff  
14 Jun 09 & 28 Jun 09, a female, Broadmoor Bottom SU85636288 (JL)  
Local and decreasing.

2068 *Callimorpha dominula* Scarlet Tiger  
from 22 Jun 09 to 2 Jul 09, on 4 dates, Red Cow Cholsey (AR)  
from 22 Jun 09 to 5 Jul 09, Bradfield, Burghfield, Caversham Warren, Chazey Mapledurham, Moor Copse, Pangbourne, Speen Moor, Tilehurst & Woolhampton (JL)  
3 Jul 09, mating pair seen being attacked by wasp, Woolhampton SU5666 (JL)

### NOLIDAE

2076 *Meganola albula* Kent Black Arches  
26 Jul 09, 1, Red Cow Cholsey (AR)  
Nationally Scarce B.

### NOCTUIDAE

2131 *Xestia rhomboidea* Square-spotted Clay  
14 Aug 09, 2, Hartslock (NMH)  
15 Aug 09, 1, Basildon Park (RDNHS)  
Nationally Scarce B. A local speciality of the Chilterns.

2140 *Cerastis leucographa* White-marked  
3 Apr 09, 1, Moor Copse BBOWT reserve SU640738 (Martin Harvey)

2165 *Hecatera dysodea* Small Ranunculus  
30 Jun 09, 1, Harcourt Drive Earley (NMH)  
A colonising species that is now established in our area, but is still infrequent at light.

2176 *Cerapteryx graminis* Antler Moth  
25 Aug 09, 1, Red Cow Cholsey. Habitat seems wrong for the species (AR)

2194 *Mythimna albipuncta* White-point  
30 May 09, 1, Rushall Farm Bradfield SU587732 (BMG)  
9 Jun 09 & 12 Aug 09, singles, Harcourt Drive Earley (NMH)  
25 Jun 09 & 6 Sep 09, singles, Red Cow Cholsey (AR)

14 Aug 09, 3, Hartslock (NMH)  
15 Aug 09, 1, Basildon Park (RDNHS)  
30 Aug 09 & 22 Sep 09, singles, Westwood Road Tilehurst (JH)

A colonising species. The number of records shows that it has arrived 'properly' in our area and will presumably be very common from now on.

2196 *Mythimna pudorina* Striped Wainscot  
29 Jun 09, 2, Padworth Common (NMH)  
A local species that likes boggy areas.

2219 *Shargacucullia lychnitis* Striped Lychnis  
18 Jul 09, 8 larvae on Dark Mullein, The Holies (by lower entrance to site) SU594798 (JH)  
Nationally Scarce A.

2247 *Dichonia aprilina* Merveille du Jour  
between 14 Oct 09 & 22 Oct 09, 6 individuals in total, Harcourt Drive Earley (NMH)  
21 Oct 09, 3 at actinic light, Emmer Green (JN); etc.  
Supposedly common – but there seemed to be more than usual in 2009.

2300 *Mormo maura* Old Lady  
Between 20 Jul 09 & 7 Sep 09, 5 individuals to light, Harcourt Drive Earley. 5 records at light is unusual (NMH)  
Most commonly seen at sugar. Sometimes found aestivating communally. Local.

2316 *Cosmia affinis* Lesser-spotted Pinion  
13 Aug 09, 1, Erleigh Lake Interpretation Centre SU75007096 (BMG)  
Larva often on Elm. Local.

2319 *Cosmia pyralina* Lunar-spotted Pinion  
10 Jul 09, 12, Dinton Pastures (BMG & BENHS)  
Examples were heavily suffused black on the forewings obscuring the cross lines, and the hindwings were darker than usual. This caused them to be misidentified at first as Lesser-spotted Pinion. Field guides and websites can be misleading for separation of Lunar & Lesser-spotted Pinion in our area. Locally *C. pyralina* is the commoner of the two. (NMH)

## CONTRIBUTORS

Thanks are due to the following members for their submissions:

(AR) Tony Rayner, (JH) Jan Haseler, (JL) John Lerpiniere, (JN) John Notton, (MWS) Malcolm Storey, (Rd'A) Rod d'Ayala & (RWF) Roger Frankum.

Records are attributed to the following if a species was recorded on one of their field meetings: (BENHS) British Entomological & Natural History Society, (BMG) Berkshire Moth Group, (RDNHS) Reading & District Natural History Society

2331 *Apamea unanimitis* Small Clouded Brindle  
27 May 09, 1, Harcourt Drive Earley (NMH)  
28 Jun 09, 1, Red Cow Cholsey (AR)  
Common, but possibly under-recorded due to confusion with Common Rustics, which have similar markings around the reniform stigma.

2377 *Arenostola phragmitidis* Fen Wainscot  
31 Jul 09, 1, Harcourt Drive Earley (NMH)  
Local, and not recorded often in East Berkshire.

2396 *Elaphria venustula* Rosy Marbled  
29 Jun 09, 1, Padworth Common (NMH)  
Nationally Scarce B, but extending its range.

2400 *Helicoverpa armigera* Scarce Bordered Straw  
19 Aug 09, 1, Westwood Road Tilehurst. First garden record since 2006 (JH)  
An immigrant pest species (e.g. of tomatoes). In 2006 there was a remarkable influx, followed by a home-bred generation, and it became very common in the autumn. However, it cannot normally overwinter, and there have been few records since then.

2437 *Polychrysis moneta* Golden Plusia  
23 Aug 09, 1, Red Cow Cholsey (AR) Larva on delphinium.  
A 'recent' colonist, but now quite common.

2439 *Plusia festucae* Gold Spot  
25 Aug 09 & 28 Aug 09, singles, Red Cow Cholsey (AR)  
Larva on sedges etc. Common, but nice to see.

2466 *Lygephila pastinum* The Blackneck  
20 Jun 09, 8, Little Hidden Farm (BMG)  
Larva on vetches. Local.

2475 *Parascotia fuliginaria* Waved Black  
2 Jul 09, 1, Red Cow Cholsey (AR)  
Larva on bracket fungi, adult sits like a geometrid moth. Nationally Scarce B.

2480 *Hypena rostralis* Buttoned Snout  
24 May 09, 2, Westwood Road Tilehurst (JH)  
Larva on Hop, overwinters as an adult. Nationally Scarce B.



## RECORDER'S REPORT FOR ENTOMOLOGY and OTHER INVERTEBRATES 2009

Chris Raper

Far from having a 'barbecue summer' we experienced yet another overcast or wet summer in 2009. But, as in previous years, the bad weather doesn't seem to have adversely affected the invertebrates – only the invertebrate recorders! So it was a very pleasant surprise to receive so many good records this year from so many recorders – I think this year's report is the largest for a long time. Keep up the good work everyone and let's make 2010 another year to remember!

### **Acarina Tarsonemoidea Eriophyidae**

*Aceria eriobia* (a gall mite)  
28 May 09; Homefield Wood BBOWT Reserve,  
erineum on underside of Field Maple leaf, in  
woodland enclosure; SU81328683 (MWS)

### **Araneae Amaurobiidae**

*Amaurobius similis* (a lace-webbed spider)  
4 Oct 09, Tilehurst, Photograph, SU666742 (JH)

### **Araneidae**

*Araneus diadematus* Garden Orb-web Spider  
26 Sep 09, Tilehurst, Photograph, SU666742  
(JH)

*Araneus quadratus* (a spider)  
1 Sep 09, Abbey Fish Ponds Nature Reserve  
(Lower Fen), Adults, SU51309792 (RA)

### **Atypidae**

*Atypus affinis* Purse Web Spider  
25 Jul 09, The Park, Chalkhills, Whitchurch-on-  
Thames (Neutral grassland), intact web, adult not  
confirmed, SU63987804 (RA)

### **Pisauridae**

*Pisaura mirabilis* Tent Spider  
17 May 09, Kent's Hill, Sonning Common,  
RD NHS field trip, SU725810 (JH)

### **Theridiidae**

*Steatoda grossa* (a false widow spider)  
7 Nov 09, Chapel Row, in old wooden lean-to  
garage. General colouration matches *S. grossa*  
although the epigyne has the anterior point of *S.*  
*nobilis*, SU568696 (MWS, conf. Stuart Hine)  
9 Dec 09, Tilehurst, in garage, SU66327506, see  
photo p. 33 (CMTR)  
This is one of the 'false widows' – harmless  
cousins of the infamous 'Black Widow' spider.  
We have a few native species but they have hit  
the tabloid news recently as foreign *Steatoda*  
spp. have settled here. Bites are usually a bit  
more severe than ordinary spiders but are not  
dangerous – just treat them with respect and  
avoid handling them.

### **Insecta Coleoptera Anobiidae**

*Ptinus sexpunctatus* (a spider beetle)  
9 May 09, Upper Bucklebury, alive, indoors. We  
often get these in the house. Said to be  
associated with solitary bees - we have *Osmia*  
*rufa* nesting in holes in the house wall where it  
has removed the soft cement used to fill the  
holes made when cavity wall insulation was  
installed in the 1980s, SU542683 (MWS)

### **Cantharidae**

*Cantharis rustica* (a soldier beetle)  
23 May 09, Tilehurst, Photograph, SU666742  
(JH)

### **Carabidae**

*Bembidion quadrimaculatum* (a ground beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill (Pond),  
SU638792 (RA:Robert Aquilina)

### **Cerambycidae**

*Aromia moschata* Musk Beetle  
27 Aug 09, Bearwater, Hungerford, Berkshire,  
adult, collected from plants on river bank.  
SU33676886 (RA)  
Lives in and feeds on Willow, especially old  
trees/pollards.

*Rutpela maculata* (a longhorn beetle)  
21 Jun 09, Decoy Heath, photograph (JH)  
15 Jul 09, Warren Bank Nature Reserve, adults,  
feeding on flowers, SU65328572 (RA)

### **Chrysomelidae**

*Chrysolina americana* Rosemary Leaf Beetle  
26 Sep 09, Tilehurst, SU66327506, see photo p.  
34 (CMTR)  
This beautiful, metallic, striped beetle is a recent  
colonizer that is slowly spreading through our  
area. It was presumably brought to our shores on  
imported cultivated lavenders and rosemary  
plants.

*Chrysolina menthastri* (a leaf beetle)  
12 Jul 09, Park Wood, Moor Copse, Photograph,  
SU638741 (JH)

### Coccinellidae

*Halysia 16-guttata* Orange Ladybird  
13 Jun 09, Tilehurst, in moth trap, SU666742 (JH)

*Harmonia axyridis* Harlequin Ladybird  
17 Oct 09, Shiplake, RDNHS field trip, SU767782 (JH)  
27 Dec 09, 70 Newlands Road, Didcot, OX11 8QB, adult overwintering on plant in unheated greenhouse. SU52188957 (RA)  
24 Aug 09, Rush Manor, Shillingford Road, Wallingford, OX10 8LJ. SU60519174 (RA)  
This recent colonizer seems to have been a little less common in 2009 and I put this down to the cold snap we experienced in February, but it might just have been my imagination. It will be interesting to plot their fortunes and see how their numbers are affected by the prolonged cold and snow that we have suffered in the winter of 09/10.

*Chilocorus renipustulatus* Kidney-spot Ladybird  
13 Dec 09, Park Wood, Moor Copse, on ash, felled during coppicing, SU638739 (JH)

### Curculionidae

*Tanysphyrus lemnae* Duckweed Weevil  
5 May 09, Tinepits Pond, Whitchurch Hill (Pond), SU638792 (RA:Robert Aquilina)

### Dermestidae

*Anthrenus verbasci* Varied Carpet Beetle  
1 Apr 09, Tilehurst, in bag with moth pots, SU666742 (JH)

*Megatoma undata* (a museum or larder beetle)  
18 May 09, Beenham Hatch, on wooden gate, SU58276944 (MWS)

### Dytiscidae

*Dytiscus marginalis* Great Water Diving Beetle  
24 Feb 09, Greenmoor, Woodcote - Upper Pond, adult, brief netting survey, SU64548702 (RA)

### Hydraenidae

*Hydraena testacea* (a water beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill (Pond), SU638792 (RA: Robert Aquilina)

### Hydrophilidae

*Anacaena limbata* (a water beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill, SU638792 (RA: Robert Aquilina)

*Cercyon convexusculus* (a water beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill, SU638792 (RA: Robert Aquilina)

*Helophorus aequalis* (a water beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill, SU638792 (RA: Robert Aquilina)

*Hydrobius fuscipes* (a water beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill, SU638792 (RA: Robert Aquilina)

### Lampyridae

*Lampyris noctiluca* Glow-worm  
7 May 09, Aston Upthorpe Downs, RDNHS field trip, SU543834 (JH)  
Apr 09, Abbey Fish Ponds, Abingdon (Grassland), Grid reference of Daisy Bank assumed for this record. SU51259797 (RA: Bob Eeles)  
9 Jul 09, Gillots Field, Henley-on-Thames (Rough grass, scrub and trees). Glowing female, tussocky grass close to trampled path. Belt of trees very close by, SU74518112 (RA)  
30 Mar 09, Foxcombe Hall, Boarshill, larvae, Under reptile monitoring sheet on sandy steepish bracken bank in open woodland. SP49040196, (RA)

### Lucanidae

*Lucanus servus* Stag Beetle  
24 May 09, Tilehurst, SU666742 (JH)  
16 Jun 09, Tilehurst, SU666742 (JH)  
AR Reports: "A villager (Cholsey) reported several sightings in his garden by 8 June. A neighbour reported 4 in her garden on 15 June. At Red Cow, Cholsey, a female under a snake sheet from 16 to 21 June. Otherwise here from 22 June to 28 July peaking on 22 June when at least 5 flying and two caught in a moth trap. One of these a massive male! NB prime flying time 21.30 to 22.00"

### Pyrochroidae

*Pyrochroa serraticornis* Red-headed Cardinal Beetle  
26 Apr 09, Sutton Courtenay Environmental Education Centre, adult, SU501918 (RA)

### Scarabidae

*Melolontha melolontha* Cockchafer  
AR reports: "Moth trap counts 1 on 22 Apr 09, 16 on 2 May 09, 5 on 13 May 09. These numbers suggest a steady decline in this species."

*Acilius sulcatus* (a diving beetle)  
5 May 09, Tinepits Pond, Whitchurch Hill (Pond), SU638792 (RA: Robert Aquilina)

### Silphidae

*Oiecoptoma thoracicum* Red-breasted carrion beetle

12 Jul 09, Park Wood, Moor Copse, Photograph, SU638739 (JH)

### Diptera

#### Agromyzidae

*Phytomyza hellebori* (a leaf-mining fly)

20 Dec 09, Stichens Green, leaf-mine on Stinking Hellebore, SU592795 (JH)

A recent colonizer – a leaf-miner in garden Hellebores – watch out for tracks and mines in the leaves.

#### Asilidae

*Asilus crabroniformis* Hornet Robber Fly

AR Reports: "In contrast to 08, the season started and finished early. Variable hay-cutting time effects end dates. The first sighting was on 18 Jul 09 and the last was on 5 Sep 09. The peak period was between 7 Aug 09 and 11 Aug 09 when counts of 19 flies were recorded. This maximum has been remarkably consistent now for the last 4 years. The flies were again seen in all areas of the meadow, and again in the garden. A few mating pairs were observed."

#### Cecidomyiidae

*Acericecis campestre* (a gall midge)

28 May 09, Homefield Wood BBOWT Reserve, galls on Field Maple leaves, in woodland enclosure, SU81328683 (MWS)

*Craneiobia corni* (a gall midge)

2 Aug 09, Hartslock Nature Reserve, Goring-on-Thames, Oxon, leaf galls on Dogwood, SU616796 (CMTR)

*Jaapiella veronicae* (a gall mite)

24 Jul 09, Littlemore Hospital Pond (Pond Surrounds), terminal bud on Germander Speedwell, SP53190251 (RA)

#### Dolichopodidae

*Poecilobothrus nobilitatus* (a dance fly)

27 Jun 09, Lye Valley, Oxford, Pond 2 (Pond), Adults, SP54700572 (RA)

#### Hippoboscidae

*Ornithomya (avicularia?)* (a louse fly)

13 Oct 09, Ducklington Village Pond, Adult. Species not confirmed but insect looked like this common species, which is parasite of birds. Presence of up to 60 Mallard on the pond would make this an ideal place for this species to be. SP35850757 (RA)

### Stratiomyidae

*Stratiomys potamida* (a soldier fly)

11 Jul 09, Moor Copse Nature Reserve, Tidmarsh, Berks, a very striking black and yellow soldier fly seen nectaring on hogweeds, SU634738 (CMTR)

### Syrphidae

*Cheilosia illustrata* (a hoverfly)

12 Jul 09, Moor Copse Nature Reserve, Tidmarsh, Berks, SU634738 (CMTR)

*Ferdinandia cuprea* (a hoverfly)

25 Oct 09, Moor Copse Nature Reserve, Tidmarsh, Berks, SU634738 (CMTR)

*Volucella bombylans* (a bee-mimic hoverfly)

31 May 09, Dry Sandford Pit BBOWT Reserve, RDNHS field trip, SU467995 (JH)

*Volucella zonaria* (a hoverfly)

25 Jul 09, Red Cow, Cholsey, SU592868 (CMTR)

### Tachinidae

*Bithia spreta* (a parasite fly)

18 Jul 09, Moor Copse, Tidmarsh, Berks, SU634738 (CMTR)

25 Jul 09, Red Cow, Cholsey, Oxon, SU592868 (CMTR)

08 Aug 09, Red Cow, Cholsey, Oxon, SU592868 (CMTR)

An interesting, rare parasitoid that favours warm, dry, grassy habitats – this is not the first year I have seen it in our area but in 2009 I caught it in 2 new localities.

*Dinera grisea* (a parasite fly)

11 Jul 09, Moor Copse, Tidmarsh, Berks, SU634738 (CMTR)

*Eriothrix prolixa* (a parasite fly)

14 Aug 09, Hartslock Nature Reserve, Goring-on-Thames, Oxon, SU616796 (CMTR)

22 Aug 09, Hartslock Nature Reserve, Goring-on-Thames, Oxon, SU616796 (CMTR)

Another rare parasitoid of chalk downlands – one of these specimens was taken at MV light.

*Phasia hemiptera* (a parasite fly)

02 Aug 09, Hartslock Nature Reserve, Goring-on-Thames, Oxon, SU616796 (CMTR)

*Prosenia siberita* (a parasite fly)

12 Jul 09, Hartslock Nature Reserve, Goring-on-Thames, Oxon, SU616796 (CMTR)

A parasitoid of small chafer beetles – usually seen on grassland or the edges of heath.

*Sturmia bella* (a parasite fly)

22 Aug 09, Warburg Nature Reserve, Bix, Oxon, see photo p. 34 (CMTR)

This parasitoid attacks Small Tortoiseshells, amongst other nymphalids, and seems to be doing very well. This might have been due to a slight increase in Small Tortoiseshell numbers and the 2009 influx of Painted Lady butterflies.

#### **Hemiptera Veliidae**

*Velia caprai* Water Cricket

21 Apr 09, East Cottage Pond, Ewelme (Pond), Adults, SU64549744 (RA)

#### **Hymenoptera Apidae**

*Bombus hypnorum* (a bumblebee)

14 Jun 09, Moor Copse Nature Reserve, Tidmarsh, Berks, SU634738, see photo p. 34 (CMTR)

11 Jul 09, Tilehurst, SU66327506 (CMTR)

This is yet another recent colonizer that seems to be spreading through our area quite quickly. This species is very easy to distinguish from other, native species – the primary colour is jet black but with a white tail and an orange-brown thorax.

*Bombus pascuorum* Common Carder Bee

15 Mar 09, 70 Newlands Avenue, Didcot, (Garden), adult, queen, SU52188957 (RA)

*Bombus terrestris* Buff Tailed Bumblebee

15 Mar 09, 70 Newlands Avenue, Didcot, (Garden), adult, queen SU52188957 (RA)

21 Apr 09, East Cottage Pond, Ewelme (Pond Surrounds), adult, SU64549744 (RA)

16 Mar 09, Sutton Courtenay Environmental Education Centre, adult, SU501918 (RA: Curt Lamberth)

26 Apr 09, Sutton Courtenay Environmental Education Centre, stream bank, adult emerging from rough vegetation on central section of stream bank, SU50079194 (RA)

#### **Argiidae**

*Arge berberidis* Barberry Sawfly

6 Sep 09, Upper Bucklebury, larvae on margins of leaves of purple-leaved barberry cultivar, Berry's Road, This recent colonist has now arrived in our area! SU542684 (MWS)

#### **Cimbicidae**

*Abia sericea* (a club horned sawfly)

2 Aug 09, Hartslock Nature Reserve, Goring-on-Thames, Oxon, SU616796, see photo p. 34 (CMTR)

#### **Megachilidae**

*Osmia rufa* Red Mason Bee or Masonry Bee

22 Apr 09, Upper Bucklebury, nesting in house wall and attached Red Masonry Bee box, 43 Berry's Road, rear garden, SU54216831 (MWS)

#### **Vespidae**

*Dolichovespula sylvestris* Tree Wasp

12 Apr 09, Burghfield Common, on mossy log, SU65376620 (MWS)

*Vespa crabro* Hornet

21 Oct 09, Skinners Green, nest in hollow Ash tree, roadside opposite gate, The Ash tree had been sawn down, neatly slicing the nest in half between two tiers of cells (MWS)

#### **Hemiptera Hydrometridae**

*Hydrometra stagnorum* Water Measurer

11 Mar 09, Bearwater, Hungerford, Berkshire - Lake, in pond where invertebrates were very sparse and more or less confined to cover created by overhanging leaves of Tussock Sedges on bank. SU33796887 (RA)

11 Mar 09, Bearwater, Hungerford, Berkshire. Adult netted from one of two low-lying temporary ponds. SU33826885 (RA)

12 Jul 09, C S Lewis Reserve Main Pond (BBOWT) Pond, brief netting survey, few species present, SP56020662 (RA)

23 Aug 09, C S Lewis Reserve Small Pond (BBOWT) (Pond), Adult, SP 55950660 (RA)

5 May 09, Tinepits Pond, Whitchurch Hill (Pond), SU638792 (RA: Robert Aquilina)

#### **Miridae**

*Miris striatus* Fine Streaked Bugkin

18 May 09, Beenham Hatch, on wooden gate, lower gate, SU58276944 (MWS)

*Rhabdomiris striatellus* (a capsid bug)

18 May 09, Beenham Hatch, on wooden gate, SU58276944 (MWS)

#### **Naucoridae**

*Ilyocorus cimicoides* Saucer Bug

26 Jul 09, GCN Pond, Sutton Courtenay Environmental Education Centre (Pond), nymphs, SU50189172 (RA)

23 Aug 09, Sutton Courtenay Environmental Education Centre - Education Pond, brief netting survey of one very small part of the pond. SU49979183 (RA)



### **Pentatomidae**

*Pentatoma rufipes* Forest Bug  
18 Aug 09, 70 Newlands Avenue, Didcot,  
(Garden), adult, SU52188957 (RA)

### **Odonata**

#### **Aeshnidae**

*Aeshna cyanea* Southern Hawker  
16 Aug 09, Tilehurst, egg-laying, SU666742, (JH)  
01 Jul 09 to 04 Oct 09, Red Cow, Cholsey,  
singles regularly seen, SU592868 (AR)

*Aeshna grandis* Brown Hawker  
4 Jul 09 to 15 Aug 09, Red Cow, Cholsey, one or  
two seen. Often laying, SU592868 (AR)

*Aeshna juncea* Common Hawker  
8 Sep 09, Millenium Green Drayton, male  
patrolling pond, SU48059450 (RA)

*Aeshna mixta* Migrant Hawker  
24 Sep 09 & 28 Sep 09, Red Cow, Cholsey,  
singles only recorded, SU592868 (AR)

*Anax imperator* Emperor Dragonfly  
21 Jun 09, Decoy Heath, , SU613638, (JH)  
15 Jun 09 to 03 Aug 09, Red Cow, Cholsey, one  
or two seen on several days. Often laying,  
SU592868 (AR)

#### **Agriidae**

*Agrion splendens* Banded Demoiselle  
15 Jun 09 to 31 Jul 09, Red Cow, Cholsey, one  
or two, SU592868 (AR)

#### **Coenagriidae**

*Coenagrion mercuriale* Southern Damselfly  
25 May 09, Dry Sandford BBOWT Reserve,  
male, northern fen, SU46809962 (MWS)

*Coenagrion puella* Azure Damselfly  
2 May 09 to 9 Aug 09, Red Cow, Cholsey,  
regularly seen with over 100 (mass laying) on 2  
June 09, SU592868 (AR)

*Ischnura elegans* Blue Tailed Damselfly  
2 Jun 09 to 8 Aug 09, Red Cow, Cholsey,  
recorded on numerous occasions. Never more  
than 4, SU592868 (AR)  
31 Jul 09, GCN Pond, Sutton Courtenay  
Environmental Education Centre, adult,  
SU50189172 (RA)

*Pyrrosoma nymphula* Large Red Damselfly  
28 Apr 09 to 10 Jul 09, Red Cow, Cholsey, max  
of 10, SU592868 (AR)  
26 Apr 09, Education Pond, Sutton Courtenay  
Environmental Education Centre, adults and

teneral adults emerging from around GCN Pond.  
SU50129185 (RA)

26 Apr 09, GCN Pond, Sutton Courtenay  
Environmental Education Centre, adults and  
teneral adults emerging from around GCN Pond.  
SU5018991724 (RA)

31 May 09, GCN Pond, Sutton Courtenay  
Environmental Education Centre, adults,  
SU5018991724 (RA)

5 May 09, Tinepits Pond, Whitchurch Hill (Pond),  
SU638792 (RA:Robert Aquilina)

19 Jun 09, Warburg Reserve (Range Bottom  
East), male - presumably from nearby pond.  
SU71958792 (RA)

#### **Cordulegasteridae**

*Cordulegaster boltonii* Golden-ringed Dragonfly  
21 Jun 09, Decoy Heath, SU613638 (JH)

#### **Gomphidae**

*Gomphus vulgatissimus* Club-tailed Dragonfly  
30 May 09, Hampstead Norreys, Down Wood,  
Photograph, SU528756 (JH)  
26 Apr 09, Red Cow, Cholsey, an early record,  
SU592868 (AR)

#### **Libellulidae**

*Libellula depressa* Broad-bodied Chaser  
31 May 09, Dry Sandford Pit BBOWT Reserve,  
RD NHS field trip, SU467995 (JH)

23 Jun 09, Burghfield, Burnthouse Farm,  
SU689684 (JH)

3 May 09 to 5 Jul 09, Red Cow, Cholsey, a good  
year for this species. Frequently seen patrolling  
or laying, maximum of 3, SU592868 (AR)

31 May 09, Education Pond, Sutton Courtenay  
Environmental Education Centre, male on east  
side of pond. SU50129185 (RA)

25 Apr 09, New Centre Pond, Sutton Courtenay  
Environmental Education Centre, Nymph, in  
smallest shallowest section of pond - presumably  
from egg laid in 08, SU49979183 (RA)

31 May 09, Sutton Courtenay Environmental  
Education Centre (Moor Ditch), female operating  
from tall stems on bank of ditch SU50129192  
(RA)

*Libellula quadrimaculata* Four-spotted Chaser  
23 Jun 09, Burghfield, Burnthouse Farm,  
SU689684 (JH)

15 Jun 09, Red Cow, Cholsey, one seen,  
SU592868 (AR)

31 May 09, Education Pond, Sutton Courtenay  
Environmental Education Centre, male on east  
side of pond. SU50129185 (RA)

*Orthetrum cancellatum* Black-tailed Skimmer  
 23 Jun 09, Burghfield, Burnthouse Farm, SU689684 (JH)  
 30 Jul 09, Red Cow, Cholsey, one seen, SU592868 (AR)  
 31 May 09, GCN Pond, Sutton Courtenay Environmental Education Centre, female flying over bare areas adjacent to pond. SU50189172 (RA)

*Orthetrum coerulescens* Keeled Skimmer  
 21 Jun 09, Decoy Heath, SU613638 (JH)

*Sympetrum sanguineum* Ruddy Darter  
 31 Jul 09, GCN Pond, Sutton Courtenay Environmental Education Centre, adult, SU5018991724 (RA)

*Sympetrum striolatum* Common Darter  
 15 Jun 09 to 4 Oct 09, Red Cow, Cholsey, seen regularly, max 4, but under-recorded. Often laying, SU592868 (AR)  
 16 Aug 09, Blenheim Farm Nature Reserve (pond), single adult male and pair laying eggs, SP36471945 (RA)  
 31 Jul 09, Education Centre Pond, Sutton Courtenay Environmental Education Centre, adult, SU49979183 (RA)  
 26 Jul 09, GCN Pond, Sutton Courtenay Environmental Education Centre, adult, first seen in 2009. SU50189172 (RA)  
 31 Jul 09, GCN Pond, Sutton Courtenay Environmental Education Centre, adult, SU50189172 (RA)  
 17 Nov 09, GCN Pond, Sutton Courtenay Environmental Education Centre, male flying over pond, sunny mild day, SU50189172 (RA)  
 8 Sep 09, Millennium Green Drayton (pond), males and at least one pair egg laying, SU48059450 (RA)  
 25 Oct 09, Sutton Courtenay Environmental Education Centre, male displaying around margin of education pond, SU50129185 (RA)  
 27 Oct 09, Sutton Courtenay Environmental Education Centre, adults still flying around ponds and site in general at this late date, SU501918 (RA)

#### Platycnemididae

*Platycnemis pennipes* White-legged Damselfly  
 2 Jun 09 to 15 Jun 09, Red Cow, Cholsey, singles, probably the same individual, SU592868 (AR)

#### Orthoptera Conocephalidae

*Conocephalus discolor* Long Winged Conehead  
 10 Sep 09, GCN Pond, Sutton Courtenay Environmental Education Centre (Pond Surrounds), immature, resting on sedge, SU50139185 (RA)

#### Phaneropteridae

*Leptophyes punctatissima* Speckled Bush Cricket  
 19 Jun 09, Warburg Reserve (Range Bottom East), nymphs, several recorded, SU71958792 (RA)

#### Tettigonidae

*Metrioptera roeselii* Roesel's Bush Cricket  
 Red Cow, Cholsey. SU592868. Once again heard and seen through the year, more extended season than 08 (AR)  
 19 Jun 09, Warburg Reserve (Range Bottom East), adult, SU71878793 (RA)  
 15 Jul 09, Warren Bank Nature Reserve (Chalk grassland and scrub), adults, including unusually a winged form (female). SU65328572 (RA)

#### Tetrigidae

*Tetrix subulata* Slender Groundhopper  
 31 May 09, Upper Woodland Pond LWNR, adult, south west corner of pond. SU57209280 (RA)

*Tetrix undulata* Common Groundhopper  
 8 Jun 09, GCN Pond, Sutton Courtenay Environmental Education Centre (pond surrounds), adult, SU50189172 (RA)  
 The less common of two local species - usual species around ponds is *Tetrix subulata*.

#### Trichoptera Limnephilidae

*Limnephilus flavicornis* (a cased caddis)  
 5 May 09, Tinepits Pond, Whitchurch Hill (Pond), SU638792 (RA:Robert Aquilina)

#### Mollusca Bivalvia Veneroida

*Musculium lacustre* Lake Orb Mussel  
 5 May 09, Tinepits Pond, Whitchurch Hill (Pond), SU638792 (RA: Robert Aquilina)

**Gastropoda**  
**Helicidae**

*Cepaea nemoralis* Brown Lipped Snail  
5 Aug 09, Newlands Avenue, Didcot, adult in Garden Privet hedge next to pavement. Also seen a week or so later a few metres down road on other side of pavement. Must be small local colony in this area of Newlands Avenue. (Known to be absent further up street around No. 70). SU52308975 (RA)

**Hygromiidae**

*Hygromia cinctella* Girdled or Foliage Snail  
Summer 09, Tilehurst, SU66327506 (CMTR)  
This recent colonizer is just about the commonest snail in my garden now – typically seen sitting off the ground in vegetation or on walls & windows. Very easy to identify from the chocolate colouration with a pale/white stripe running around the outside edge. If you examine the snail more closely you will also see that the stripe marks a distinct keel, from which it gets one of its common names.

**Crustacea**  
**Anostraca**  
**Chirocephalidae**

*Chirocephalus diaphanus* Fairy Shrimp  
5 May 09, Little Harwood, Cookham Dean - Field Pond 1 (Pond), Netting survey failed to find species. Pond low and much reduced in size and depth. Seen in '08 later in year (18<sup>th</sup> May). Assuming not emerged earlier and missed, may well not appear at all this year as pond is rapidly drying out. SU86508433 (RA: Rod d'Ayala and Robert Aquilina)

**Isopoda**  
**Asellidae**

*Asellus aquaticus* (a water slater)  
17 Jun 09, 12 Harpes Road, Sunnymead, Oxford (Garden Pond) SP509097 (RA)  
17 Jun 09, 17 Capel Close, Oxford (Garden Pond), SP50520956 (RA)  
17 Jun 09, 28 Islip Road, Oxford (Garden Pond), SP51000980 (RA)  
17 Jun 09, 89 Islip Road, Oxford (Garden Pond), SP51040984 (RA)

**CONTRIBUTORS**

Thanks are due to the following members and friends for their submissions and identifications:  
(AR) Tony Rayner, (CMTR) Chris Raper, (JH) Jan Haseler, (MWS) Malcolm Storey, (RA) Rod d'Ayala (includes a records from Robert Aquilina, Curt Lamberth, Bob Eeles & Martin Sell)

**Decapoda**  
**Astacidae**

*Pacifastacus leniusculus* Signal Crayfish  
27 Aug 09, Bearwater, Hungerford, Berkshire (River Dun), Remains (a single claw) on river bank - perhaps individual eaten by predator. Also reported as being present on site by one of local residents. SU33836883 (RA)

**Annelida**  
**Oligochaeta**  
**Lumbricidae**

*Aporrectodea longa* Long-worm or Blackhead

23 Apr 09, Bucklebury, dug up in garden, Waven, Male pore: 15; clitellum: 31-36; tubercula pubertatis 32-35, SU552708 (MWS)

*Lumbricus rubellus* Red Worm or Redhead  
23 Apr 09, Bucklebury, dug up in garden, Waven, Tanylobous. Male pore absent; clitellum: 27-32. tubercula pubertatis: (27) 28-31, SU552708 (MWS)

*Lumbricus terrestris* Lob, Dew Worm, Squirrel Tail or Twachel  
23 Apr 09, Bucklebury, dug up in garden, Waven, Tanylobous. Male pore 15; clitellum: 32-37; tubercula pubertatis: 33-36, SU552708 (MWS)

**Cestoda**  
**Pseudophyllidea**  
**Schistocephalidae**

*Schistocephalus* sp. (a tapeworm)  
5 May 09, Tinepits Pond, Whitchurch Hill (Pond), Tapeworm which uses amphibians (in this case Smooth Newt) as host. Final host is fish-eating birds. SU638792 (RA: Robert Aquilina)

## RECORDER'S REPORT FOR VERTEBRATES 2009

Tony Rayner

My grateful thanks to all those who have contributed to this report. Once again special thanks are due to Rod D'Ayala and John Lepeniere for their unrivalled input. Note also John Sumpter's impressive amphibian counts and conservation work at Hambleden. Where the location is not stated, the records relate to Red Cow, Cholsey SU592868

### FISH

*Pungitius pungitius* Nine-spined Stickleback  
24 Aug 09 Adults at Rush Manor, Wallingford  
SU605917 (Rd'A)

*Salmo trutta* Brown Trout  
11 Mar 09, 2 in Hungerford pond SU337688  
(Rd'A)  
27 Aug 09 Seen in River Dun SU338668 (Rd'A)

*Oncorhynchus mykiss* Rainbow Trout  
27 Aug 09 Some large fish at Bearwater,  
Hungerford SU337688 (Rd'A)

### AMPHIBIANS

*Bufo bufo* Common Toad  
Feb/Mar 09, 6,628 adults collected and carried  
across road at Oaken Wood, Hambleden. On  
some days over 500 collected. SU768854 (JS)  
22 Feb 09 A few found with frogs under a grass  
pile at Hosehill LNR SU649697 (JL)  
11 Mar 09 One adult at Downsway School  
Tilehurst SU662753 (JL)  
20 Mar 09 One at Loddon Reserve SU784755  
(JL)  
18 Apr 09, 16 adults at Copse Pond Didcot  
SU510897 (AB)  
5 May 09, 14 adults in Tinepits Pond Whitchurch  
Hill SU638792 (RA)  
5 May 09 Large number of tadpoles at Cookham  
Dean SU865843 (RA)  
3 Jun 09 One toadlet at Cholsey (TR)  
9 Jun 09 Numerous tadpoles at Lower Pond  
Greenmore Woodcote SU645807 (Rd'A)  
1 Jul 09 One adult female on Cholsey drive (TR)

*Triturus vulgaris* Smooth Newt  
Feb/Mar, 20 adults collected and carried across  
road at Oaken Wood, Hambleden SU768854  
(JS)  
7 Mar 09 One in Tilehurst garden SU666742) JH  
1 Apr 09, 27 in Tilehurst garden SU666742) JH  
10 Jun 09 One adult at Brookfield School  
SU663754 (JL)  
10 & 24 Jun 09, 4 adults at Thatcham Discovery  
Centre SU50760 (JL)  
5 Aug 09 One adult at Moatlands GP Burghfield  
SU671705 (JL)

*Triturus cristatus cristatus* Great Crested Newt  
6 Jul 09 One at Sutton Courtenay Env Ed Centre  
SU500918 (LK)  
6 Jul 09 Present in Crazies Hill pond SU789801  
(ST)  
23 Aug 09, 2 adults at Sutton Courtenay EEC  
SU501918 (Rd'A)

*Triturus helveticus* Palmate Newt  
24 Feb 09 One in Upper Pond Greenmoor  
Woodcote SU645807 (Rd'A)  
5 May 09 One in Tinepits Pond Whitchurch Hill  
SU638792 (RA)  
19 May 09 One at Priest Hill Nettlebed Common  
SU700873 (Rd'A)  
9 Jun 09 One in Lower Pond, Greenmoor  
Woodcote SU645807 (Rd'A)

*Rana temporaria* Common Frog  
Feb/Mar, 738 Adults collected and carried across  
road at Oaken Wood, Hambledon SU768854  
(JS)  
23 Feb 09, 5 in Tilehurst garden SU666742 (JH)  
Mar 09 Lots of spawn at Stanford Dingley  
SU578706 (JL)  
1 Mar 09, 26 adults in Didcot garden SU521895  
(Rd'A)  
4 Mar 09, 6 adults and 14 spawn clumps in  
Didcot garden SU521895 (Rd'A)  
7 Mar 09 Spawn at Inkpen Common SU383641  
(JH)  
9 Mar 09 Over 50, plus first spawn in Tilehurst  
garden SU666742 (JH)  
9 Mar 09, 26 clumps of spawn in Didcot garden  
SU521895 (Rd'A)  
11 Mar 09 A square metre of spawn at Downsway  
School Tilehurst SU662753 (JL)  
13 Mar 09 Over 20, plus spawn in Spencers  
Wood SU708663 (JH)  
13 Mar 09 Many adults plus spawn at Rushall  
Bradfield SU584724 (JL)  
15 Mar 09, 20 adults & spawn at Manor School  
Didcot SU520901 (Rd'A)  
20 Mar 09, 60 spawning adults in Didcot garden  
SU518892 (JB)  
10 May 09 One at Moor Copse SU637735 (JH)  
9 Jun 09 Numerous tadpoles in Lower Pond  
Greenmoor Woodcote SU645807 (Rd'A)  
18 Jul 09 One at Withymead Reserve SU602827  
(JH)  
1 Jul 09 One froglet on Didcot golf course.  
SU543906 (TR)  
13 Aug 09 One froglet in Cholsey garden (TR)  
1 Nov 09 One flushed out from Cholsey garden  
pond margin (TR)



## REPTILES

### *Lacerta vivipara* Common Lizard

3 Mar 09, 5 at Thatcham Discovery Centre SU507670 (JL)  
 21 Jun 09, 3 at Decoy Heath SU6163 (JL)  
 28 Jun 09 One at Broadmoor Bottom SU856628 (JL)  
 29 Jun 09 Three adults at Decoy Heath SU611634 (MB)  
 3 Jul 09 One at Paices Wood SU583637 (JL)  
 1 Aug 09 One at Nettlebed Common SU703868 (JH/JW/JeW)  
 10 Aug 09, 2 young at Decoy Heath SU611634 (MB)  
 24 Aug 09 An immature at Bowdown SU512653 (JL)  
 15 Mar 09 to 27 Oct 09, 404 Cholsey sightings, 10% down on 2008. Max 12 On 9/9/09 (TR/RR)

### *Anguis fragilis* Slow-worm

21 Mar 09, 2 at Decoy Heath SU613638 (JH)  
 10 Apr 09 One in Tilehurst compost heap SU666742 (JH)  
 21 Apr 09, 5 at Snelsmore Common SU462712 (JL)  
 21 Apr 09 One in a Winnersh garden SU774712 (JL)  
 23 Apr 09, 13 at Decoy Heath SU6163 (JL)  
 8 May 09, 16 at Sutton Courtenay EEC (AB)  
 16 May 09 & 18 Oct 09 One dug up in Tilehurst vegetable patch SU666742 (JH)  
 5 Jun 09, 4 at Sutton Courtenay EEC (Rd'A)  
 10 Jun 09, 17 at Decoy Heath SU611634 (MB)  
 19 Jun 09, 34 at Warburg SU7187 (Rd'A)  
 21 Jun 09, 14 at Decoy Heath SU6163 (JL)  
 15 Jul 09, 4 at Warren Bank SU653858 (Rd'A)  
 18 Jul 09 One at Withymead reserve SU602827 (JH)  
 22 Jul 09, 2 at Mortimer SU654647 (JL)  
 28 Jul 09 One on Kingswood Common SU6982 (JeW)  
 7 Aug 09, 3 at Sutton Courtenay EEC SU500918 (Rd'A)  
 10 Aug 09, 35 at Decoy Heath SU611634 (MB)  
 18 Aug 09, 14 at Decoy Heath SU611634 (MB)  
 6/9/09 One in Tilehurst allotment compost SU672748 (JL)  
 10/9/09, 10 at Wooley Firs SU852803 (JL)  
 10/9/09 One at Padworth Common SU618696 (JL)  
 7 Mar 09 to 25 Oct 09 An amazing 2,226 Cholsey records and a maximum count of 88 on 15 Apr. Numbers tailed off towards the end of the season, so colony may have peaked! (TR/RR)

### *Natrix natrix* Grass Snake

24 Apr 09, 3 at Hosehill LNR SU653697 (JL)  
 14 May 09 One at Goddard's Green SU667661 (JH)  
 18 May 09, 2 juveniles at Decoy Heath SU610634 (JL)  
 10 Jun 09, 6 juveniles at Decoy Heath SU611634 (MB)  
 13 Jun 09, 3 at Paices Wood SU583637 (JL)  
 17 Jun 09 One adult at Snelsmore Common SU461712 (JL)  
 8 Jul 09, 2 adults at Hosehill LNR SU653697 (JL)  
 10 Aug 09, 8 Juveniles at Decoy Heath SU611634 (MB)  
 18 Aug 09, 6 juveniles at Decoy Heath SU611634 (MB)  
 19 Jun 09 One adult at Warburg SU720880 (Rd'A)  
 18 Jul 09, 2 at Withymead Reserve SU602827 (JH)  
 27 Aug 09, 4 at Paices Wood SU583636 (JL)  
 17 Mar 09 to 10 Oct 09, 243 Cholsey sightings, best year since 2001. Record high count of 14 on 9 May. High numbers reflect breeding success in year. (TR/RR)

### *Vipera berus* Adder

2 Mar 09, 2 at Decoy Heath SU611634 (JL)  
 21 Mar 09 One at Decoy Heath SU613638 (JH)  
 4 Jun 09, 4 at Decoy Heath SU611634 (JL)  
 12 Jun 09, 3 at Warburg SU7188 (MB)  
 21 Jun 09, 5 at Decoy Heath with Grass Snake SU611634 (JL)  
 10 Aug 09, 5 at Decoy Heath SU611634 (MB)  
 25 Aug 09, 3 at Decoy Heath SU611634 (MB)  
 1 Sep 09, 2 at Decoy Heath SU611634 (MB)

## BATS

### *Pipistrellus pipistrellus* Common Pipistrelle

31 Mar 09 & 15 Apr 09 One at Cholsey (TR)  
 3 & 20 Apr 09 One over Didcot garden SU521895 (Rd'A)  
 24 Apr 09 One seen entering bat box at Cholsey at 5.30 AM (TR)  
 14 May 09, 2 flying at Cholsey in light drizzle (TR)  
 29 May 09 to 17 Jun 09 At least one flying nightly at Cholsey (TR)  
 9 Jul 09 One at Henley SU745812 (Rd'A)  
 7 & 25 Jul 09 Several flying at dusk at Cholsey (TR)  
 12 Aug 09 Seen at Hungerford (RF)\*

### *Pipistrellus pygmaeus* Soprano Pipistrelle

12 Aug 09 Seen at Hungerford (RF)\*

### *Myotis daubentonii* Daubenton's

12 Aug 09 Seen at Hungerford (RF)\*

## INSECTIVORES

### *Erinaceus europaeus* Hedgehog

25 Mar 09 Large individual in Cholsey garden at 11PM.(TR/RR)

17 Apr 09, 4 adults from Tiggywinkles released in Didcot garden SU521895 (Rd'A)

4 Jun 09 One in Tilehurst garden SU666742 (JH)

1 Aug 09, 4 adults from Tiggywinkles released in Didcot garden SU521895 (Rd'A)

25 Dec 09 Road Kill at Ipsden SU625851 (Rd'A)

### *Sorex araneus* Common Shrew

20 Feb 09 One at Bowdown SU507654 (Rd'A)

5 Mar 09 to 23 Oct 09 Seen on 37 occasions throughout this study period, usually singles. This is marginally up on 2008 for this Cholsey site. (TR/RR)

### *Sorex minutus* Pigmy Shrew

10 Jun 09 to 20 Sep 09 Seen at Cholsey on just four occasions, the same frequency as in 2008. (TR/RR)

### *Neomys fodiens* Water Shrew

19 Aug 09 One swimming in Lower Pond, Greenmoor, Woodcote SU645807 (Rd'A)

### *Talpa europaea* Mole

No specific records received, but seemingly another good year for this species.

## CARNIVORES

### *Meles meles* Badger

24 Feb 09 One in chalkpit at The Warren, Caversham SU692753 (Rd'A)

23 Jun 09 One crossing road beside Cholsey Hill SU571882 (TR)

2 Aug 09 Holes dug in Tilehurst lawn, one used as latrine SU666742 (JH)

27/9/09 One crossing road at Path Hill, Whitchurch at 8PM SU6578 (JW/JeW)

27 Oct 09 One between Didcot & Sutton Courtenay SU505913 (Rd'A)

### *Mustela nivalis* Weasel

25 Jun 09 One at Ipsden SU622861 (GC)

2 Oct 09 One at Little Wittenham SU566924 (GC)

### *Mustela erminea* Stoat

12 May 09 One at Benson SU628921 (GC)

23 Aug 09 One at Ipsden SU622862 (GC)

3 Sep 09 One at Goosey SU363924 (GC)

### *Furo putorius* Ferret

14 May 09 One at Lower Basildon SU613788 (GC)

### *Mustela putorius* Polecat

3 Apr 09 Road Kill by A34 near Milton SU480920 (Rd'A)

### *Mustela vison* American Mink

Seen by local resident in a pond at Bearwater SU337688 (local resident)

### *Vulpes vulpes* Fox

4 Jan 09 One in Reading SU709713 (GC)

6 Jan 09 One crossing main road near former Fairmile Hospital, Cholsey SU594857 (TR)

20 Jan 09, 2 at Shinfield Park, Reading SU728695 (JH)

3 Feb 09 Tracks in snow on Cholsey drive (TR/RR)

17 Feb 09 One barking at Cholsey, early morning. (TR/RR)

6 Mar 09 One at Pound Copse, Arborfield SU751672 (JH)

28 Apr 09 One at Enbourne SU435632 (GC)

7 May 09 Dog Fox on Cholsey drive (RR)

12 Jun 09 One at Burghfield SU679700 (GC)

30 Jul 09 One at Burghfield SU689699 (GC)

12 Aug 09 One at Burghfield SU689699 (GC)

14 Sep 09 One at Shepperlands Copse, Finchampstead SU779644 (JH)

15 Nov 09 Dog Fox disturbed when lying out in the sunshine at Cholsey (TR)

23 Nov 09 One on Peppard Road, north of Emmer Green SU7277 (JW/JeW)

22 Dec 09 One crossing a snow covered Cholsey field mid morning SU596877 (TR)

mid to end Dec, 2 or 3 in Earley garden, courting followed by mating SU7472 (AA)

### *Rattus norvegicus* Brown Rat

27 Mar 09 One at Moor Copse SU634739 (JH)

18 Apr 09 One in pond at Fulscot Manor SU546890 (Rd'A)

7 May 09 One at Aston Upthorpe SU550884 (JH)

## DEER

### *Muntiacus reevesi* Muntjac

20 Jan 09 One at Ashampstead SU575767 (GC)

23 Jan 09 Road kill in Wallingford Road, Cholsey SU595873 (TR)

25 Jan 09 One at Silchester SU623611 (GC)

27 Feb 09 Juvenile at Crookham Common SU522643 (Rd'A)

1 & 3 Mar 09 One in neighbour's garden at Cholsey (TR)

17 Mar 09 Baby at Burghclere SU460616 (GC)

19 Mar 09 One at Bucklebury SU567701 (GC)

22 Apr 09 One in Cholsey garden (TR)

23 Apr 09 One at Highmoor SU702855 (GC)

10 May 09 One at Moor Copse SU640739 (JH) & One at Streatley SU590813 (GC)

14 May 09 One at Ashampstead SU678749 (GC)

21 May 09 One at Emmer Green SU712767 (GC)

31 May 09 One at Beenham SU593691 (GC)

1 Jun 09 One in Cholsey garden at 5am (TR/RR)

3 Jun 09 & 12 Jun 09 One on Cholsey drive (TR)

4 Jun 09 One at Emmer Green SU711767 (GC)

8 Jun 09 One at Silchester SU624612 (GC)

10 Jun 09 One at Burghfield SU674707 (GC)

2 Jul 09 One at Ashampstead SU596741 (GC)  
 12 Jul 09 One in Cholsey meadow (TR/RR)  
 18 Jul 09 One at Sonning Common SU695802 (GC)  
 9 Aug 09 One at Whitchurch SU635796 (GC)  
 20 Aug 09 One in Cholsey garden (TR)  
 14 Sep 09 One at Shepperlands Copse Finchampstead SU779644 (JH)  
 11 Oct 09 One at Moor Copse SU636741 (JH)  
 25 Dec 09 Road Kill at Exlade Street SU660812 (Rd'A)

*Capreolus capreolus* Roe Deer

2 Jan 09, 4 at Cholsey SU597878 (TR)  
 15 Jan 09, 4 at The Moors, Finchampstead SU795663 (JH)  
 17 Feb 09 One at Spencers Wood SU708663 (JH)  
 20 Feb 09, 2 at Bowdown Bomb Dump SU506653 (Rd'A)  
 25 Mar 09, 2 at Long Copse, Arborfield SU758658 (JH)  
 27 Apr 09, 2 at Woodcote SU639830 (GC)  
 28 Apr 09 One at Carters Hill SU765689 (JH)  
 7 May 09, 3 at Juniper Valley, Aston Upthorpe SU551844 (TR)  
 21 May 09 One at Hopkiln Farm, Burghfield SU694687 (JH)  
 15 Jun 09 One at Wickham SU381724 (GC)  
 16 Jul 09 One at Murrellhill Farm, Binfield SU839696 (JH)  
 31 Aug 09, 2 at Christmas Common SU737963 (GC)  
 14 Sep 09, 3 at Shepperlands Copse, Finchampstead SU779644 (JH)  
 23 Oct 09 One at Mill End SU786856 (GC)  
 28 Oct 09 One at Skirmett SU787890 (GC)  
 24 Nov 09, 7 at Churn SU514845 (TR/RR)  
 2 Dec 09 One at Mortimer SU662658 (GC)  
 20 Dec 09, 3 at Cholsey SU597878 (TR)  
 22 Dec 09 Fresh tracks in snow at Cholsey (TR/RR)  
 26 Dec 09 One at Chieveley SU474730 (GC)  
 28 Dec 09 Doe and fawn in frosted Cholsey meadow (TR/RR)

*Dama dama* Fallow Deer

23 Oct 09, 6 at Turville Heath SU741911 (GC)

**WALLABIES**

*Macropus rufogriseus* Red-necked Wallaby

12 Oct 09 Road kill by M40 sliproad near Lewknor SU722977 (Rd'A)

**CONTRIBUTORS**

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

(AA) Alice Ayers, (RA) Robert Aquilina, (AB) Andrew Burdock, (CB) Chris Baldwin, (JB) Jerry Bauer, (GC) Gordon Crutchfield, (Rd'A) Rod D'Ayala, (RF) Roger Frankum, (\*bat identification by Dave Endacott), (JH) Jan Haseler, (LK) Linda Knight, (JL) John Lepiniere, (RR) Ro Rayner, (TR) Tony Rayner, (JS) John Sumpter, (ST) Sarah Tomeranz, (JW) Janet Welsh & (JeW) Jerry Welsh.

**RABBITS & HARES**

*Lepus europaeus* Brown Hare

10 Jan 09 One at Cholsey (TR)  
 12 Mar 09 One at Upton SU517860 (GC)  
 16 Mar 09 One at Stanford End SU705632 (JH)  
 10 & 15 Apr 09 One at Cholsey (TR)  
 16 Apr 09, 2 at Stanford Dingley SU5771 (RF)  
 28 Apr 09, 3 at Mouldsford SU578835 (GC)  
 31 Jul 09 One at Lambourn SU359815 (GC)  
 4 Sep 09 One at Great Chalk Wood, Goring (JW/JeW)  
 23 Sep 09, 3 at Cholsey (TR)  
 29 Nov 09, 4 at Aldworth SU558797 (TR)  
 25 Dec 09 Road kill at Brightwell-cum-Sotwell SU571910 (Rd'A)

*Oryctolagus cuniculus* Rabbit

2 Mar 09, 2 at Beech Hill SU701640 (JH)  
 21 May 09, 2 at Hopkiln Farm, Burghfield SU694687 (JH)

**RODENTS**

*Sciurus carolinensis* Grey Squirrel

No specific records received, but seems to be both widespread and increasing.

*Apodemus sylvaticus* Wood Mouse

7 Jun 09 to 15 Aug 09 Seen on 10 occasions at Cholsey (TR/RR)

*Microtus agrestis* Field Vole

5 Sep 09 One at Cottington's Hill, Kingsclere SU515565 (JH)  
 7 Mar 09 to 25 Oct 09 Seen on 62 occasions at Cholsey – about 20% down on 2008 (TR/RR)

*Clethrionomys glareolus* Bank Vole

18 Mar 09 to 25 Oct 09 Seen on 75 occasions at Cholsey – only half the 2008 sightings (TR/RR)

*Arvicola terrestris* Water Vole

19 Apr 09 One at Hungerford Marsh (RF)  
 26 Apr 09 Latrines & larders at Sutton Courtenay EEC SU5091 (Rd'A)  
 29 May 09 Body floating in pond at Sutton Courtenay EEC SU5091 (CB)  
 26 Jul 09 Fresh burrows, droppings & footprints at Sutton Courtenay EEC (Rd/A)  
 27 Sep 09 Droppings, latrines & eaten pondweed at Sutton Courtenay (Rd/A)

## THE WEATHER IN READING DURING 2009

Roger Brugge

### National Centre for Earth Observation, Department of Meteorology, University of Reading

2009 was slightly warmer than average overall; there were three major weather events during the year – the snowfalls in February and December and the wet November. Sunshine and rainfall totals for the year were very close to the long-term average. There was more snow and fewer thunderstorms than in recent years.

**January** The month began with 12 days of cold weather; the minimum temperature on the 7<sup>th</sup>, -7.2°C, was the lowest in January since 2002. The highest temperature of the month (10.3°C on the 22<sup>nd</sup>) was the lowest for January since 1979 while on the 10<sup>th</sup> the temperature only just rose to 0.0°C. The initial cold weather was the result of anticyclonic conditions; these gave way and on the 23<sup>rd</sup> the barometer fell to about 964mb – the lowest in January locally since 1949. Overall the month was the coldest January since 1997, with the nights being the coldest since 1987. Winds were frequently from an easterly quarter.

**February** This month brought the first of two significant spells of snow to Reading during 2009. Snow fell on most days during the first week; in some places around the town the snow depth on the 2<sup>nd</sup> was the greatest in February since at least 1991. The temperature then rose a little and this was followed on the 9<sup>th</sup> by 26.8mm of rain – the heaviest fall for any day in February since 1933 (in which year there was a major two-day snowstorm). Some local flooding resulted from the rain and snowmelt. For the month as a whole the number of air frosts for February was the most since 1996. The number of days with snow falling was the highest since 2005 and the number of days with snow lying was the highest since 1996. Apart from the heavy rainfall on the 9<sup>th</sup> there was little rainfall once the early snow had melted.

**March** March began with some unsettled weather and a rather wet day on the 3<sup>rd</sup>. Thereafter it turned much more settled with high pressure, although low pressure led to a little rain during the 23<sup>rd</sup> to 28<sup>th</sup>. The end of the high pressure coincided with an exceptional 8-day spell of warm sunshine from the 15<sup>th</sup> to the 22<sup>nd</sup>. It was the driest month since 2003 and over half the rainfall total fell on the 3<sup>rd</sup>. The total sunshine amount was the fourth highest since 1957 while the number of sunless days the lowest since 1995. There were only 6 air frosts, but 19 ground frosts (more than in February).

**April** The 18<sup>th</sup> to 26<sup>th</sup> was a notably sunny period with about 10 hours of sunshine per day on average. The month was a warm one overall, especially during the day. Winds were generally on the light side – the mean wind speed at 2 metres height was the lowest in April since before 1968. The number of days with hail and thunder was the highest in April since 2005. Although a mild month, April 2007 was actually warmer by 1.6°C. Other milder Aprils were in 1945, 1943 and 1893.

**May** May was another warm month, and concluded what had become a mild, dry and sunny spring. 14.4 hours of sunshine on each of the last two days of the month made these the sunniest days of the year – there were another three similarly very sunny days during May and the month was the only one to record more than 200 hours of sunshine. The mean air pressure at 0900GMT was the highest in May since 2001 yet, despite the warmth of the season, mean soil temperatures at 30cm, 50cm and 100cm were the lowest since 2003. The mean relative humidity at 0900GMT was the lowest since 1996 – another indication of the dryness of the month. Again, over half the rain fell on one day – the 14<sup>th</sup>.

**June** This month was dry, warm and sunny with over half the rain falling on the 6<sup>th</sup>. Both the 5<sup>th</sup> and 6<sup>th</sup> were rather cold days for the time of year. The minimum temperature on the 8<sup>th</sup> was the lowest in June for 4 years. The highest maximum temperature for the month on the 29<sup>th</sup> was highest since 2005 and the highest for any day of the year since July 2006. Around the area noctilucent cloud was to be seen in the evening on the 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup> and 20<sup>th</sup>, the display on the 17<sup>th</sup> being especially bright. The 11<sup>th</sup> to the 30<sup>th</sup> was a very dry period with a slight ground frost on the 12<sup>th</sup>.



**July** 30.6°C was the highest temperature for any day of the year since July 2006; thereafter daytime temperatures declined for about a week, and the soil gradually cooled – by nearly 3°C at a depth of 30cm. It was a wet month – with not many very wet days, just some heavy showers and a high frequency of days with at least some rain. It was the dullest July since 2000 with barely 10 hours of sunshine on the sunniest day – the lowest such value in July for over 30 years.

**August** This was the warmest and driest August since 2004 with generally dry conditions after the first six days. The warmth was, however, mainly due to rather cloudy nights rather than to sunny days. It was the second successive month to be dominated by southerly and south-westerly winds – warmer weather at this time of the year usually requires rather more of a south-easterly flow.

**September** After the 2<sup>nd</sup>, which produced about three-quarters of the month's rainfall, it was a mainly dry month. There was a little rain on the 15<sup>th</sup> – but Reading missed the deluges that occurred only a short distance to the south and southwest. Overnight 7<sup>th</sup>/8<sup>th</sup> it was unusually warm – the temperature did not fall below 17.0°C – one of the warmest September nights of the past 50 years. Overall the temperature varied little during the month – rather than showing the usual fall as we headed into autumn. The month was very anticyclonic after the 5<sup>th</sup> – and the most anticyclonic overall in September since 1986.

**October** October was slightly drier than normal and a little on the dull side; however, it was a warmer-than-average month. A rise in temperatures during the final ten days of the month was in stark contrast to the snowy conditions at the same time in 2008!

**November** This was a very wet and cyclonic month. The air pressure was frequently below 1000mb and the average air pressure was the lowest overall for November since 2000. The rainfall total amounted to nearly two and a half times the value normally expected with 27 days having a fall of at least 0.2mm. There was no air frost – the lowest air temperature was higher than that recorded in October and was the highest such value in November since 1994. There was no sign of winter this month.

**December** Temperatures during the first 12 days of the month were close to the normal for early December – thereafter they fell until the 21<sup>st</sup>, before picking up a little towards Christmas. The undoubted features of the month were the snowfalls of the 17<sup>th</sup>/18<sup>th</sup> and 21<sup>st</sup>. The former led to a level lying snow depth of 8cm – this was increased to 11cm by the second fall which caused local traffic chaos in the afternoon and evening. Overall it was the coldest December since 1995 (1996 was only marginally warmer) while sunshine and precipitation totals were above average. There was a severe ground frost on the 23<sup>rd</sup> -13.2°C was the lowest grass minimum temperature of the year. Not until after Christmas did the lying snow finally melt – although no snow fell after the 23<sup>rd</sup>. The number of days with snow falling was the greatest in December since 1981.

		J	F	M	A	M	J	J	A	S	O	N	D	2009
Mean maximum temperature	°C	6.5	7.6	12.4	15.3	17.9	21.4	21.5	22.1	19.6	15.5	12.1	6.5	14.9
Mean maximum anomaly	°C	-0.8	-0.1	2.1	2.6	1.4	2.1	-0.5	0.3	1.1	1	1.8	-1.6	0.8
Mean minimum temperature	°C	-0.4	1.8	2.8	5.8	8.2	10.6	12.8	12.9	10.6	8.4	6.6	0.2	6.7
Mean minimum anomaly	°C	-2	0.3	-0.3	1.4	0.9	0.5	0.4	0.8	0.6	1.3	2.6	-2.4	0.3
Mean temperature	°C	3.1	4.7	7.6	10.6	13.1	16	17.2	17.5	15.1	12	9.4	3.4	10.8
Mean temperature anomaly	°C	-1.4	0.1	0.9	2	1.2	1.3	0	0.6	0.9	1.2	2.2	-2	0.6
Highest temperature	°C	10.3	14	15.7	20.4	24.9	30.3	30.4	27.5	25.8	19	16.5	12.9	30.4
Date		22	27	16	15	31	29	1	19	8	6	1	5	
Lowest maximum temperature	°C	0	0.2	7.9	10	13.7	13	18.4	18	16.9	11.9	6.1	0.5	0
Date		10	2	5	27	17	6	17	30	15	17	30	22	
Highest minimum temperature	°C	6.9	7.9	7.2	10.1	11.7	14.8	18.3	17.1	17	12	12.5	7.6	18.3
Date		13	25	31	16	25	30	1	5	8	24	20	6	
Lowest temperature	°C	-7.2	-3.9	-1.6	0.9	3	5.2	9	8.7	6	1	1.6	-7.1	-7.2
Date		7	3	6	28	10	8	10	29	27	18	9	23	
Lowest grass minimum temperature	°C	-13	-7.8	-8.2	-3.6	-3.5	-0.7	3	1.5	-1.5	-6.4	-4.2	-13	-13
Date		7	7	21	1	10	12	10	25	25	18	9	23	

# SUMMARY WEATHER RECORDS: 2009 – UNIVERSITY OF READING (WHITEKNIGHTS)

		J	F	M	A	M	J	J	A	S	O	N	D	2009
Total precipitation	mm	60.7	52.3	26.4	28.1	26.7	21.6	70.2	30.2	15.1	43.8	145	100	620
%age of the average precipitation	%	102	129	57	59	57	43	170	58	26	68	247	155	99
Number days with 0.2mm or more	days	14	11	8	14	12	10	20	10	5	11	27	20	162
Number of days with 1.0mm or more	days	12	9	6	9	6	6	14	7	2	9	24	14	118
Greatest fall in 24 hours	mm	15.2	26.8	15	4.7	13.7	11.2	9.1	10.6	11.3	14.6	21.5	19.8	26.8
Date		17	9	3	27	14	6	12	6	2	7	29	21	
Number of days with air frost	days	18	13	6	0	0	0	0	0	0	0	0	14	51
Number of days with ground frost	days	24	16	19	14	4	1	0	0	4	7	6	22	117
Number of days with snow/sleet falling	days	4	7	1	0	0	0	0	0	0	0	0	8	20
Number of days with 50% ground snow cover at 0900GMT	days	2	3	x	0	0	0	0	0	0	0	0	7	x
Number of days with thunder	days	0	0	x	2	0	0	0	0	0	0	0	1	x
Number of days with ice pellets/small hail	days	0	0	x	1	0	0	0	0	0	0	0	0	x
Number of days with hail over 5mm diameter	days	0	0	x	0	0	0	0	0	0	0	0	0	x
Number of days with fog at 0900GMT	days	5	2	0	1	0	0	0	0	0	0	1	1	10

		J	F	M	A	M	J	J	A	S	O	N	D	2009
Total sunshine	h	52.7	67.6	174	196	215	199	166	175	150	86	62.2	49	1593
Percentage of average sunshine	%	97	96	163	129	112	106	82	90	108	80	92	103	105
Greatest daily sunshine total	h	6.4	7.6	9.9	12.9	14.4	14.2	10.5	11.6	10.9	9.8	5.7	4.7	14.4
Date		6	27	22	29	30,31	1	1	19	12	8	7	6	
Number of sunless days	days	9	11	0	3	1	2	1	2	1	4	0	10	44
Mean 5cm soil temperature	°C	1.8	3.7	6.1	11.5	15.2	19.1	19.1	18.5	15	10.9	7.8	2.9	11
Mean 10cm soil temperature	°C	2.1	3.2	5.6	10.4	13.8	17.4	17.7	17.4	14.5	10.9	7.9	3	10.3
Mean 20cm soil temperature	°C	3	3.9	6.5	9.5	13.4	16.9	17.5	17.4	15.2	11.9	9	4.3	10.7
Mean 30cm soil temperature	°C	3.9	4.7	7.4	10.5	12.8	15.9	17.5	17.5	15.4	12.8	10.2	5.9	11.2
Mean 50cm soil temperature	°C	4.7	5.2	7.5	10.3	12.6	15.2	17	17.3	15.5	13.4	10.9	6.8	11.4
Mean 100cm soil temperature	°C	5.9	5.6	7.4	9.5	11.5	13.7	15.6	16.2	15.4	13.8	11.8	8.4	11.2

		J	F	M	A	M	J	J	A	S	O	N	D	2009
Number of days with gale	days	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of days with N'ly winds	days	0	1	2	1	2	1	0	1	4	1	1	2	16
Number of days with NE'ly winds	days	4	3	3	5	5	5	1	0	6	2	2	3	39
Number of days with E'ly winds	days	3	2	2	3	4	6	2	0	1	4	1	1	29
Number of days with SE'ly winds	days	5	1	1	3	0	2	1	0	0	3	1	2	19
Number of days with S'ly winds	days	6	3	3	8	7	4	14	11	5	4	11	6	82
Number of days with SW'ly winds	days	4	4	10	1	6	4	6	10	6	5	9	6	71
Number of days with W'ly winds	days	6	7	6	5	5	4	7	5	6	5	4	6	66
Number of days with NW'ly winds	days	1	4	4	3	2	4	0	3	1	4	1	2	29
Number of days with calm winds at 0900GMT	days	2	3	0	1	0	0	0	1	1	3	0	3	14
Mean wind speed	mph	3.4	3.6	3	2.4	3.1	3	3.9	2.8	7.8	5.6	7.7	5.3	4.3
Mean cloud cover at 0900GMT	%	79	81	52	88	64	62	74	66	62	73	69	74	70