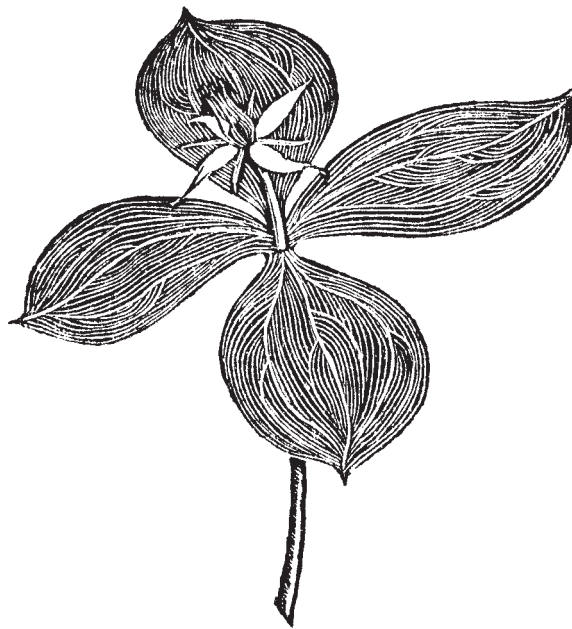


The Reading Naturalist

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THE READING NATURALIST

No 56 for the year 2003

The Journal of the
Reading and District Natural History Society

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EDITORIAL

What a wonderful summer we've had! The 10th August was the hottest day recorded (32.3°C – see Ken Spiers' *The Weather at Reading during 2003*) and the hot sunny days just seemed to go on and on. For once the tabloid cliché, "Phew what a scorcher!" was entirely appropriate.

For warmth loving wildlife it was an excellent season too – butterflies and dragonflies abounded, and many people saw migrant Hummingbird Hawkmoths (and even *Convolvulus* Hawkmoths, though apparently not in our area) which flew across from the continent in unprecedented numbers. But spare a thought for the botanists: for plants it was a short season, most having entered the "brown state" by July. Mycologists fared even worse and many species, even of common fungi, failed to put in a showing.

We welcome two new recorders: Chris Raper for *Entomology* and *Other Invertebrates* and John Notton for *Lepidoptera*. As always, they and the society's other recorders welcome your records. Please don't feel you're imposing – the more records you send them, the easier it is to write their annual reports!

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OBITUARIES

Jocelin Whitfield

Jocelin Whitfield (née Rushton) was born in 1937, daughter of the Professor of Physiology at Cambridge. The family was both highly academic and musical (one sister was a professional musician, one brother a professor of music and the other worked for the Ordnance Survey). She left the Perse School for Girls after O-levels and worked in computing in its very early days, there meeting George, a research student, whom she married at an early age. Initially she took up pottery, then moved into sculpture, and then into painting. She took an OU degree in Sociology and finally became an internationally known basket-maker and weaver of willow sculptures. She was president of the Society from 1991 to 93 and gave two presidential addresses: one on China and one on Sunshine. She was on the committee for many years, leading occasional excursions and contributing to the society in many ways.

Catherine Olver

Catherine died of a brain tumour on 4th October 2003. She had a distinguished career as Life Sciences Librarian of the University of Reading, having started out with a first class degree in English Literature from University College, Toronto. Her interest in plants led her to take the MSc in Plant Taxonomy in the School of Plant Sciences at Reading, and to found the Reading Tree Club. This enthusiasm for trees led to her organising exciting programmes of visits to *arboreta* and gardens and trips abroad as well as a programme of winter walks for the Tree Club. She also gave a talk and led a walk for the Society.

TERM REPORT & WISH LIST

It has been heartening to see plenty of member participation at all our events this past year. Attendances at the indoor meetings and on our field trips have increased. Indeed car parking at field trip meeting points has sometimes posed a problem due to larger than expected numbers. Since October we have recruited more new members than usual, and the Pangbourne meetings have attracted several visitors. These factors are in part due to the excellent programmes organised by Alan Burt, Meryl Beek and others, and part due to the modest amount of publicity now given to our events. Some of that publicity has come from the Reading RSPB group at their Pangbourne meetings and there has been excellent co-operation with that group ever since we shared a corner of the Caversham Festival field.

The committee are keen to see our membership grow and to ensure that we properly cater for new members. So I am delighted that Jan Haseley has accepted a new role as their spokesperson. It is seldom publicised, but there is a great deal of natural history expertise within our ranks. On field trips in particular the less knowledgeable amongst us have a great opportunity to learn from the experts. Newer members please note.

My personal wish list for 2004 is as follows:-

1. Top of the list – to be able to award a Fishlock prize to a junior. Mindful of the need to be careful in our dealings with juniors, the idea of a Junior Recorder scheme was launched at the Caversham Festival. We had a superb response so it is hoped that this arm's length approach will bear fruit without having to be personally vetted first!
2. Meryl has arranged for a coach outing to Corfe Castle and the Purbeck Downs on Saturday 19th June. My wish is that members note the date in their diaries now and give this event their full support.
3. Record-keeping by more members to further improve the content of Recorders' reports in *The Reading Naturalist*. Newer members please note.
4. Finally we have many 'retired and eminent members' who now prefer to take a back seat in the society. It is wonderful that these members remain on our books, but I am sure many of us could benefit from their experience. Articles offered for inclusion in future *Reading Naturalist's* would be much appreciated, failing that the Secretary would simply like to hear from you now and again.

Tony Rayner

MEMBERS' OBSERVATIONS

Before each evening talk begins, members are invited to announce their observations. Here is a selection of observations from the 2002/2003 winter meetings:

- 24 Oct 02 Tony Rayner had seen a Great Grey Shrike at Cholsey and Richard's Pipit at Churn on 17/18 Oct and on 16th, an Emperor Dragonfly at Cholsey, and Crossbills.
A 4.5lb Chub had been caught from the Thames at Shillingford
- 14 Nov 02 Tony Rayner reported the following late insects: a Peacock butterfly in his garden at Red Cow, Cholsey on the 8th, Common Darter in garden at Appleford on the 12th, Red Admiral on ledge South Moreton on the 13th.
- 12 Dec 02 Tony Rayner mentioned 1st record of Woodcock at Cholsey Wood, Bowbridge, on 15th Nov. and Stonechat at Fairmile and Churn on 23rd and 26th Nov, and large numbers of Bullfinches, one flock of at least ten on Nov 18-27.
Dora Lucy had seen a Red Kite being mobbed by black bird probably a small crow.
Michael Keith-Lucas reported Daubenton's Bats in University offices
- 9 Jan 03 Colin Dibb reported a female Blackcap at Wokingham and male and female Marsh Tits on 27th Dec 02.
On the last day of the year, John Lepiniere had found the first crocus, John Marshall had seen two Hares at Dunsden and Dora Lucy saw a cat chasing Muntjac
Martin Sell had seen Goosander, Smew and 2 Golden Eye at Fox & Hounds gravel pit. and Stonechat at entrance to golf course on Warren, all on the 8th Jan.
Chris Bucke reported 75 Lapwings near M4 / Burghfield Rd.
Kit Brownlea mentioned 2 pairs of Shoveller on Whiteknights Lake.
Tony Rayner spotted a male Blackcap at Red Cow on 24th Dec, and on 7th Jan: a pair of Stonechat at Churn, Water Rail at Cholsey Marsh, 6 Red-legged Partridge and a covey of 7 Grey Partridge about 30 yds apart outside Cholsey, at Red Cow on 8th Jan: a Green Woodpecker eating apples, the ground frozen and a Bank Vole with week old young in nest, on the 9th: 3 Siskin feeding on silver birch seeds and on the 22nd: 41 Goldfinches and 10 Corn Buntings.
Colin Dibb had seen Goldfinch feeding on Evening Primrose and 150 Redwings.
- 13 Feb 03 Ken Grinstead had seen a Queen wasp, and Malcolm Storey, who had found one on his rucksack, reported the first flowers on Cherry Plum and Hawthorn in bud.
Ray Lush had seen Lesser Celandines on Jan 2nd.
- 28 Feb 03 Tony Rayner had seen an early Red Admiral at Sonning Common on 24th – more evidence this species was now overwintering here and on the 27th: Small Tortoiseshell flying in garden, Sweet Violets beside road near Four Points Pub, Aldworth. On the 9th Feb: a Bumblebee, (probably *Bombus terrestris*) was seen at Red Cow
Chris Bucke saw Reed Bunting at Sheffield Bottom on 27th and first Coltsfoot by canal.
John Marshall reported Skylarks singing and a Brimstone on the 26th
Norman Hall had seen a Common Quaker moth
Tony Rayner said that Longtailed Tits were building a nest on the 15th and he had seen 30 Mute Swans on the 26th.
- 13 Mar 03 John Marshall had Frog spawn and newts in his garden pond
- 27 Mar 03 Heather Baker had seen more than 100 bees
Dennis Dormer saw Great Crested Grebes on the Thames at South Stoke on 10th

EXCURSIONS: October 2002 – September 2003

Meryl Beek

This year has been an extremely happy one, with a good variety of venues. Numbers attending have been good, especially during the summer months, when double figures were almost invariably reached. In all 70 members have attended at least one excursion during the year. All leaders are thanked warmly for their work in achieving this.

This year Colin Dibb has acted as “scribe” on nearly all the excursions. He has done this extremely well and is a worthy successor to Alan Brickstock, who recorded observations so faithfully over many years.

The season began on October 26th when Colin Dibb led a walk in the Pang Valley. The venue was Rushall Manor Farm, the history of which goes back to 1241, and which is open to the public throughout the year with toilets and shelter. The walk was in two halves. 15 members and guests proceeded to the River Pang along a new footpath avoiding Kimberhead Farm. A diversion was made to visit a private nature reserve followed by an opportunity to see the Blue Pool where the springs bubble up through the valley floor and feed what were commercial watercress beds. Both visits were by special arrangement with their respective owners. After a tea break back at the farm, the walk continued through woodland, some of it ancient and much of it in coppice with standards. A newly designated SSSI Geological and Geomorphological quarry site near the modern organic Rushall Farm was seen with the chalk exposure going back 100 million years. Then the steeper upper slopes of the valley were tackled to complete a two-hour circuit. The weather was very good, with the day sandwiched between heavy rain before and storm-force winds after, and a range of habitats were seen.

A walk in the Turville area was led by Rod d'Ayala on Saturday morning November 9th. It was enjoyed by 7 people. The ground was very wet after Friday's downpours, but 3 Red Kites were seen, also a small number of fungi and various snails, spiders and mosses. The trees were bare of leaves, reminding everybody that winter was coming in fast.

Chris Bucke led a walk in the Mapledurham area on 7th December. 6 members met on a dull, chilly, almost dry morning at the end of the Warren and walked up to Chazey Heath, across the golf course to Rose Farm, round to Lilly Farm, then down the road to Mapledurham and back along the bottom track. As there had been no frost, fungi provide the main entertainment with large numbers of Sulphur Tuft and *Flammulina velutipes* on the dead Elms beside the track through the golf course, also Blewits and Parasol mushrooms (*Lepiota procera*). A large heap of farmyard manure beside the bottom track was home for a *Peziza* sp. in some quantity, also a small elegant *Coprinus* sp. The golf-course has been planted sensitively, with quite large areas of the rough planted with Gorse and (probably) native trees. There were few common flowers in bloom. A pleasing number of small birds were seen, many tits, Blue, Great and Coal, at the start of the walk, Goldfinches in Mapledurham village and Pied Wagtails along the bottom track. No Red Kites were seen.

On February 2nd Martin Sell led a 13-strong party from BBOWT and the RDNHS to Farlington Marshes in Portsmouth harbour. It is a Hampshire Wildlife Trust reserve, consisting of pools, reed beds and rough grazing, surrounded by a sea wall. The tide was high, and apart from a densely packed group of Grey Plovers and Oystercatchers on the harbour's last remaining mud bank, all the waders were roosting on land. The first pool contained Teal, Brent Geese, Curlews, Snipe and a solitary Bar-tailed Godwit, while Widgeon were grazing in the fields, and Little Egrets moving about. Red Breasted Mergansers and Goldeneye were diving in the harbour. After lunch, a flock of Shoveler were spotted feeding in the pools. The highlight was a Red Throated Diver, which swam along the channel close to the seawall. Several Avocets were seen in a pool on the walk back to the cars.

On February 22nd a small party enjoyed another mosses and liverworts morning with Séan O'Leary on Pamber Heath and Forest. Two weeks later on March 9th, Meryl Beek led a morning walk from Nuffield village to Morrell's Bottom on the Ridgeway to see the Green Hellebores. These flowers have increased in number of the last few years, and the plants are now spreading up the side of the opposite hill. Weather was fine and there were 13 people in the party.

The summer season began on Saturday 5th April with a walk to Bottom Wood near Mapledurham and Janet Welsh led a positive crowd of 22 eager members and guests. The afternoon was sunny. The footpaths from the Kings Charles' Head were followed through to Bottom Wood, part of the Hardwick

Estate. The trees in the valley are mostly Beech but Ash trees (some coppiced) are frequent in Ashmore Wood. The steep banks beside the sunken old tracks through the wood have a fairly varied flora including Primrose, Scaly Male Fern, Wood Sorrel and Southern Woodrush. Wood Goldilocks and Yellow Archangel were also found. From from the Path Hill Farm road the party turned north-east down through a small wood across the valley where they paused to really absorb the mousey smell of Hound's Tongue - a feature of the Rabbit scrapes. In a small triangle of grassland which had escaped agricultural improvement, there was an opportunity for a rest and for spotting typical chalk-loving plants, mostly in the green or brown state: Marjoram, Salad Burnet, Wild Strawberry, Dwarf Thistle, Mouse-ear Hawkweed, Hoary Plantain and Cowslip were noted. However the best spot of the day was Green Hellebore in a hedge a little further on.

On April 26, 12 members and guests led by Chris Bucke met on a bright afternoon at South Stoke Church and walked route through fields to Little Stoke and on to North Stoke. The return route took the party through North Stoke churchyard and back along the bank of the Thames, under Brunel's marvellous bridge. The fern Wall-rue Spleenwort has the temerity to grow between the bricks of the bridge. Orange Tip, Small Tortoiseshell and Speckled Wood butterflies were seen. For the botanists, Loddon Lily was the star, with three populations, one at North Stoke and much larger groups in the area of Brunel's bridge. A large group of Canada Geese on the river in that area included a strikingly different individual, apparently a hybrid with a farmyard goose. Other plants noted were Dwarf Elder (at Little Stoke) and the usual spring flowers. Black Spleenwort was seen in a wall in South Stoke and St. George's Mushrooms at North Stoke.

Saturday 10th May saw 11 members on an all-day visit to Asham Meads and Whitecross Green Wood, both BBOWT reserves. These were lead by Rod d'Ayala and Tony Rayner. The Green-winged Orchids on the meadow at Asham Meads in the morning were plentiful and splendid. The party admired the variety of colours from white through to really dark purple. After an excellent pub meal we were able to hear two or three Nightingales at close quarters in Whitecross Green Wood

The programme includes some weekday evening venues and Martin Sell led a party on 15th May to Theale Gravel Pits for birds and on Wednesday 28th May, Chris Bucke led a party of 12 for a walk to explore an area of chalk grassland above Hook End Lane, Lower Basildon. The area was of considerable interest but did not provide sightings of orchids in the quantity that had been anticipated, in fact only Greater Butterfly Orchid was seen, in a clearing in a wood that had obviously had a beautiful display of Cowslips earlier in the year. Other plants noted were Remote Sedge, Hemlock, Common Gromwell, Field Madder, Vervain, Rest-Harrow, Mignonette, Rock-rose, Milkworts and Fairy Flax. The area will be worthy of a return visit in another year.

On Sunday June 1st, Michael Keith-Lucas led a combined BBOWT/RDNHS party to Bramshill Plantation. It is an SSSI for dragonflies, having 14 ponds created after the extraction of sand/gravel. It is close to the rivers Whitewater to the west and Blackwater to the north. An unusual feature is the presence of both acidic and alkaline soils with pond water varying from pH5.9 to 7.2. The site mainly lies on marine and river terrace gravel of the Efford 1 soil association but towards the south there is much more acid soil derived from Holidays Hill Tertiary and Cretaceous sand, loam and clay. Surrounding land in the two river valleys is river terrace gravel and sandy or loamy drift derived from Hurst and Swanwick soil associations. The most notable species found included Bladder Sedge (*Carex vesicaria*), Gey Sedge (*Carex divulsa* ssp. *divulsa*), Floating Club-rush (*Eleogiton fluitans*), Grass Vetchling (*Lathyrus nissolia*), Bee Orchid (*Ophrys apifera*) and Southern Marsh Orchid (*Dactylorhiza praetermissa*).

By popular request Martin Sell led an excursion to the National Nature Reserve at Aston Rowant on Sat 14th June. 15 people enjoyed the sunshine and searching the chalk grassland site for typical plants. Common Spotted, Fragrant, Bee and Pyramidal Orchids were all found. It was also nice to see Wild Candytuft growing well – a Chiltern speciality. Butterflies included Common and Small Blue, and also a Hummingbird Hawkmoth was seen among other goodies! A small party stayed on late and visited the reserve on the other side of the motorway where Greater Butterfly Orchids were growing in selected places.

Only 6 people were present on Saturday 21st June to visit Mapledurwell Fen, Greywell Moors and Basingstoke Canal by Greywell Tunnel. Graham Saunders led the group. Bogbean, Water Mint, Fen Bedstraw and many other marshy plants were found in the rather overgrown fen. The site to the left of the pumping station was drier and contained numerous Twayblades and Common Spotted Orchids also

Marsh Helleborine. Darkness had fallen by the time the canal was reached, when the party picked out one Pipistrelle and 7 Daubenton's Bats helped by Graham's headlight and sound equipment. Back at the cars Graham got out a box and showed the party two of his own pet bats – brought along in case the canal site showed nothing! A memorable evening.

Although numbers for the coach outing were low this year, the day was thoroughly enjoyable and the weather fine – as always! Butser Ancient Farm, near Petersfield in the morning provoked great interest, and many did reach the top of Oxenbourne Down after lunch, while others (including the excursions secretary!) lazed in the sun. A Common Lizard was seen basking in the Ancient Village and 2 Adders were resting near the main lunchspot! Flowers on Oxenbourne Down included most common chalk grassland species, but it was good to see Frog Orchid and numbers of Bee Orchids.

The moth night on Friday 4th July at the home of John and Brenda Marshall was particularly rewarding this year. John and Brenda are thanked for their hospitality to the 29 people who attended. The 3 traps yielded a very high number of different moths – and a horrible Hornet! The records are listed in the entomology report.

The walk round Thatcham Reedbeds on Saturday 12th July was led by Malcolm Storey. The party saw a variety of reedbed and fen plants including a good showing of Common Meadow-rue. Fen Nettle was new to several in the party. This plant was formally confirmed for Britain from Woolhampton Reedbeds, a few miles downstream, as recently as 1999.

On Saturday afternoon 26th July, a really magical time was spent with old friends George and Val Osmond, who led the excursion first on Seven Barrows near Lambourn, and later on Crogg Hill, further up on the Downs. Both these sites are BBOWT reserves, and the meeting was shared with BBOWT members. A total of 29 people enjoyed the first half of the afternoon, including 7 children, who were shown some of the butterflies, including Marbled White, Chalkhill and Common Blue, Small and Large Skippers and the Essex Skipper together with the Dusky Sallow moth were also present. Sawwort was flowering in profusion on the barrows, but Crog Hill was the best part. Tucked away behind a belt of trees, the grassland slope revealed Bastard Toadflax and had been full orchids earlier in the season. A visit to this relatively unknown site earlier in the year is a must in a future programme.

It was disappointing to learn earlier in the year that David Notton was unable to lead the planned excursion to the Thames Valley Park Reserve on 2nd August. David is congratulated on his new job in London, but the society is sorry to lose him. In David's place Kit Brownlee led the afternoon and 15 people enjoyed seeing the lakes near the River Thames and associated banks and amenity grassland. The pond inhabitants were many and varied, including some fish notably Perch, Roach, Gudgeon and Bleak. Many plants were in the surrounding area including Bogbean, Gipsywort, Trifid Bur-marigold and White Water-lily to name but a few. Thank you Kit for stepping in to lead at fairly short notice – obviously a very happy afternoon.

On Saturday 16th August, which was an extremely hot day, 11 members and friends visited Watlington Hill and were led by Brian Kemp. Watlington Hill is an all-time favourite venue of the society's and the visit was ostensibly to see the flowering Chiltern Gentians. In 2002 in the same week they were at their prime and had spread a lot from some years ago. This time, due to the very dry conditions, the gentians were disappointing and not going to be in flower for at least another two to three weeks. The usual chalk grassland plants were flowering, including some others of varying habitat, namely Ploughman's Spikenard and Vervain. Large and Silver-spotted Skippers and a Treble-bar moth were also observed. A pleasant afternoon with reasonable views from the hill top.

14 members enjoyed a 3-hour walk from Sulham Woods on Saturday 30th August in the early autumn sunshine and saw a wide variety of habitats, including three types of woodland and a rare patch of acid heath in the otherwise alkaline Pang Valley which also supports the Sulham Brook – and at one time the Kennet also. "Alien" species included Highland cattle and a Vietnamese pot-bellied pig! The pub stop in Tidmarsh proved popular and the normally wet field on the way back must relate the old English name which means "the common (of the people) marsh". Plant highlights included Dwarf Gorse, Harebells and Celery-leaved Crowfoot. Thank you Colin Dibb for leading this walk

Martin Sell led the excursion to Bartley Heath on Sunday afternoon, 14th September in place of Michael Keith-Lucas who had to be elsewhere on that date. Only 20 people turned up with 15 being RDNHS members and the rest from BBOWT, all intent on seeing the Marsh Gentians for which Bartley Heath is

renowned. In spite of the exceptionally dry weeks, the Marsh Gentians were flowering well and in some numbers. Another excellent find was Lesser Skullcap, which was flowering in one or two places, and also the sighting of a White Admiral butterfly in the early part of the afternoon. Susan Erskine, a member of BBOWT from Faringdon and of Plantlife connections, kindly contributed a fairly extensive list of flowers found. She is thanked for this involvement.

Malcolm Storey led a fungus foray on 27th September at Fence Wood. 17 people attended this joint meeting with the Thames Valley Fungus Group. The two groups visited the same site in 2002, but only 29 species were found because the autumn was so dry. Although there had been some recent rain, 2003 was even drier, and only 14 fungus species were recorded. The highlight of the day was a number of baby newts in a water-filled wheel rut.

The society now looks forward to its new season, and welcomes all members, both old and new, to take part – you will enjoy it!

WEDNESDAY WALKS

A special thank you is extended to Ken Thomas, who has led 9 Wednesday morning walks this year. It has always been the intention that these talks should cover the countryside north, south, east and west from Reading and this policy continues.

Three of the walks have been informal, notably November, January and March when Ken has planned according to weather conditions and the venue has not been announced in the programme. A quick phone call up to 48 hours beforehand can determine the venue for participants. These walks have been well supported, and have included places around Sonning Common and Burghfield Common.

The summer walks have been in the Finchampstead Ridges area; Chapel Row Common and Bushnell's Green; Riseley and the Devil's Highway, Pishill Napper and Hollandridge; Little Wittenham Wood and Sotwell, and the Assendons and Lambridge Wood. The walks are of approximately four miles length and end at lunchtime with the optional visit to a local public house for a drink and a sandwich.

The social side has been quite important on these walks, but the walks have also been full of natural history interest. To quote a few examples, six Fallow Deer stags were seen leaping across the fields near Hollandridge and a flock of 200 plus Lapwings were in a field under Wittenham Clumps. This day also produced a specimen of Green Amaranth (an alien from tropical America) and a whole hedgerow of Wild Liquorice in late flower and seed near Brightwell-cum-Sotwell! The party watched a Red Kite being mobbed by a Sparrowhawk on the walk near Lambridge Woods. Full lists of botany, birds, butterflies and fungi etc are always kept from these walks, which prove that whatever season members go out there is always something to see.

MEMBERSHIP

Norman Hall

The following members were welcomed to the society in calendar year 2003:

John Woolven-Allen
Miss Alison Archbold
Mrs Elizabeth Bond
Miss Linda Collins
Stuart Hine

Mrs Fiona Hoggarth and family:
 Calum (aged 11)
 Iona (aged 8)
 Rowan (aged 13)

John Lerpiniere

Kenneth Palmer
Mr Martin & Mrs Delysia Raper
Mrs Ro Rayner
Mrs Sonnie Sheridan
Dr Peter & Mrs Susan Twitchett
Mr Simon & Mrs Anita Norris and family:
 Colin West (aged 13)
 Richard West (aged 17)
Matthew Young (Junior Member)

MEETINGS (2002–2003)

Catherine Butcher

On October 24th, 2002 the speaker was Mr. Nick Bowles who showed slides of “Butterflies of the Chilterns Escarpment”. Members were invited to identify the butterflies which resulted in a lively discussion. Of special mention was the Wall Brown, locally found only in the Chilterns area nowadays. Another rare species, the Real’s Wood White (only found in Ireland) was also shown. Other slides were of the Orange Tip, the first butterfly of Spring, the Chalkhill Blue, redolent of hot summer days, the Small Blue, now scarce because Kidney Vetch is rare, the Marbled White, a favourite of the speaker and the Adonis Blue, the last butterfly of summer. Mr. Bowles also brought in several books which he recommended and he also stressed the importance of trying to get children interested in the conservation of butterflies.

Mr. Daryl Buck who is a fishery conservation officer, spoke to thirty members who were present on 14th November. He explained some of the work the Environment Agency carries out, giving technical advice, planning site management etc. Dredging to keep the rivers clear temporarily disturbed wildlife. Pollarding of trees, strategic extraction of water from reservoirs and various enhancement schemes to try and redress the balance were all part of his remit. His colleague, Mr. Eddie Hopkins, then spoke about the fishery aspect in the upper catchment of the Thames. He explained how fish population surveys were carried out, and spoke of fish management on still waters. During drought years fish were rescued from gravel pits. He was often called out when fish were found dying from pollution. Sometimes they could be saved by aerating the water but in most cases it was too late. A new concept of stocking gravel pits and lakes was by placing a trough of fish eggs in the water and this had proved to be very successful. Members learned that poached fish could fetch up to £3,000 and poaching entailed a serious amount of money.

Due to the unexpected illness of the guest speaker, the President, Tony Rayner and Vice President, Rod d’Ayala stepped into the breach and gave a lecture on “Wildlife and Churchyards”. The principles of the Living Churchyard and Cemetery Project were explained. This encouraged people to discover and conserve their wildlife. Local schemes involved BBOWT, Butterfly Conservation and the Diocese of Oxford. BBOWT made annual awards. Management of churchyards was the key, the principal points being grass cutting, conservation of gravestones and walls and preservation/planting of trees and shrubs. Churchyards were considered important for wildlife as they were areas protected from chemical sprays and undue disturbance. Money could be saved by reducing the amount of grass cutting and by doing almost nothing to gravestones, which represented a special habitat for lichens and mosses, especially in an area like Reading where there was little naturally exposed stone and rock. Lichens were sensitive to disturbance so any movement of gravestones could be harmful and should be avoided. Trees in churchyards often included yews, whereas they were often an absence of this species in the countryside. Being highly poisonous to livestock, churchyards with their surrounding walls, had traditionally been havens for yews – some of them ancient. Species popularly associated with churches included bats, Swifts and Kestrels. Local churches with award winning projects were identified, together with examples of their habitat and notable species. Surveys had been carried out nationally by BTO (birds) and locally by Butterfly Conservation (butterflies) and BBOWT (bats). The bird and butterfly surveys showed that the most commonly recorded species included several which were not prominent in similar surveys of gardens, e.g. Bullfinch, Linnet, Spotted Flycatcher, Gatekeeper, Holly Blue, Meadow Brown. This served to underline the value of churchyard habitats for the living as well as the dead.

Mr. John Brucker spoke on the “History of the birds of Oxfordshire”. He had joined the Oxfordshire Ornithological Society in 1943. This Society, the oldest in the country, had been reporting since 1921. He had met several famous ornithologists including Bernard Tucker and Julian Huxley. They noted the number of birds, their habitat, how they lived and how they survived. Initially, birds were shot and stuffed and eggs were collected for identification. Mr. Brucker gave several anecdotes about famous birders who were against this practice “except when they were to be collected for scientific reasons”. Disaster struck in 1926 when colonies of House Martins died because the streets of Oxford were tarmaced. Slides were shown of House Martins nesting under a bridge at Clifton Hampden which all disappeared – an unsolved mystery which makes bird watching so intriguing. Lately, one of the largest lakes in Oxfordshire was to be used as a water sports facility. The Society had fought hard against this but had

lost the battle. There are now 60 former gravel pits in Oxfordshire and John Brucker stressed the importance of ensuring that good aftercare was maintained.

On 23rd January 33 members came to hear Mr. John Cornwall speak on "Definitely Bulgaria". He had been on several trips with the British Bulgarian Friendship Society. This excellent photographer did not like to be rushed! Whilst others in the group marched on ahead he preferred to start slowly and quietly. He had an eye for choosing his subject. No placing of twigs or leaves in strategic places, the scene was natural and just as he saw it. Slides were shown of heart shaped Marsh Orchids, *Geum*, Marsh Helleborines, Wild Gladioli and Gentians. Mr. Cornwall and his group went to the Vilosha mountains where they visited a monastery. They often saw statues of a monk who is the national hero in Bulgaria. This monk wrote a history of their nation when morale was at its lowest ebb and walked around the countryside reading his book to the local people. Members heard that Cranesbill is given to tourists to wish them God speed and good luck on their journey. On a butterfly tour they identified 116 species including blues, Marbled Whites and skippers. Not only did Mr. Cornwall give us pleasure with his slides of wild flowers and butterflies and weird wooden structures, he also showed charming photographs of the local people. Who could forget his slide of four elderly ladies? Were they discussing their husbands? We shall never know.

Forty six members came to hear the Vice President, Rod d'Ayala speak on "Reptiles and Amphibians". He concentrated on the commoner species, giving graphic descriptions of Common Toads moving to their breeding grounds. We were told how the males hitched a lift aboard the much larger females and how roads were a major threat to their mass movement. There were excellent slides of Grass Snakes, Adders, Slow Worms and Common Lizards, the latter freely losing their tails as a diversionary tactic when threatened. He mentioned Sand Lizards which had recently been reintroduced. Very little was known about the distribution and abundance of our locally occurring species of Herptiles. All species appeared to be declining, a pattern seen the world over. This decline was due to several factors, including loss of terrestrial habitat and ponds, disturbance of suitable areas and pollution. Also, all species of reptiles and amphibians, although mostly easily recognisable, were massively under-recorded. To date Berks, Bucks and Oxon were a bit of a black hole for records and Rod, on behalf of the newly formed Reptile and Amphibian Group welcomed all records, current and historical, for any species even common ones.

Professor Christopher Bucke, gave an interesting account of his visit to "Nepal in the Monsoon". This described a four week trek organised by the Alpine Garden Society which started in early July, a time avoided by normal treks because of heavy rainfall, high humidity and the consequences these produced. It was, however, the best time of year to see the high alpine plants. The trek started at Dumre, east of Khatmandhu, at 1500 ft and proceeded up the valley of the Marsyandi river for most of its length, then left the river and climbed up to the Thorong-La-Pass at about 17,000 ft. The route passed the various peaks of the Annapurna range but these were only rarely visible because of cloud.

The route passed through rice paddy fields and farmland at the lower altitudes with occasional climbs through gorges and frequent river crossings. The bridges used in the normal trekking season are removed to prevent flood damage so some of the river crossings, all on foot, were anxiety-inducing. Really interesting plants were encountered throughout, with begonias, bamboos, various relatives of ginger appearing frequently at the lower altitudes; then around 6,000 ft where there was temperate woodland and lilies appeared such as the spectacular *Lilium nepalense*, *Notholirion* species and various *Arum*-like *Arisaemas*. There were several different species of terrestrial orchid, including the familiar Musk Orchid and ladies' tresses in magenta. Monkeys were frequent in this altitude, Capuchin monkeys being the most conspicuous. At about 9,000 ft the route turned west into the "rain shadow" of Annapurna and the vegetation became less lush. *Rhododendron*'s appeared with many *Cotoneaster* species and more typically "alpine" species such as saxifrages, *Primula*'s and *Androsace*'s. An unexpected "star" family were louseworts (*Pedicularis*) which became more spectacular with increasing altitude. Higher still, bleak side valleys proved rich with fine plants, especially the blue poppies (*Meconopsis*). Finally, at the last camp site there was a profusion of wonderful species. Two species new to science were found on the trek, *Codonopsis grey-wilsonii* and an *Iris* sp. All human members of the party survived in good health but a pony passed away towards the end of the trek.

35 members were present on 13th March when the speaker was Mr. Andrew Cleave, Warden of Bramley Frith Environmental Education Centre. His subject was "The Dormouse in my Pocket". This intriguing title came from an artificial dormouse which he kept in his pocket to entertain the many

children who came to the Centre. We learned that the dormouse was extremely agile, secretive and very rare. Their feet were flexible, enabling them to run along the thinnest of twigs. Diet consisted of hazel nuts which are packed with protein and fat, aphids, honeysuckle and chestnuts. During the day they went into a state of torpor curling their bushy tails over their heads. Dehydration was a big problem with the dormouse losing half its body weight by the end of the winter. At Bramley Frith there were 200 dormouse boxes. A license was required to look into their nests. It was Mr. Cleave's job to weigh them and fit them with radio transmitters in order to track their movements. He also did a lot of work with other invertebrates and described the work that goes on in the Centre, such as charcoal burning.

At the Members' Evening, Dr. Malcolm Storey spoke on record keeping . He gave guide-lines and requested members to be on the look out for items of interest. Mrs Heather Baker brought her late husband, Brian's, collection of Clearwings (40 years of collecting) and told members to contact Reading Museum if they wished to see more items of interest. President, Tony Rayner, showed slides of his holiday in the southern part of Morocco. Miss Shirley Townend read an amusing poem "Don't step on that Earwig" and Mr Martin Sell gave an interesting account of his recent visit to Madagascar. A book auction concluded the meeting.

THE FISHLOCK PRIZE

Fishlock Prize has not been awarded this year.

MY PATCH – A STORY OF CONSERVATION AT RED COW, CHOLSEY

PRESIDENTIAL ADDRESS – by Tony Rayner

(based loosely on an illustrated talk given on 21st October 2003)

This story has its roots in Cholsey's village life and history, beginning with responsibility for an old cottage and developing into a nature reserve with an added meadow. There was no great plan involved, circumstances simply took over.

Cholsey can be reached by boat from Reading. After passing by Moulsoford, the Thames leads north under Isambard Kingdom Brunel's magnificent railway bridge with stone facing to its four arches. Cholsey Parish starts here with BBOWT'S Cholsey Marsh Reserve. The mile-long riverine strip that forms Cholsey Marsh is by no means the sole nature reserve in or around the village. The junior school, where naturalist Bill Campbell was once headmaster, has its own reserve complete with ancient carp ponds.

There is also a small private woodland reserve, but this is the story of another place.

History is responsible for what was to happen. It all began with Ethelred the Unready – fittingly enough. It was he who in AD 986 had a hand in founding the settlement of Cholsey. There was a strong connection too with Reading – for in the early days Cholsey was the granary of the immensely powerful Reading Abbey. Indeed on the present site of the Manor Farm there stood the Great Tithe Barn of Cholsey which served the Abbey. With dimensions of 303 feet by 54 by 51, it was the largest structure of its kind in Europe – but sadly demolished in 1851.

So it was in 1986 that Cholsey came to celebrate its millennium, 14 years later the village celebrated another millennium – they come thick and fast in Cholsey! My role as treasurer to the Millennium Committee led me to visit one of our event organisers in his cottage. This chance event led to the purchase of that cottage, Red Cow.

Another major surprise came with a visit to the Reading University's Museum of English Rural Life. The old photograph of "a typical Berkshire Cottage" displayed prominently on a wall turned out to be Red Cow! The later discovery that for the first 250 years of its existence the cottage was occupied by tenants, went some way to explaining why it had not been improved. Only in the late 1950's came the first



Red Cow

owner/occupier. It quickly became apparent to Ro (my wife) and I that we had a conservation project on our hands, and we became filled with a sense of responsibility.

The three-quarter acre garden was an open expanse of grass with few plantings to provide shelter from the prevailing winds, but we were aware of large numbers of amphibians and a single Bee Orchid flowering in our first full year. So we had an unspoilt historical building and grounds on our hands.

In the first five years after 1986 we carried out major repairs to the Cottage including a new thatch in Norfolk Reed. A garden pond was dug to provide a home for the frogs and toads, and we monitored the progress of the Bee Orchids as we discovered more each year. Ro became a beekeeper which led to friendly contacts with the farmer of the adjoining arable farm. These contacts centred on the need for advance warning of sprayings and hopeful enquiries on the possibility of the farmer selling a small strip of land as a 'bee buffer'. About the same time there was a development proposal to build 41 houses on adjoining land. This land was already being recognised by us as a key reservoir for wildlife – much of what we were attracting was obviously originating there.

As the environment 'expert' opposing the proposal at the appeal stage, I found myself presenting evidence stemming from such records as numbers of toads crossing roads on dark wet March evenings. The inspector shocked me by accepting my argument and rejecting the appeal on environmental grounds. This saga alerted us to the possibility of further development applications in our back yard.

So it was that in 1991 Ro invested her nestegg in the purchase of three adjoining acres of farmland, offered when the entire farm was sold. Now we were safe from development of the arable land just feet from the backdoor.

Having purchased our buffer, we needed to think what to do with it. Letting it out as a horse paddock was the easy solution, but we decided otherwise. The farmer ploughed up the wheat stubble and sowed our expensive flower meadow seed mix.

One acre was also sown with a cornflower mixture. On three sides native hedging was planted and another larger pond was dug. The artist Richard Lewington had just produced a beautifully illustrated book on the oak tree. Having grown many oaks at different stages as drawing subjects, he was looking for a permanent home for these seedlings. They were all planted around the newly-created meadow.

Some wheat had to be pulled in the first year, but the acre of cornflowers was breathtaking. We had many visitors, and elderly ladies were seen to cry at the sight – which presumably brought back memories of their childhood days in the country.

Before all the surrounding fencing was completed we bought a vintage tractor and all the machinery necessary to cut and harvest the hay.

Meanwhile the garden was taking shape with plenty of herbs, berry-bearing shrubs, climbers, and nectar source plants.

Soon we were seeing more insects and amphibians than we had imagined. There were masses of frogs and toads. The introduction of some baby smooth newts from a neighbour's garden proved to be pointless. A few days later some adults were seen in the pond, having arrived unaided! Dragonflies were early colonisers and in the meadow various grassland butterflies moved in. Yet even in those early days it was clear that while some wildlife prospered, other forms did not. We might have imagined ourselves to be in control, but clearly other forces were at play – including nature itself.

The planning battle had taught us one value of record keeping, so routine monitoring of all we knew and could manage was undertaken.

The identification of basic keys to the site management unfolded over time. Native plant species were sought from the start. Use of chemicals was outlawed and the organic approach adopted. Every opportunity was taken to use green materials so concrete surfaces and ugly wooden fence panels were out. Low disturbance also seemed a good idea, and this developed into the creation of no-go areas where nature ruled. Overall we worked on the idea that maximum habitats would equate to maximum wildlife diversity. "Diversity" is one of those buzzwords that these days no nature article is complete without.

At the time of writing, October 2003, the Cottage looks resplendent after being limewashed. Beneath this the gable end has been saved from collapse with a new base beam and panels of wattle and daub to replace the inappropriate brickwork. Outside the hedges are maturing and are lightly trimmed each spring. Rod d'Ayala (Past President) has even laid one stretch that was planted ahead of the rest. To give an idea of scale, the total length of hedging now amounts to almost half a mile!

Hawthorn and Field Maple proved to be the first to get established, but now Blackthorn and Hornbeam are filling out nicely. Blackthorn and Hawthorn blossom is supplemented by wild plums and Bullace, providing quite an early show. Later Wayfaring Trees and Wild, Dog and Burnet Roses add their colour both as blossom and then showy fruits.

There is Guelder Rose and Spindle adding further autumn berries plus Holly, Wild Privet and Yew providing evergreen cover throughout the year. Common and Alder Buckthorn are easily overlooked, but not by the Brimstone butterfly. The female Brimstone can be seen alighting on every Buckthorn as she follows a hedge line. Later their deep green caterpillars can be seen decimating the leaves. Although not really showing yet, the picture is not complete without mention of the tree planting. Over 100 saplings have been planted including the Oaks previously described. Silver Birch, Rowan and Crab Apple feature prominently but others include Alder, Scots Pine, Whitebeam, Wild Service, Walnut, Holm Oak, Larch and Small-leafed Lime.

Meanwhile the meadow has become established. The cornflowers have gone and the fertility reduced to produce a manageable growth. In spring Cowslips dominate, yet of all the plants in the original seed mix they were easily the last to appear. The meadow must have been in its third year before Cowslips deigned to show. In the summer months plants such as Yellow Rattle, Birdsfoot Trefoil, Ox-eye Daisy, Common Sorrel, Ribwort Plantain, Musk Mallow and Black Knapweed take over. Attempts to grow additional key egg-laying plants for butterflies have been rather optimistic, but Horseshoe Vetch has accepted the less than ideal soil type. In one corner of the meadow we planted a cider apple orchard with old varieties such as Yarlington Mill, Dabinett and Somerset Redstreak. So we now produce a potent home-made cider whilst making a modest contribution to preserving some traditional cider-making apples.

Other attempts at habitat creation come in the form of undisturbed compost heaps and wood piles, dead Elms and other old tree roots left to rot, boxes for roosting and/or nesting and metal sheets left lying on the ground. More of the sheets later.

So what of the wildlife? How has it fared? And what has been learnt from all the monitoring over the years?

We can claim 3 species of amphibians, 3 reptiles, 104 birds, 3 orchids, 18 dragonflies, 318 moths, 29 butterflies, 12 small mammals, 10 larger mammals, and much more – but to find the true story we need to dig deeper.

In 1986 Red Cow was blessed with lots of toads and frogs. There was a toad breeding site nearby and March lived up to its name for these creatures. Then it was a common sight to see toads, often as coupled pairs, marching in the direction of the breeding pond. On a still night their contact calls could be clearly heard. 'George' was a notable resident who habitually took up station beside the front door. Insects hit the outside light above and George enjoyed many meals as moths fell to the ground. He was also quick to realise the potential meals offered around the moth trap. The toads played their part in the planning appeal, but sightings fell during the period 1996 to 1998 and by 2000 had become a rarity. Pollution of the breeding pond by excessive numbers of domestic ducks and geese is suspected, and toad/car accidents could not have helped.

Toads are known to be particularly long-lived (up to 40 years in captivity) so this local extinction is especially worrying.

Frogs have bred in large numbers ever since the first garden pond was completed. It is difficult to count frogs in all but a small pond, but on one occasion when a sudden hard frost occurred over 100 adult frogs perished beneath the ice. Later that year there was no sign of a decline in numbers and spawn in March, so safe to say there was a significant population. Counting the balls of spawn each year seemed a good measure for the success or otherwise of the resident population. Once again we saw a rapid decline. In 1999 the spawn ball count was still a respectable 30 but by 2002 the count had dwindled to just 2 and 2003 was our first clean sheet. Yet again we have a species whose sighting has become a rarity. The suspects here include disease (spread by visiting domestic ducks?), predation by Smooth Newts, Grass Snakes and the increasing visits by Grey Herons.

This leads neatly on to birds which proved to be among the last wildlife group to be drawn to any significant degree to Red Cow. True there were early casual visits by local rarities including Redstart, Redpoll, Tree Sparrow, Black Redstart, Wheatear, Barn Owl, Tree Creeper, Lesser Spotted Woodpecker, Sedge Warbler and Snipe. True also that the species list amounts to 104 if one counts birds passing overhead and the Cockatiel that for a week escaped its owner to drink daily from the meadow pond. Our measure of success lies more with the regular visitors and especially those that breed on or near Red Cow. Among the regular visitors we can include Coal Tit, Siskin, Grey Wagtail, 3 buntings – Yellow, Corn and Reed, and Meadow Pipit. In recent years there have been some encouraging breeding successes – notable among them Swallow, Whitethroat, Bullfinch, Goldfinch, Long-tailed Tit, and Willow Warbler. In adjoining plots we could add Sparrowhawk, Kestrel, Grey Partridge, Green & Great Spotted Woodpecker, Chiffchaff, Blackcap and in the past – Turtle Dove. Sadly neither Starling or House Sparrow stays to breed any more. When House Sparrows are present they no longer chatter around the eaves, but lurk deep in the hedges. Feeding seeds has made all the difference between House Sparrows appearing or not. Birds nesting close to the Cottage provide super opportunities for observation. The Wren for example was seen to cram huge quantities of natural litter into a deserted Swallow's nest. So much so that the ground beneath the nest was tidied up beyond recognition! The Swallows were seen to raise two broods with vastly different juvenile behaviour. The first brood was perfectly behaved, but the second were a load of hooligans and made a huge racket as they demanded ever more food. Both broods were successful but perhaps the food supply had become difficult when the second brood arrived. Long-tailed Tits provided much entertainment in nest building, and by their hovering flight before diving down to the nest.

Other bird lessons learnt include Siskins' and Redpolls' liking for Silver Birch; Lesser Spotted Woodpeckers' liking for dead Elm; the incredible noise Song Thrushes can make with snail shells, how birds enjoy communal bath times except for the Sparrowhawk which not surprisingly bathes alone; and the effectiveness of a resident pair of Carrion Crows in driving away Magpies.

The Bee Orchids were a bonus almost from the start. The rough unimproved grassy area that formed half of the original garden was overdue for its first cut in June 1987. Ro was ever more insistent that it should be mown, so it was fitting that she should discover that sole flowering spike in our second year at Red Cow. The area was now to be cut only with care. The grass was coarse and not really convivial for orchids to grow among. Nonetheless more plants continued to appear until peaking in 1996 when 150 were found. Whilst still increasing in number the plants were generally losing



Sparrowhawk

their vigour and the proportion flowering declined from 83% in 1991 to none in 1999. The colony then appeared to migrate to the garden pond margins and began to increase in vigour. At the latest count there were 47 plants of which 10 produced flowering spikes. One of the 47 plants popped up some 150 yards away in the meadow – we had ceased to be surprised by orchids some time ago.

In 1997 two Early Marsh Orchid plants sprang up beside the garden pond. This area had not been disturbed since the pond was dug nine years previously. Neither had any soil been introduced from outside. The following year the orchids flowered and have since grown in number. If this were not enough a single Common Spotted Orchid appeared and flowered in the Meadow in 2002. The plant appeared again in 2003 but did not flower.

Orchids have proved themselves to be an unpredictable joy. Bee Orchid plants emerge as early as the beginning of October and flower in early June. They often fall prey to slugs, but can be effectively protected by a scattering of soot. In a dry spell, stressed plants have been seen to respond quickly to even the slightest sprinkling of water.

If orchids are a joy, then dragonflies are at least equally appealing. 18 species have been recorded so far, many of them known to have bred in the ponds. Some breeding dragonflies were much quicker to colonise the site than others. Azure Damselflies arrived many years ahead of Large Red damselflies for example. Broad Bodied Chasers and Southern Hawkers were much earlier arrivals than Brown Hawkers and Emperors.



Early Marsh Orchids

Azure Damselflies hatch in particularly large numbers, as can both Brown Hawkers and Emperors. Indeed we have witnessed at least 60 of both of the last two mentioned species hatching at once. Only by collecting the empty cases could we be confident of the numbers. We are fortunate too in attractive riverine species from the Thames less than a mile away. Banded Demoiselle, Black-Tailed Skimmer, White-legged Damselfly and Club-tailed Dragonfly all fall into this category. Unless the dragonflies are on your doorstep, you may not be aware of the long flight season for these creatures. The Large Red Damselfly appears as early as 17th April and Common Darters have been seen as late as 13th November and even egg laying on 5th November! Prime time for dragonflies is to witness their emergence. The larger species particularly can be watched at close quarters at this stage, but you may have to get out of bed early to see all the action. Climbing out of the pond and emerging out of a case or skin is a dodgy business. It can take several hours to dry out properly and to expand the wings. Falling back into the water is not an option at this stage. Predation can be a further hazard, for example a Willow Warbler was seen to return many times to carry off a beak full of emerging Azure Damselflies. Strong territorial behaviour should indicate that you are watching a male dragonfly. The male Emperor for example will patrol a chosen pond for hours, whereas the female will slip in quietly and lower her abdomen into the water with minimal fuss. The method of egg laying can be a good aid to identification. Some species will lay on the surface of the pond, whilst others will perform the same operation clinging to the edge of the pond. Some species lay in tandem, whilst in others the female lays alone often with the male on guard.

The total species count has accelerated sharply since moth trapping began. In the early years our son Fred ran a simple trap with a battery powered filament. Since 2001 a more sophisticated Skinner trap has been used. The more powerful trap has markedly increased the moth species seen to an accumulated 316 to date. Moth trapping can be a highly antisocial activity, but with the meadow maturing there has been a big increase in day-flying moths. Six-spot Burnets have dominated with



Six-spot Burnets

estimates of at least 1000 in each of the last three years. Burnet Companions offer a good supporting act and at dusk we have been treated to the dancing flight of male Ghost Swifts in good numbers.

One moth to benefit from the high density of Ladies Bedstraw in the meadow has been the Small Elephant Hawkmoth, whereas the larger Elephant Hawkmoths feed on Willowherb around the garden pond. The variety of moths seen is amazing and taxes identification skills dulled by the paucity of British options for many wildlife groups.

Many moths combine superb camouflage with concealed gaudy hindwings which can be flashed to warn off predators. Hopefully the concentration on native planting will attract many more moth species to Red Cow in future. 2003 saw a record annual list of 181 species, several of which had not been recorded on site before.

Every year a return of butterflies seen each week is sent to Butterfly Conservation. The number of species varies between 21 and 24, with migrants Painted Lady and Clouded Yellow being among the unpredictables. Not surprisingly it is grassland specialists that are the most common. In order of abundance – Common Blue, Meadow Brown, Marbled White and Gatekeeper. The site also boasts a strong colony of Small Copper, Brown Argus that are often overlooked amongst the Common Blues, and the three commoner Skippers. Orange Tip numbers seem to be declining, but both Ringlet and Speckled Wood are slowly increasing. Two species have been lost, the

Small Heath and the Wall Brown. Neither ever had more than a toe hold on the site. White-letter Hairstreak and Chalkhill Blue are perhaps the most surprising butterflies to have been recorded more than once. The Hairstreak probably on account of the wealth of Elm at Red Cow, and Chalkhill Blues possibly on account of the growing patch of Horseshoe Vetch. The intensive recording of all butterflies since 1988 reveals exactly how each is faring and shows how precisely their brood patterns are repeated each year. Reference books show normal periods of flight, but keeping your own records may (and often does) show a local variation. Early notice of a brood failure is also provided by detailed annual records.



Common Blues

Surely there can be nothing more absorbing than the opportunity to study reptiles at close quarters on a daily basis. There was a time when we were totally ignorant of the presence of any reptiles at Red Cow. Then in 1993 the secret was unlocked and sightings of Grass Snakes became commonplace. A total of 25 metal sheets were spread around on the ground in sheltered margins, and these monitored daily. To date there have been over 2,900 sightings of Grass Snakes. It may seem incredible but 93% of these sightings were from on or under the sheets. They are indeed the window on these and several other creatures. Compost heaps and ponds head the second division of places to have produced Grass Snake sightings. Sloughing appears to take place two or three times a year and is obviously a draining process. Prior to sloughing a snake is lethargic and can be found in the same spot for several days. The skin looks tired and the eyes have a glazed look. The snake withdraws from the skin by wriggling through rough vegetation and friction provides something for the snake to heave against. Freshly shed skins are quite oily to the touch and betray the size of the former occupant. An adult female skin was found to be a metre long which is about as long as can be expected in Britain. Frogs are a favoured prey and a rather disgusting bulge is possibly a part-digested frog. Despite their size and ability to swallow an adult frog, Grass Snakes are easily damaged if not treated with great care. Lifting sheets is a practised art and not one to be undertaken lightly.

Given their liking for Frogs, it is no surprise to discover that Grass Snakes readily take to water and are excellent swimmers. Indeed the only time we witnessed a mating display several snakes were doing circuits around the meadow pond. Eventually they climbed onto the bank and piled on top of each other. This apparently was a mating ball involving one female and at least three males.

Slow-worms were re-introduced to the site in 2000. They, like the Grass Snakes, have prospered and bred successfully. There is some reason to believe that the introduced Slow-worms eventually attracted the occasional newcomer. Mating has been observed on several occasions and newly hatched young seen once. Sightings of Slow-worms have been entirely dependant upon the sheets. All 595 sightings to date have been beneath the sheets. Like Grass Snakes, Slow-worms are social creatures often found in small groups but are seldom found in hot/dry spells.

The last reptile species to be discovered at Red Cow is the Common Lizard. These were not seen at all until 2001, ten years after the purchase of the meadow. Numbers remain low and sightings are only slightly less dependent upon sheets as the other reptiles. It is clear too that tails are often shed and replaced, which is a help in identifying individuals.

Small mammals are yet another group to be mainly found under sheets. Here too are found their nests and the residue of meals in the form of seed husks, grass stems and nut shells. These meals have often been taken from the nearest plants. Field Voles, Bank Voles and Common Shrews make up the bulk of small mammals seen often with their young. Wood Mice are encountered much less often as are Pigmy Shrews. The latter are probably under-recorded and mistaken for Common Shrews. For reasons that are not understood Moles produce their hills in an adjoining garden but seldom stray into Red Cow territory. A single sighting of a Water Shrew was made in 2003 when one leapt into the meadow pond. Bats complete the tally of small mammals but only Pipistrelles are known to sometimes roost on site. Noctules have on occasions given wonderful flight displays that have lasted for at least half an hour. Including bats, a total of 12 small mammal species have been recorded.

Larger mammals, by which it is meant Weasel sized and upwards account for a further 10 species. Both Fox and Badger are regular visitors but are seldom seen. Evidence of their presence comes in the form of droppings, latrines, remnants of corpses, diggings of bumblebee nests or freshly dug tunnels under sheep fencing. Foxes are seen much less since neighbours stopped having chickens. These used to provide regular meals for our bushy-tailed friends. Badgers were only seen in 2002 when a family group would pay us a visit. This increase in their obvious presence coincided with the disappearance of Hedgehogs. It is suspected that there was a connection between these two changes, and sadly the Hedgehog has not now been seen for over two years. Muntjacs raised one young in a neighbouring garden in 2002 and were frequently seen at close quarters in daylight. They took little notice of dogs or humans. Much less approachable are Weasels which are sometimes found under the metal sheets. When a mass of fresh vole corpses are seen beneath the sheets, this invariably seems to be the work of Weasels. On occasions they have been caught in the act, especially the year that 3 young Weasels frequented the meadow margins. There was also the time that Rats appeared just after harvest and an attempt was made to trap them. It was a surprise to find an angry Weasel in the trap instead, but the release of the mustelid coincided with the overnight disappearance of the Rats. Cause and effect?

It might surprise you to know that the wildlife for which Red Cow has become best known has yet to be mentioned in this article. For this we must return to insects. Chris Raper has run a malaise trap and recorded an impressive list of small flies and beetles. Cockchafers are now quite numerous on the site. As a result moth trapping in May is a hazardous pastime and maybe warrants the wearing of a hard hat. These beetles come crashing into the trap arena and are quite likely to hit the moth trapper first! Since these beetles are usually first seen in stretches of Hornbeam hedging, it is assumed that we owe the presence of Cockchafers to the considerable amount of Hornbeam planted.

It is however another Beetle that first put Red Cow on the wildlife map. The strength of our Stag Beetle colony undoubtedly owes its origins to the rotting stumps and remnants of mature Elms and to a lesser extent Apple trees. Elm stumps in particular have hosted these beetles and they have clearly contributed to the total consumption of this rotting timber. When you live alongside a Stag Beetle colony you are privy to some remarkable events. Males swarm on muggy June evenings, flying like unguided missiles with much buzzing of wing beats. Clumsy crash landings and noisy take-offs are features of these gatherings. Sometimes as many as a dozen have been seen together and then to land, usually in ground cover. Then it becomes difficult to observe their nocturnal activities, but much peering into undergrowth with a torch reveals pairs of males with antlers locked. These fights can last for hours, and some males can be relocated at the same spot the following morning. One female is sometimes seen on these occasions crawling along the ground, so it seems likely that she is the object of all the activity. BBOWT arranged for a TV cameraman and the local press to attend a 'Stag evening'. Unfortunately they arrived on a very wet evening long before nightfall. The situation was saved by the production of 4 beetles caught the previous evening and stored in the fridge. These were filmed on the evening under



Stag Beetle

umbrellas! Guide books don't prepare you for some of the incidents encountered with Stag Beetles. When excavating a pond for example it was a surprise to find their large white larvae in a spadeful of soil. Or the live adult beetles dug out of the vegetable patch well below the surface. Or in mid-summer to be reclining in a deckchair and being aware of a female Stag Beetle marching in determined fashion between your feet!

Finally enter *Asilus crabroniformis*, otherwise known as the Hornet Robberfly. A more unlikely champion for Red Cow would be hard to imagine. This supposed rarity was first identified by Richard

Lewington in August 1995, although with hindsight we realised that 'an unusual fly' had been observed during the previous summer. At that stage our interest had not spread to flies. Once identified, the interest taken in the flies by others was obvious. Knowledgeable friends arrived with cameras and the spectacle of otherwise sane adults crawling around in the meadow became the norm! In order to walk around the meadow with ease we had been mowing paths or rides, providing sheltered strips of short vegetation. Unwittingly these strips were to prove ideal habitat for *Asilus crabroniformis*. They took readily to lying in wait for prey on dry or bare patches in the rides. Blow flies and grasshoppers were pounced on and sucked dry. Britain's largest fly was clearly at home at Red Cow and with transect counts reaching 28 at the peak, it was a particularly strong colony. By 1999 news of these flies had reached Reading University's School of Animal & Microbial Sciences, c/o Rod d'Ayala. So it was that RU students began a two year study of the population dynamics and dispersal of the Hornet Robberfly in Cholsey. Flies were caught and marked using nail varnish. The colour coding system became complicated as the numbers caught far exceeded expectations. (128 in 1999 alone.) Results were different in 2000 when few were found at Red Cow, but the population had shifted slightly onto the adjoining East End riding stables pasture. This time 257 individuals were marked, two thirds of which were females. One conclusion is that the population depends on horse dung at the riding stables for egg laying, and the adjacent Red Cow meadow provides a handy habitat with an abundance of prey and shelter for resting and mating to take place. With 2003 proving to be another vintage year for *Asilus crabroniformis* in the Red Cow meadow, its future looks bright particularly since the riding stables business appears to be thriving. So at last we come to the heart of our project – a mere fly!



Hornet Robberflies – pairing

The conservation value of our project is for others to judge. We claim no credit for what has taken place largely by accident, but we are happy to share with others the experience of creating what might be called a nature reserve from scratch. As for the future, well the site will develop – hedges and trees will mature. Wildlife fortunes will continue to fluctuate, and hopefully we can retain something of value until nationally we stop the current downward trends. Recording will continue and hopefully we shall learn to better understand our wildlife. Perhaps monitoring will be extended to include some of the more difficult entomological groups. Also experience has shown that the next unexpected bonus is only just round the corner. So why not dream of Corncrakes breeding in the meadow? After all the local wisdom is that a pair may have nested in the adjoining arable field in May/June 1999. More realistically we look forward to others copying our example. This has already happened locally in at least three cases, and in 2004 another 1.3 acres are to be converted to a wildflower meadow just a stone's throw from Red Cow.

THE QUILLED DANDELION

by Michael Fletcher

As a twelve-year-old, I started collecting and growing cacti. My best schoolfriend was a certain David Hunt, a wizard musician. Knowing nothing about music, I tried to teach myself to play the piano at home, with peculiar results. I asked David to help, and he explained to me about sharps, flats, and key signatures. I in turn gave him one of his first cacti, and in the school holidays, we cycled round local florists, seeing what other cacti we could find. The upshot was that I became a musician and music teacher, and he became a professional botanist, with a long career at Kew gardens, and an especial interest in cacti.

However, we both kept up our friendship, and our other interests. A few years after we had left school, he mentioned to me that he had found a strange dandelion (*Taraxacum officinale*) on a road verge near Cambridge. He had mentioned the plant to Dr. Turrill, keeper of the herbarium at Kew Gardens, who had replied that he would like to grow the plant at Kew, and that a similar dandelion had been found once before (ref 1.). I pestered David until eventually he gave me a small piece to grow. He was a little reluctant, and made me promise I would not let it seed.

British dandelions all produce seed without cross-fertilisation, so the descendants of one plant are usually genetically identical. Slight variations and mutations are thus perpetuated, and over 600 microspecies have been described in the British Isles alone. Few people study them, and even fewer can recognise many of them, yet the plant David gave me was so distinctive, it can be easily noticed by a passer-by.

Dandelions are in the family Asteraceae, one of the largest plant families. Such large families are often subdivided. The Asteraceae have flowers composed of many florets, usually with an outer ring of main petals. A character which has been used to subdivide this family is the nature of these petals. In most species and genera they are a normal petal shape. In others, they are tubular.

Normal dandelions have strap-shaped petals. However David's plant had tubular ones. The flowers thus look a little strange, with apparently narrower petals, which give the whole flower a spiky appearance. The existence of such a dandelion throws the sub-classification of this large family into question. He did not want to see it seeding around, since it would be of interest to know if this particular mutation ever occurred independently again.

A glance at a large display of dandelions may occasionally show such spiky-looking flowers, but looking at them over the years, I found only plants with incurved outer petals, not truly tubular ones.

David's plant grew for many years in a place of honour in our South Street garden, in Reading, Berkshire, in sunshine, in wet soil by the cactus greenhouse. I removed occasional seedlings (whether of this or perhaps only of normal dandelions), and, as he had asked me to, picked off the seedheads. I kept a few packets of seed. However, I became ill in 1996 with a brain tumour, and was unable to do any gardening, nor to remember anything for the next 4-5 years. In 2000, I was unable to refind the plant in my garden. It seemed to have been lost, nor could I find any packeted seed.

In 2002, we moved to Frome, in Somerset. There is a fine display of dandelions here in April and May, growing on the rather heavy acid soil. I soon had the habit of looking at their flowers, hoping to refind this plant, or another like it. In April 2003, I saw spiky flowers on a plant on the shaded grass verge of the Bath road, immediately South of Frome College, on the North side of the town. A quick check with a lens showed tubular petals, so one branch of the forked taproot was dug up, brought triumphantly home, and re-rooted in an enclosed frame.

Other common Asteraceae on lawns include the smooth and rough cat's ears (*Hypochaeris glabra* and *H. radicata*, respectively). In the dry climate of Reading, and especially on the thin alluvial soils near the town centre, the second species, being more drought-tolerant, is commoner on lawns than dandelions.

A small area of lawn in front of a house in South Street, just West of the junction with Sidmouth Street, had a fine display of *H. radicata*. In passing, I noticed, in 1993, a plant with slightly smaller, "spikier" flowers than the others, so I leaned over the wall and picked one. This too had tubular petals, though *H. radicata*, like the dandelion, normally has strap-shaped ones. Later, I collected seed, and grew a few

plants, one of which produced flowers with tubular outer petals. That too was put in the garden, and seed collected. It also disappeared without trace during my illness. After, I failed to germinate any of my seed, nor did my plant, or the original one, seem to exist any more. These forms with tubular petals must be very rare in either species, but they may also occur in other similar Asteraceae. Because they are so easily recognised, they are worth looking out for, and recording.

Reference

Prof. F. E. Reiss; *Journal of Botany*. vol. 62, p. 304 (1924)

I thank David Hunt for checking this note, and for providing the reference and the historical information.



Two capitula of Oxeye Daisy (*Leucanthemum vulgare*) with ray florets showing similar deformity

NOTEWORTHY MOSSES IN READING

by Michael Fletcher

After reviewing a draft of my article for the *Reading Naturalist*, about “The Mosses of Central Reading” in 1987, the late Eric Watson remarked that it would be a long time before anyone wrote such a local flora again. Whether this was a tribute to my thoroughness, or – more likely – a comment on the uninterestingness of the subject, he did not say. My article mentioned the changes and improvements that were taking place in the Reading moss flora as the result of the introduction of smokeless zones, and the resulting reduction in air pollution.

For some years afterwards, I made no systematic attempts to extend or add to the original article, nor did I make any new records of interest in the town. I remained interested in the “Zinc *Bryum*” a plant associated with wire netting fences, iron railings, street furniture and suchlike, which occasionally, when with capsules in good condition, could be determined as *Bryum pallescens*, a species which had hardly been recorded in Berkshire before. In 1996 I became too ill to do any recording at all, and it was not until 1999, as I was recovering from that illness, that I began to be aware of my surroundings, and started noticing and collecting mosses again. It was for a time a fairly futile and frustrating occupation, for my eyesight and memory had been so damaged that I was hardly able to see most mosses, let alone recognise them, nor to sort out my occasional gatherings. One of the few botanical occasions of interest that I remember from that time, was a local meeting of the British Bryological Society in September 2000, which took advantage of the end of the Cold War by gaining access to the Greenham Common Air Base. Interesting habitats were examined for the first time in many years, and some mosses and hepatics, remarkable for Berkshire, were found. However, the findings there have been published elsewhere. My daily interest was in the mosses I was finding nearer home,

some of which seemed worth gathering, recording, and in some cases, cultivating. These, as recorded in my accession catalogue, included:

Bryum's

2655 H	<i>Bryum flaccidum</i>	Abundant. brick wall, North end of Alexandra Rd.,
3656 H	<i>Bryum</i> nr. <i>dunense</i>	Abbey ruins
2655 H	<i>Bryum flaccidum</i>	Abundant. brick wall, North end of Alexandra Rd.
3661 H	<i>Bryum capillare</i> (concave leaf)	Cindery soil, the Coal, Kennet Mouth.
3701 Hc.fr	<i>Bryum pallescens</i> 6.01	Cement under railings, North end of Sidmouth Street.
3711 H	<i>Bryum microerythrocarpum</i>	Soil & cement under drip from corrugated iron roof, Livery Close.
3726 H	<i>Bryum pallescens</i>	Base of railings, Crescent Rd., Sutton School,
Reading.		

Notes on the *Bryum*'s;

Bryum flaccidum is the commonest *Bryum* on trees in East Reading, but rare on walls.

B. dunense is very occasional, resembling, and growing in similar places to *B. bicolor*. It has narrower leaves with an excurrent nerve.

B. microerythrocarpum is rare in Reading, hitherto only seen on soil. It can best be identified by examining the red tubers on the rhizoids, buried in the soil.

The "zinc *Bryum*", sometimes nameable as *B. pallescens*, appears to be common in such habitats, but if so, must be greatly under-recorded. It was hardly recorded in Humphrey Bowen's *Flora of Berkshire*, yet I have over 20 records of this "zinc *Bryum*" from Reading town alone.

Other mosses

3001 H 5.99	<i>Barbula vinealis</i>	North facing ledge of brick wall.
3608 H 9.99	<i>Tortula virescens</i> (note 2)	Old shaded cement path near duckpond, Emmer Green
3612 H.cfr.	<i>Orthotrichum</i> + <i>Cryphaea heteromalla</i> cfr. (note 3)	Elder in scrub between Thames & gasworks.
3618 H 1.00	<i>Ceratodon conicus</i> (note 5)	Calcareous ground, Reading Abbey.
3657 H	<i>Zygodon viridissimus</i>	Sheltered basic ledge, Abbey ruins.
3660 H	<i>Polytrichum piliferum</i> (dark hairpoint)	Cindery soil, Abbey ruins.
3661 H	<i>Bryum capillare</i> (concave leaf)	Cindery soil, Abbey ruins.
3662 H	<i>Phascum?</i>	Soil, Abbey ruins.
3663 H	<i>Lunularia cruciata</i>	Soil, Kennet Mouth.
3664 H	<i>Ceratodon conicus</i> (5)	Cindery soil, Kennet Mouth.
3666 H 93.01	<i>Grimmia trichophylla</i> (10)	Old cement, top of brick pillar, Townlands Hospital, Henley, Oxon.
3680 H 4.01	<i>Lophocolea bidentata</i> (6)	Shaded turf, Watlington House lawn.
3704 H	<i>Brachythecium mildeanum?</i> (7)	Shaded siliceous stone boulders by drive to University music department, Upper Redlands Rd
3699 H	<i>Orthotrichum</i> (large) (4)	Tarmac, base of south-facing wall, by St John's Church entrance
3705 H	<i>Hygrohypnum</i> (7)	With <i>Cladonia</i> on gravelly shaded edge of road, Queens Cottages
3710 H	<i>Tortella tortuosa</i> (?) + <i>Fissidens adianthoides</i> (8)	On limestone, N. facing garden bed, King's Rd., introduced to make a rockery.
3719 (H previous)	<i>Porella platiphylla</i>	Still present. Some large tufts, Reading Abbey
3720 H	<i>Camptothecium lutescens</i> (9)	Cindery ground, Thames Side, W. of Kennet Mouth.
3721 H	<i>Cirriophylum crassinervum</i> (small form)	Cindery ground, Thames Side, W. of Kennet mouth
3727 H	<i>Grimmia</i> (10)	Low brick wall, Erleigh Rd.
3728 noH	<i>Orthotrichum diaphanum</i> + <i>Tortula</i> + <i>O. affine</i> (? blunt leaf)	Lime trunk. Erleigh Rd. Sandstone tomb under tree, St Mary's.
3730 H	<i>Marchantia</i> sp. (Not accessible, presumed <i>M. polymorpha</i>)	

3739 H small	<i>Tortula muralis</i> , (form with leaf tapering)	Damp vertical cement by Holy Brook, Reading library Sheltered bricks, railway bridge near Coley Park.
3740 H	<i>Tortula muralis</i> (long leaved form)	Shaded rock below railway bridge near Coley Park.
3741 H 18.7.01	<i>Ceratodon conicus</i> (5)	Large tuft on sunny new cement balustrade by Kennet, nr. Dukes St bridge.
3742	<i>Conocephalum conicum</i>	Cement side of Holy Brook by Reading library.

Comments

2 Some *Tortula*'s key out as this sp., but I am not convinced that such a supposedly rare plant occurs in Reading.

3 The most dramatic change in the moss flora of Reading has been the improvement of the flora on walls, and, more recently, on trees, as the air has become cleaner. The records of *Cryphaea heteromalla*, hitherto hardly ever seen except well West of Reading, are especially surprising. The large *Orthotrichum*'s are also a welcome new arrival, but being sterile, could not be identified.

4 *Orthotrichum*'s other than *O. diaphanum* are rare on tarmac. *Zygodon* can occur on old cement and mortar, as here, but more rarely than on trees.

5 *Ceratodon conicus* seems commoner in Reading than I have hitherto realised.

6 I have rarely seen any *Lophocolea* so near the centre of Reading before.

7 A surprising record, though not uncommon by the upper Thames, and by other local rivers and streams. Not seen before in Reading, but likely to occur near the Thames and the Kennel

8 There is a minor industry in garden centres, selling attractively shapes limestone boulders, mostly from Yorkshire. On them are often imported *Tortella tortuosa* and *Neckera crispa*, which can persist in quite hostile places, as here.

9 I have noted these less common *Brachythecium*'s more often in recent years.

10 This plant was very scarce, and the gathering even smaller. *Grimmia*'s other than *G. pulvinata* and *G. apocarpa* are very rare in Berkshire, and, except for *G. orbicularis*, not hitherto recorded on brick walls. A few relatively common plants are noted here, as replacements in culture for those lost during my illness

NOTE: Shortly before our move to Frome, in Somerset, in January 2002, my moss herbarium, including all my specimens gathered in Reading, was given to Royce Longton, to be incorporated in the Reading University herbarium.

THE NEW BERKSHIRE FLORA

The long-awaited new "Flora of Berkshire" should be available late this year.

Prof MJ Crawley FRS, Imperial College, Silwood Park, Ascot, SL5 7PY



Neckera crispa

RECORDER'S REPORT FOR BOTANY 2003

Janet Welsh

Most records this year are from society walks which included a mixture of chalk and acidic habitats. Thanks to Colin Dibb for many of the comprehensive lists. Those selected below are either local rarities or new records which now usually are alien species or hybrids. Unfortunately I have had few opportunities for private botanising this summer.

One of the most significant events of the year has been the publication of the Henley Parish Plan *Wildlife and its conservation in Henley upon Thames*, to which Sally Rankin, Rod and Helen d'Ayala made a substantial contribution. It is an excellent flora of the parish recorded within a short time span and has considerable analysis of the common and rare species and of the various habitats. Some of the rarer Oxfordshire plants found include the Sharp-leaved and Round-leaved Fluellens, Weasel's-snout, Bullwort, Ivy Broomrape and Fine-leaved Water-dropwort.

There have been general appeals in the press by local experts Dr Max Coleman and Ted Green for records of elms and ancient trees in general. For more details see the Woodland Trust website: www.woodland-trust.org.uk/ancient-tree-hunt.

Bryopsida (Mosses)

**Campylopus introflexus* New Zealand Moss
1/6/03 Bramshill Plantation, Hants. MKL
A largely tropical montane species of the southern hemisphere which has spread all over the British Isles. Now very common on heathland, sometimes even dominant, particularly after fires.

Magnoliidae

30 Ranunculaceae

Myosurus minimus L. Mousetail
18/4/03 Tiny plant found while weeding garden in sandy soil with Hairy Bittercress, Fromont Drive, Thatcham. SU517670 MWS

Helleborus viridis Green Hellebore
5/4/03 One plant in a hedge near Holmes' Wood, Collins End. SU655785 MB (A woodland glade or edge and hedgerow species, long persistent and restricted to the chalk or limestone; scarce in Oxon. Like Stinking Hellebore this is poisonous and was once used as a purge for humans and cattle. Meryl clearly has an eye for this one.)

31 Berberidaceae

Berberis vulgaris Barberry
9/4/03 One small bush in the hedge on Frieze Farm Lane, Crowsley. SU726796 JW
9/4/03 In the hedge by the gate on the northern side of Crowsley Park. SU732804 JW
18/10/03 Two bushes in an ancient hedge near Ashampstead Common. SU572750 CD (Barberry was eradicated from many hedgerows in the C19 because it was found to be a secondary host of wheat rust. Still declining according to the New Flora.)

32 Papaveraceae

Papaver hybridum L. Rough Poppy
25/8/03 One plant in gravel extraction area, Burdens Heath. SU530685 MWS,CAS,SNP

46 Amaranthaceae

**Amaranthus hybridus* Green Amaranth
20/8/03 One sturdy plant along fieldside near Brightwell-cum-Sotwell. SU582915 MB (An annual and casual native, rarely establishing and a native of tropical and sub-tropical America. It likes nutrient-rich waste ground and arable land.)

71 Primulaceae

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

77 Rosaceae

Sorbus torminalis Wild Service-tree
18/10/03 Ashamstead Common SU583747 CD (Yet another record)

79 Fabaceae

Astragalus glycyphyllos Purple Milk-vetch (or Wild Liquorice)
20/8/03 Along footpath near Brightwell Barrow and near the village of Brightwell-cum-Sotwell. In great profusion, one shoot in flower and seedpods forming. SU582914. MS (A good record of this uncommon species. It may be a new 10Km square record.)

Ornithopus perpusillus Bird's-foot
1/6/03 Bramshill Plantation, Hants. MKL (Likes dry, often acidic short grazed grassland.)

Lathyrus nissolia Grass Vetchling
1/6/03 Bramshill Plantation, Hants. MKL
4/7/03 Wide road verge from Burghfield to Sheffield Bottom. SU667697 MKL,RL,JW. (Has linear leaves which make the plant difficult to spot when not in flower! Large pendulous seedpods. Also locally frequent nearby on the Hosehill Reserve.)

Ulex minor Dwarf Gorse
30/8/03 Unimproved acidic grassland/heath in the Pang Valley SU641757 CD
14/9/03 Bartley Heath, Hants. Susan Erskine

94 Rhamnaceae

Frangula alnus Alder buckthorn
14/9/03 Bartley Heath, Hants. Susan Erskine

105 Oxalidaceae

**Oxalis stricta* L. Upright Yellow-sorrel
4/8/03 3 plants, upright, small yellow flowers. Bucklebury Upper Common, FP through wood. SU531693 MWS,SNP.

111 Apiaceae

Sison amomum L. Stone Parsley
4/8/03 Burdens Heath. SU531690. MWS,SNP

112 Gentianaceae



Gentiana pneumonanthe
Marsh Gentian

Gentiana pneumonanthe Marsh Gentian
14/9/03 Bartley Heath, Hants. Susan Erskine

114 Solonaceae

**Datura stramonium* Thorn-apple
10/9/03 Assendon/Lambridge Wood area MS/CB
A spectacular casual!

122 Lamiaceae

Salvia verbenaca L. Wild Clary
10/10/03 Garden, Chapel Row. SU568696. MWS

Scutellaria minor Lesser Skullcap
14/9/03 Bartley Heath, Hants. Susan Erskine.
Much less common than skullcap and differs by its smaller pale-pinkish purple corolla <10mm, with a nearly straight tube. It is generally restricted to damp acidic habitats. Bowen thought this was decreasing in Berks.

Thymus pulegioides Large Thyme
14/6/03 Aston Rowant NNR. MS (Much less common than wild thyme and geographically biased to the south and east.)

128 Scrophulariaceae

**Verbascum blattaria* L. Moth Mullein
31/8/03 Yellow-flowered form growing on bank at western end of car park, Newbury Station car park, SU469666 MWS. (Stalked glands on back of petals).

**Verbascum bombyciferum* Boiss. Broussa Mullein
31/8/03 Growing in car park and on bank at western end, Newbury Station car park, SU469666 MWS.

Veronica filiformis Slender Speedwell
10/9/03 Assendon/Lambridge Wood area MS/CB (Not recently recorded though can be locally dominant and very colourful in short grass).

139 Asteraceae

**Conyza bilbaoana* (a fleabane)
23/8/03 Growing in Bartholomew street car park, Newbury. SU469666 MWS

Centaurea x moncktonii (*C. jacea* x *C. nigra*) Hybrid Knapweed
April 2003 Many plants on the strip of land by the Foudry Brook between Bennet Road and Island Road, Reading. CB (This is notable as a spring-flowering knapweed and is a new record)

**Petasites fragrans* Winter Heliotrope
18/6/03 Risely / Swallowfield area. MS This plant has spread widely in the British Isles since its introduction in 1806. (Is it a shy flowerer here? Our local patches in Sonning Common never seem to flower yet the population we know in Suffolk flowers every year.)

Liliidae

141 Alismataceae

Baldellia ranunculoides Lesser Water-plantain
2/8/03 Thames Valley Park, Reading. GC (Lakes, margins and grassland of the Nature Reserve created in the early 1990s. This plant is likely to have been derived from an introduction; as a native it was thought by Bowen to be very rare or extinct.)

146 Potamogetonaceae

Potamogeton crispus Curled Pondweed
1/6/03 Bramshill Plantation, Hants. MKL (Very distinctive with crinkly margins to the leaves. Tolerates eutrophic waters.)

152 Lemnaceae

**Lemna gibba* Fat Duckweed
21/12/03 Sonning Common SU718793 A thick mat on wet ground from an overspill or leak from the ponds by the sewage treatment works. JW (Scarce in Oxon).

155 Juncaceae

Juncus acutiflorus Sharp-flowered Rush
14/9/03 Bartley Heath, Hants. Susan Erskine

156 Cyperaceae

Eleogiton fluitans Floating Club-rush
1/6/03, Bramshill Plantation, Hants. MKL (On peaty, usually acid streams, ditches and pools. Fairly frequent on the Bagshot Sands in Hants, records on these soils in Berks.)

Carex vesicaria Bladder Sedge
1/6/03, Bramshill Plantation, Hants. MKL (On lake shores and by streams avoiding peaty and acid places. Very local and rather rare in Hants)



Carex vesicaria
Bladder Sedge

157 Poaceae

Molinia caerulea ssp *arundinacea* Purple Moor-grass
14/9/03 Bartley Heath, Hants. Susan Erskine (Differs from the usual commoner subspecies as a taller grass, with longer panicles, very uneven lengthened branches which are usually spreading at least in flower. There is no distribution map for the subspecies in the Atlas but it is described as widespread but scattered. Also tufted, Susan says it often stands head and shoulders above the general swathe of ssp *caerulea*. A new record)

162 Liliaceae

Allium ursinum Wild Garlic
1/5/03 On sticky clay disturbed by forestry operations near the bridleway through Clayfield Copse, Reading. SU726773 JW

Leucojum aestivum Loddon Lily
1/5/03 Clayfield Copse, Reading. SU724770. JW (I presume a deliberate introduction).

166 Orchidaceae

Platanthera chlorantha Greater Butterfly Orchid
4/7/03 In rough grass by the lake, Hosehill reserve. SU652697 RL/JW

Gymnadenia conopsea Fragrant Orchid
14/6/03 Aston Rowant NNR. MS (Very local in Oxon, decreasing especially outside the Chilterns.)

Dactylorhiza x grandis (*D. fuchsii* x *D. praetermissa*)
1/6/03, Bramshill Plantation, Hants. MKL (another record of this hybrid!)

NOTE All names are after Stace (1997).

Recent introductions are marked *

CONTRIBUTORS

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

(CAS) Christine Storey, (CB) Chris Bucke, (CD) Colin Dibb, (GC) Gordon Crutchfield, (JW) Janet Welsh, (MB) Meryl Beek, (MKL) Michael Keith-Lucas, (MS) Martin Sell, (MWS) Malcolm Storey, (RL) Richard Lee, (SNP) Sarah Priest and to Susan Erskine (Oxon Rare Plants Group)

REFERENCES

- Bowen, H.J.M. (1968)
Brewis A et al (1996)
Clement, E.J. and Foster, M.C. (1994)
Killick, J., Perry, R., Woodell, S.(1998)
Preston CD et al. (2003)
Stace, C (1997) 2nd Edition
Stewart A. et al. (1994)
- The Flora of Berkshire
The Flora of Hampshire.
Alien Plants of the British Isles
The Flora of Oxfordshire
New Atlas of the British and Irish Flora
The New Flora of the British Isles
Scarce Plants in Britain.

RECORDER'S REPORT FOR MYCOLOGY 2003

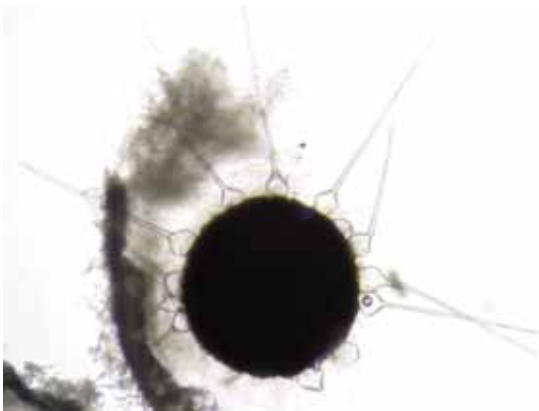
Malcolm Storey

A short report this year. The autumn of 2002 was very dry with few fungi to be found until very late in the season. We all thought: it can't get any worse than this, but 2003 was even drier! As you can read in Ken Spiers' *The Weather at Reading during 2003*, September was the driest since 1959 and the third driest since 1921, October was a bit better, but still the driest since 1995 (and the ninth successive month with below-average rainfall.) However the rain at the beginning of the month was too light to help the fungi very much.

The bracket fungi and some of the others which grow on living and fallen wood fared well, but, for the second year, the grassland species mostly failed to show and it was well into November before woodland species showed in any numbers. By then it's mainly the tough common species, and once the leaves are on the ground, even these are hard to see. As in '02 it was the mycorrhizal genera (those fungi forming an intimate and mutually-beneficial association with tree roots) like *Boletus*, *Lactarius*, *Russula*, *Amanita*, *Tricholoma* and *Cortinarius*, which were most noticeable by their absence.

ASCOMYCOTA

Erysiphales



Phyllactinia guttata Hazel mildew
Ascocarp (photomicrograph)

Phyllactinia guttata Hazel mildew
4/11/03, Lambridge Wood, GR: SU731842, on underside of fallen Beech leaves (MWS/TVFG). Several people this autumn have noticed this powdery mildew forming a conspicuous white covering on occasional fallen Beech leaves. Its usual host is the living leaves of Hazel, but it suddenly seems to be growing on dead Beech leaves!

Leotiales

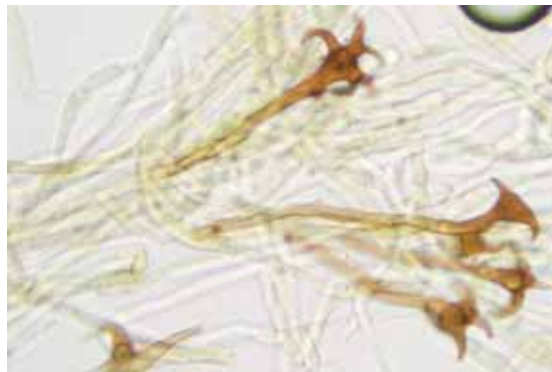
Myriosclerotinia sulcata (a discomycete)
5/4/03, Little Wittenham Nature Reserve, GR: SU573938, in pond; three apothecia growing from a black cylindrical sclerotium inside dead sedge (*Carex riparia* or *acutiformis*) culm, above water line. (Rd'A)

BASIDIOMYCOTA

Ganodermatales

Ganoderma pfeifferi (a bracket fungus)
4/10/03, Sulham Wood, GR: SU645745, at base of Beech trunk broken off at 2m. (MWS, PEC). Upper surface deep purplish-brown, hard (woody) but with resinous layer and the resin forming patches where it runs over onto the pore surface. This species is much more local than *G. resinaceum* from which it differs in the darker, almost purple-black upper surface and harder context.

Hymenochaetales



Inonotus cuticularis
"anchor" setae in cap tomentum (photomicrograph)

Inonotus cuticularis (a bracket fungus)
4/10/03, Sulham Wood, GR: SU646744, on fallen Beech bough. "Anchor" setae in cap tomentum up to 144µm long (PEC, MWS). Another uncommon species best recognised microscopically by the large anchor-shaped setae.

Boletales

Chalciporus piperatus (Peppery Bolete)
26/10/03, Greenham Common, GR: SU503651,
S of Bomb Dump access road, E of Bury's Bank
Road, (MWS/TVFG)



Agaricus bitorquis
Stipe showing "double ring"

Tricholomatales

Agaricaceae

Agaricus bitorquis (a
mushroom)

Hydraulics Research Station,
Benson Lane, Wallingford,
15/08/02, GR: SU616900.

Coprinaceae

Psathyrella bipellis (a
toadstool)

Lambridge Wood, 4/11/03,
GR: SU731842, north of
road, on Beech litter. Gills
without red line in gill edge.

Spore print: black. Spores: narrowly ellipsoid,
with germ pore, 13-15/8-8.5µm. Pleurocystidia:
abundant, fusiform, clamped at base, 80-90.17-
20µm. Cheilocystidia: 42-70/15-20.5µm, clavate,
fusiform, lageniform etc. (MWS/TVFG)

Hydnangiaceae

Laccaria proxima (Scurfy Deceiver)
26/10/03, Greenham Common, GR: SU503651,
S of Bomb Dump access road, E of Bury's Bank
Road. Spores: mostly ellipsoid, 9/7.7µm.
(MWS/TVFG) This is the big brother of *Laccaria*
laccata (The Deceiver), distinguished
microscopically by the slightly elongate spores.

Strophariaceae

Melanotus horizontalis (Wood Oysterling)
26/10/03, Greenham Common, GR: SU503651 ,
S of Bomb Dump access road, E of Bury's Bank
Road, on dead Holly twigs. (MWS/TVFG). A
small laterally attached and almost stipe-less
toadstool, like a black-spored *Crepidotus*.

Tricholomataceae

Calocybe gambosa (St George's Mushroom)
Red Cow, May 03 (TR)

CONTRIBUTORS

Thanks are due to the following members for their submissions:

(GC) Gordon Crutchfield, (MWS) Malcolm Storey, (PEC) Paul Cook, (Rd'A) Rod d'Ayala, (TR) Tony Rayner, (TVFG) Thames Valley Fungus Group.

Marasmius graminum (a toadstool)
17/7/03, Little Wittenham Nature Reserve, GR:
SU568924, Castle Hill in ditch at bottom of
Ramparts (comp 574), growing in area of nettle
and rough grass, on grass (Rd'A)

Marasmius setosus (a toadstool)
26/10/03, Greenham Common, GR: SU503651 ,
S of Bomb Dump access road, E of Bury's Bank
Road, on leaf. (MWS/TVFG). A tiny white-capped
toadstool with a hair-like stipe which is pale
above and brown below.

Melanoleuca cognata (Spring Cavalier)
22/4/03, Upper Bucklebury, GR: SU542683, in
tub on patio with cultivated *Scirpus* sp. (MWS).
One of the few spring toadstools, although it also
occurs in the autumn. Recognised by its overall
yellow-brown tones and yellow spore print.

Mycena oortiana (a toadstool)
26/10/03, Greenham Common, GR: SU503651,
S of Bomb Dump access road, E of Bury's Bank
Road. Smell: iodoform. Cheilocystidia: pyriform,
warted. (MWS/TVFG) A member of the small
group of *Mycena*'s which smell of Iodoform
("Elastoplast") as they dry.

Mycena speirea (Bark Bonnet)
26/10/03, Greenham Common, GR: SU503651,
S of Bomb Dump access road, E of Bury's Bank
Road. On Oak twig. (MWS/TVFG) A tiny *Mycena*,
this species is characteristic of very wet wood in
streams and marshes. Often entirely covered
with minute water droplets, it is very beautiful
under a hand lens. Despite its small size and
fragile appearance, it is actually quite tough.
Recognised microscopically by its covering of
spiral hairs.



Calocybe gambosa
St George's Mushroom

RECORDER'S REPORT FOR LEPIDOPTERA 2003

John Notton

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

At least as far as the Lepidoptera are concerned this seems to have been an above average year both for species, including migrants, and for numbers of individuals. The exceptional weather must have made a contribution to this, but the low numbers of social wasps suggests that at least one source of predation may have been much reduced.

Zygaena filipendulae stephensi Six-spot Burnet
Red Cow Cottage, Large numbers for the third successive year (TR); Emmer Green, last year's garden colony again well in evidence but the flight period was two weeks earlier than 2002 (JHFN).

Epiphyas postvittana Light Brown Apple moth
Emmer Green, common, a total of 41 from 25/5/03 to 13/12/03, the latter a very late record (JHFN). A potential pest of fruit trees, introduced from Australia about the middle of the last century.

Dichrorampha alpinana A Tortrix moth
Upper Bucklebury, at light, on 14/6/03 (MWS).

Evergestis pallidata, A Pyralid moth
Upper Bucklebury, one on 5/8/03 (MWS); Red Cow Cottage, two on 17/9/03, the first record for the site (TR).



Diasemiopsis ramburialis

Diasemiopsis ramburialis, Emmer Green
One at light on 24/9/03 (JHFN). A nationally scarce, migrant Pyralid moth. Brian Baker recorded only one specimen for Berkshire.

Aglossa pinguinalis, Large Tabby
Emmer Green, one at light on 16/6/03 (JHFN).
Much less common than formerly.

Nomophila noctuella Rush veneer
Emmer Green, 31 at light between 28/6/03 and 1/11/03 (JHFN). A well-known migrant species, which was plentiful in 2003.

Ochlodes faunus, Large Skipper
Red Cow Cottage, recorded on 18 days between 2/6/03 and 12/7/03 (TR); one in Tilehurst 14/6/03 (JMH). A species with declining numbers.

Coleus croceus, Clouded Yellow
One at Lardon Chase, Streatley 14/5/03 (JMH).

Lycaena phlaeas eleus, Small Copper
Red Cow cottage, plentiful on 15 days between 23/4 and 26/5/03 and on a further 60 days from 26/6 to 17/10/03 (TR). Three generations noted in Harris Garden (JMH).

Cupido minimus Small Blue
Several including a mating pair in Lardon Chase (SU588809) on 29/5/03 (TR) (JMH).

Polyommatus icarus icarus, Common Blue
Red Cow Cottage, the most abundant butterfly on site this year. Peak count of 155 on 27/7/03, an all-time record (TR).

Lysandra coridon, Chalkhill Blue
Lots at Seven Barrows (SU329828) on 26/7/03 (TR); Lardon Chase, 38 counted on 9/8/03 (JMH).

Limenitis camilla, White Admiral
One at Bartley Heath (SU727535) on 14/9/03 (TR). A late date for this species.

Vanessa cardui, Painted Lady
Red Cow Cottage recorded on 49 days from 30/5/03 to 27/9/03, Peak count 19 on 27/7/03 (TR); Harris Garden, four records from 20/6/03 to 25/9/03 (JMH). An exceptional year for this species.

Melanargia galathea serena, Marbled White
Red Cow Cottage, recorded on 18 days from
24/6/03 to 30/7/03, peak count 72 on 5/7/03 (TR);
Harris Garden, one on 20/6/03 (JMH).

Drepana binaria, Oak Hook Tip
Red Cow Cottage, four
records between 5/8/03
and 18/9/03 (TR)

*Hemistola
chrysoprasaria*, Small
Emerald
Red Cow Cottage, one
on 26/8/03 (TR).

Idaea trigeminata,
Treble Brown Spot
Upper Bucklebury, one
at light 14/6/03 (MWS).

Laspeyria flexula,
Beautiful Carpet
Red Cow cottage, one on 1/7/03, the first record
for the site (TR).

Chloroclysta siterata, Red-green Carpet
Emmer Green, three records from 15/10/03 to
5/11/03 (JHFN).

Eupithecia inturbata, Maple Pug
Emmer Green, one on 26/7/03 (JHFN).

Perizoma flavofasciata, Sandy Carpet
Red Cow Cottage, one on 6/6/03, the only
previous record here was in 1993 (TR).

*Trichopteryx
carpinata*, Early
Tooth-striped
Red Cow Cottage,
one on 24/3/03, the
first record since 1993
(TR).

Acasis viretata,
Yellow-barred Brindle
Emmer Green, one
on 30/5/03 (JHFN).

Chiasmia clathrata
clathrata, Latticed
Heath
Red Cow Cottage, one on 25/8/03, only previous
record in 1992 (TR). This day-flying moth may be
under-recorded as not found in the trap.

Ectropis consonaria, Square Spot
Red Cow Cottage, one on 25/6/03 (TR).

Macroglossum stellatarum, Hummingbird Hawk
Wargrave on 15/6/03 (RP), Red Cow Cottage,
recorded on nine days from 3/7/03 to 11/9/03;
Emmer Green, three on 21-23/9/03 (JHFN);
Basildon Park on 30/8/03, Harris garden on
5/9/03 and Tilehurst on
21/9/03 (JMH).

Deilephila elpenor,
Elephant Hawk
Red Cow Cottage,
several dates from
27/5/03 to 9/7/03, peak
number in trap 10 (TR);
Caversham, larva on
Fuchsia, 4/8/03 (VM).

Deilephila porcellus,
Small Elephant Hawk
Red Cow Cottage,
recorded on 4 days
between 27/5/03 and
25/6/03, peak number
in trap - 4, as last year (TR).

Furcula furcula, Sallow Kitten
Emmer Green, reared from a larva collected in
2001 after 2 winters in the pupa (JHFN).

Ptilodontella cucullina, Maple Prominent
Red Cow Cottage, one at light on 8/8/03 (TR).

Callimorpha dominula, Scarlet Tiger
Red Cow Cottage, two daytime records on
29/6/03 and 13/8/03 (TR); Moor Copse, one on
22/6/03 (JMH).

Agrotis ipsilon, Dark
Swordgrass
Red Cow Cottage,
one on 8/8/03 at light,
(det. RL), two later
records on 25/8/03
and 19/9/03 (TR);
Emmer Green, a total
of six (JHFN).

Peridroma saucia,
Pearly Underwing
Emmer Green, one
on 16/6/03 at light
(JHFN). A migrant

species.

Xestia baja, Dotted Clay
Red Cow Cottage, first record for site on 8/8/03,
two trapped on 15/9/03 (TR).



Drepana binaria
Oak Hook Tip



Perizoma flavofasciata
Sandy Carpet



Hecatera dysodea
Small Ranunculus

Hecatera dysodea, Small Ranunculus
Several larvae feeding on flowers of Prickly Lettuce *Lactuca serriola* near the Cattle Market in Reading town centre, SU709736, on 19/7/03. After rearing them, the identity of the moth was confirmed (DGN). The species was said to be "scarce" in Berkshire in the Victorian era and considered extinct nationally as a resident early in the last century. Occasional subsequent records were believed to be migrants. It appears to have re-introduced itself in Kent in 1999 and may be spreading. Voucher specimens have been deposited at the Natural History Museum, London.

Xanthia icteritia, Sallow
Red Cow Cottage, three records from 15/9/03 to 4/11/03, maximum count 3, the only previous record here was in 1992 (TR).

Craniophora ligustri, Coronet
Red Cow Cottage, not previously recorded, but seen on several dates between 24/5/03 and 9/7/03, probably overlooked before. Emmer Green, one on 8/7/03 (JHFN).

Euplexia lucipara, Small Angle-shades
Red Cow Cottage, one on 31/5/03 (TR).

Apamea sublustris, Reddish light arches
Emmer Green, four records at light between 20/6/03 and 27/6/03 (JHFN).

Celaena leucostigma leucostigma, Crescent
Red Cow Cottage, one on 8/8/03 at light, identification by RL.



Spodoptera exigua
Small Mottled Willow

Spodoptera exigua, Small Mottled Willow
Upper Bucklebury, one at light on 5/8/03 (MWS). A migrant which can breed here when the weather is warm enough.

Heliothis peltigera, Bordered straw
Emmer Green, two records on 17/8/03 and 21/9/03 (JHFN). A migrant, which may breed here in favourable years.

Nycteola revayana, Oak Nycteoline
Emmer Green, one at light on 5/11/03 (JHFN).

Polychrysis moneta, Golden Plusia
Red Cow Cottage, one on 5/7/03, the first record for the site (TR).

Catocala nupta, Red Underwing
Red Cow Cottage, caught in trap, or found at rest on outbuilding wall, on three occasions from 2/9/03 to 15/9/03. This moth is recorded every year here (TR).

Schrankia costaestrigalis, Pinion-streaked Snout
Emmer Green, one at light on 4/10/03 (JHFN). A localised species which is an unusual visitor to a garden environment, especially this year – wet meadows and boggy places are preferred!



Heliothis peltigera
Bordered Straw

CONTRIBUTORS

Thanks are due to the following members for their submissions:

(DGN) David Notton; (JHFN) John Notton; (JMH) Jan Haseler; (KHG) Ken Grinstead; (KT) Ken Thomas; (MWS) Malcolm Storey; (RP) Rowena Perry; (TR) Tony Rayner.

RECORDING WILDLIFE OBSERVATIONS

Chris Raper

Before the Recorder's report, I'd like to show a little of how each of us can record in our own patch and really make a difference.

Why do we record?

In general we record so that we can learn more about the world around us. This might be to learn about a kind of animal or plant to understand more about how common they are or when they appear or how long they are in our area. But it might also be to study one particular patch and find out what we have there – starting from a blank sheet and just compiling a list of the species that either live or move through our area.

With this information we can make decisions that affect how we use our land. For instance, individual landowners have a responsibility to look after their land and take into consideration any rare species when they make changes to the way the land is used.

Regional bodies, such as local wildlife trusts (e.g. BBOWT) and national organisations, such as English Nature, collate information provided by amateur recorders like us and then feed this information back into the system to the decision makers who have to work out how best to manage land. Often this information can be used to modify potentially destructive construction or agricultural schemes and either save rare species & habitats completely, or make the development have the least impact.

But without the initial records, collected by recorders like us, the system would grind to a halt and our precious natural resources would be at risk because we simply wouldn't know enough about them.

How should we record to get the best results?

I think I'd turn this question around and say first of all that there are no strict rules – we each do what we can and record as much as we want to or are able to do. But the more data we record, the more useful the information will be for anyone who wants to use it.

As a basic principle we should always record:

- The name of the species – as accurate and precise an identification as possible – if you are at all unsure you must either omit the record or make a note alongside it
- The date you saw it
- The location where you saw it – if possible give a grid reference to make mapping easier
- The name of the person who recorded it

Below I have included some very good examples of records submitted to the entomological recorder this year. I am sure Tony Rayner won't mind me holding his data up as an example, because it illustrates how easy recording can be – just a matter of writing down what you see in a logical and clear way.

When you take examples like this and repeat them over a few years you can build up a valuable personal record of what you see. But also you can submit these records to local and national recording schemes and they will have the minimum of effort to incorporate the data into their schemes.

Tony's 2003 records for Stag Beetles and part of his 2003 Dragonfly records follow. Tony also recorded Hornet Robber Fly in detail, and interested readers will find those records on the Society website.

2003 Stag Beetle records in Cholsey

This is a good example of how you can intensively record one species and learn a lot about the pattern of flight / emergence.

Date of sighting	Time of sighting	Location	O/S ref	Number	Sex	Comment
6-Jun-03	21:45	Red Cow	SU592868	1	Male	Flew out of Viburnum
7-Jun-03	21:45	Red Cow	SU592868	2	One male	1 in Viburnum, 1 nearby in flight
26-Jun-03	14:00	Red Cow	SU592868	1	Male	Flying over garden
3-Jul-03	13:15	Red Cow	SU592868	1	Female	Crawling on ground
4-Jul-03	13:03	Red Cow	SU592868	1	Male	Flying around meadow (unusual time)
6-Jul-03	17:00	Red Cow	SU592868	1	Female	Crawling on meadow edge
6-Jul-03	22:06	Red Cow	SU592868	1	Male	Flying at entrance to meadow
14-Jul-03	am	Cholsey Recreation Ground		1	Male	In flight
28-Jul-03	13:03	Red Cow	SU592868	1	Female	Crawling at entrance to meadow
3-Aug-03	17:03	Red Cow	SU592868	1	Female	Crawling at entrance to meadow

2003 Dragonfly records at Red Cow

Tables such as this are excellent for recording one kind of insect in your patch – such as dragonflies or butterflies. Just start with the first species you see and add each new species along the left hand side as you see them in the year. Go out and observe regularly throughout the season and write the dates across the page and record each field trip vertically in the table.

When you have finished the season you will be able to see easily which species are single & double-brooded, which species emerge first or have the longest flight period and statistically which species are most numerous in your little corner of the world.

Dragonfly records part 1 – 23rd April to 3rd July

Day	23	27	29	3	8	9	11	12	19	24	25	28	30	31	1	2	4	5	7	9	11	12	13	24	25	26	29	30	1	3						
Month	4	4	4	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	6	6	6	6	6	6	7	7						
Large Red Damselfly	2	2	2	3	2	3	1	2	4	7	2	2				4				5	2		1	1	1	2	2									
Broad Bodied Chaser													1	1					2	1		2	3	1	1	1	1									
Azure Damselfly									3	2	1	5	2	5	20	5	6	56	9	2	40	40	100	40	20	20	4	7	10							
Blue Tailed Damselfly																						2			1	2	2			1						
Club Tailed Dragonfly															1																					
Banded Demoiselle																											1									
Emperor Dragonfly																			1	1		3	2	1	1	1	1									
Four Spot Chaser																																				
Southern Hawker																												1								
Common Darter																										1										
Ruddy Darter																																				
Brown Hawker																																				
Migrant Hawker																																				
White legged Damsel																																				
Emerald Damselfly																																				
Common Blue Damsel																																				
Scarce Chaser																																				

Thanks are due to Tony Rayner for permission to reproduce his data.

RECORDER'S REPORT FOR ENTOMOLOGY and other INVERTEBRATES 2003

Chris Raper

ARTHROPODA

CHILOPODA

Geophilus easoni Arthur et al, 2001 (an earth centipede)
18/10/03, Upper Bucklebury, GR: SU542683, female, in clump of Honey Fungus growing on old Ash stump, voucher retained (MWS)

INSECTA

Coleoptera

Gyrinidae

Orectochilus villosus (Mueller, 1776) (Hairy Whirligig)
10/7/03, Maiden Erlegh Country Park, GR: SU746710, at MV light, voucher retained (MWS)

Elateridae

Ampedus balteatus (L., 1758) (a click beetle)
7/6/03, Upper Bucklebury, GR: SU542683,
indoors, voucher (MWS)

Lycidae

Platycis minuta (Fab.) (a net-winged beetle)
24/8/03, Upper Bucklebury, GR: SU542683, on
Lemon Verbena, voucher (MWS)

Apionidae

Nanophyes marmoratus (Goeze, 1777) (Loosestrife
Weevil)
11/5/03, Upper Bucklebury, GR: SU542683, on
Purple Loosestrife, garden pond, voucher (MWS)

Curculionidae

Dorytomus dejeani Faust, 1882 (a weevil)
29/3/03, Bucklebury Common, GR: SU553691,
on male Sallow catkins, voucher (MWS)

Polydrusus flavipes (Degeer, 1775) (a weevil)
18/5/03, Sulham Woods, GR: SU644748, on
Butcher's Broom under Beech, voucher (MWS)

Lucanidae

Cetonia aurata (Linnaeus, 1758) (Rose chafer)
30/07/2003, garden, Emmer Green, (JN)

Dorcus parallelipipedus (Linnaeus, 1758) (Lesser
Stag Beetle)
27/06/2003 & 13/7/2003, Red Cow, Cholsey, GR:
SU592868 (AR), (first date seen under metal
sheet in meadow, second date in garden at Red
Cow, Cholsey)

Lucanus cervus (Linnaeus, 1758) (Stag Beetle)
Red Cow, Cholsey, GR: SU592868 (AR)
See details in table opposite – an average year
but recording was reduced due to absence
during the peak period.

Diptera

Pipunculidae

Pipunculus fonsceai Coe (a big-headed fly)
20/6/03, Upper Bucklebury, GR:
SU542683, indoors, voucher (MWS)

Tipulidae

Pedicia rivosa (Linnaeus, 1758) (a crane-fly)
Female, 5/5/03, Heath Trap 4/5 May 03,
Upper Bucklebury, GR: SU542683,
voucher (MWS)

Asilidae

Asilus crabroniformis Linn. (Hornet Robber Fly)
Red Cow, Cholsey GR: SU592868 (AR)
See table on website – a good year for this fly.

Tachinidae

Cistogaster globosa (Fab., 1775) (a Parasite Fly)
19/07/03, Dry Sandford Pit, Oxon GR: SU467995
Female. Photographed. (CMTR).
A very rare parasite fly that attacks bugs.

Syrphidae

Merodon equestris (Fabricius, 1794) (a Hoverfly)
07/06/03, Tilehurst GR: SU663750 (CMTR)
A common hoverfly in gardens – larvae feed on
Daffodil bulbs. Lots of pairs seen this year –
many more than in previous years.

Volucella inanis (a Hoverfly)
06/08/03, garden, Emmer Green (JN)
A large and spectacular wasp-mimic hoverfly

Volucella zonaria (a Hoverfly)
06/08/03, garden, Emmer Green (JN)
A large and spectacular wasp-mimic hoverfly,
currently expanding its range west and north

Stratiomyidae

Odontomyia angulata (Panzer) (a Soldier Fly)
19/07/03, Dry Sandford Pit, Oxon GR:
SU467995. Photographed (CMTR)
A rare soldier fly associated with ponds.

Stratiomys chamaeleon (Linnaeus) (a Soldier Fly)
19/07/03, Dry Sandford Pit, Oxon GR:
SU467995. Photographed. (CMTR)
A large black & yellow soldier fly associated with
marshy areas – extremely rare – only known
currently from 7 localities.

Stratiomys potamida (Meigen) (a Soldier Fly)
19/07/03, Dry Sandford Pit, Oxon GR:
SU467995. Photographed. (CMTR)
A large black & yellow soldier fly associated with

marshy
areas –
uncommon



Pedicia rivosa

Hymenoptera

Cimbicidae

Cimbex femoratus (Linn.) (a club-horned sawfly)
18/5/03, Upper Bucklebury, GR: SU542684, (WF, MWS)

Andrenidae

Andrena hattorfiana (Fabricius) (a Mining Bee)
19/07/03, Dry Sandford Pit, Oxon GR: SU467995. Photographed. (CMTR)
A rare mining bee associated with Field Scabious on calcareous grassland

Vespidae

Vespa crabro Linnaeus (Hornet)
22/8/03 – 7/9/03, garden Emmer Green.
Unusually common in the garden this year. The first record was in the moth trap! (JN)

Siphonaptera

Nosopsyllus fasciatus (Bosc, 1800) (rat flea)
12/7/03, Upper Bucklebury, GR: SU542683, 3 females and 1 male from debris in rat's nest in compost heap, voucher retained (MWS)

Orchopeas howardi howardi (Baker, 1895) (grey squirrel flea)
Female imago, 24/5/03, Dunstan Park, GR: SU521683, alighted on anorak, voucher (MWS).
An alien flea introduced from North America with the host.



Orchopeas howardi howardi
Grey Squirrel Flea

Ctenophthalmus nobilis (Rothschild, 1898) (mammal flea)
Female imago, 12/7/03, Upper Bucklebury, GR: SU542683, in rat's nest in compost heap, voucher retained (MWS)

Trichoptera

Phryganea grandis L., 1758 (a caddisfly)
Male and female imagines, 12/6/03, Maiden Erleigh Country Park, GR: SU747710, at MV, wide grassy path towards Western end, voucher retained (MWS)

CONTRIBUTORS

Thanks are due to the following members for their submissions:

(AR) Tony Rayner, (CMTR) Chris Raper, (MWS) Malcolm Storey, (WF) Wynne Frankum

Orthoptera

Metriopectera roeselii (Hagenbach, 1822) (Roesel's Bush Cricket)
Red Cow, Cholsey, GR:SU592868 Heard in the meadow on numerous occasions through the summer. (AR) A recently arrival in Berks that continues to make steady progress west and north across Britain

Odonata

(see also, Tony Rayner's dragonfly records table, above)

Aeshna cyanea (Muller, 1764) (southern hawker dragonfly)
Female imago, 30/8/03, Upper Bucklebury, GR: SU542683, came indoors through open patio door. Sadly, it landed in hot washing up water and died (MWS)

Platycnemis pennipes (Pallas, 1771) (White-legged Damselfly)
08/08/03, Red Cow, Cholsey, GR: SU592868 4th site record (AR)

Ephemeroptera

Ephemera lineata Eaton, 1870 (a Mayfly)
14/06/03, Skilton Road, Tilehurst GR: SU663750
Seen on an outside wall of my house. (CMTR)
This large mayfly was once thought to be very rare but has been cropping up all along the Thames from Streatley to Henley-on-Thames.

Hemiptera

Ledra aurita (Linnaeus) (a leaf hopper)
16/10/03, garden, Emmer Green (JN)
A local species associated with Oak.

Notonecta maculata Fabricius (a water-boatman)
20/03/03, garden, Emmer Green (JN)

ASCHELMINTHES

Gastrotricha (Bristle Backs, Hairy Backs or Gastrotriches)
5/10/03, Upper Bucklebury, GR: SU542683, in garden pond, (MWS).

RECORDER'S REPORT FOR VERTEBRATES 2003

Tony Rayner

The number of contributors has increased, but I still need more. Notable record gaps at present include Toad breeding sites, Frog spawning dates and garden counts, Stoat and Adder sightings.

The well being of our amphibians and Hedgehogs give particular cause for concern so any information would be welcome in 2004. On the plus side it would appear from the following records that Hares, Badgers and Roe Deer are among species prospering in the area.

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

PISCES

Cyprinus carpio Carp
9 released in Loddon at Whistley Mill, Hurst, Feb 03 (RDA)

Leuciscus cephalus Chub
Fewer caught than previous year in Kennet at Upper Benyons. (RDA)

Barbus barbus Barbel
150 released in Ufton River, March 03. (RDA)
Fewer caught than previous year in Kennet at Upper Benyons. (RDA)

Rutilus rutilus Roach
5500 fish released at Cottage Lane lakes, Pingewood – mainly Roach, April 03. (RDA)

Scardinius erythrophthalmus Rudd
Some released at Cottage Lane lakes, Pingewood, April 03. (RDA)

AMPHIBIA

Bufo bufo Common Toad
No Cholsey records for 2nd successive year. (TR)

Triturus vulgaris Smooth Newt
Three in Tilehurst garden SU666742 on 6/6/03 (JH)
Present in all ponds but numbers down. (TR)

Rana temporaria Common Frog
70+ in Westwood Road, Tilehurst SU666742 on 6/3/03 (JH). Frogs first noticed on 1/3/03 and spawning began on 10/3/03 in a Park Lane, Tilehurst garden (CD). Spawn in garden pond, 11/3/03,



Rana temporaria Common Frog

Emmer Green
SU716773 (JWM.)

At least 20 pairs at spawning time in and around a small garden pond in Oatlands Road, Shinfield. Surplus taken from this pond on 25/3/03 to stock my meadow pond, where there had been no sign of frogs in March. Four balls of frogspawn were laid but the frogs soon

disappeared coinciding with visits from a Heron. No tadpoles survived, eaten by predators? inc. Smooth Newts. (TR)

REPTILIA

Lacerta vivipara Common Lizard
Adults seen on 16 days from 9/5/03 to 10/8/03 never more than one. Easily the most records ever for the site. Mainly found on small heaps of grass cuttings beside metal sheets. (TR)

Anguis fragilis Slow-worm
Recorded on 59 days between 9/3/03 and 31/8/03. One also seen on 25/9/03 and 26/9/03. The warm dry weather probably accounts for the lack of records in September. Mating seen on 20/5/03 and 22/5/03 – probably the same pair both times. No evidence of successful breeding this year. The maximum no seen was 6 on 1/5/03 and 21/5/03. Individuals in the process of sloughing were seen on 3 occasions from 27/4/03 to 29/4/03. (TR)
One on 5/5/03 and 28/9/03 in Tilehurst garden SU666742 (JH)

Colony previously reported from a Wokingham garden (RG31) still present in compost heap. (CD)



Anguis fragilis Slow-worms – pairing

Natrix natrix Grass Snake

Observed on 52 days between 20/4/03 and 5/9/03 – a much shorter period than usual. Mating only witnessed on 21/8/03 – an unusually late date, quite rare per textbooks.



Natrix natrix Grass Snake swimming across pond

Evidence of successful breeding not conclusive this year. Another year of decline for this species on the site. Maximum number at any one time only 3. On 1/9/03 a freshly shed skin found measuring 97.5 cm, thought to come from an exceptionally large male. (TR)

A very early record on 29/1/03 of a very sluggish individual at Hogmoor Copse. Probably displaced by recent floods. A female basking by pond at Park Wood on 4/5/03. Two pregnant females and a male under corrugated sheet at Moor Copse on 5/6/03. One very small young at same spot on 7/9/03. A male by Pang in Hogmoor Copse on 9/6/03. (MR)

CHIROPTERA

Pipistrellus pipistrellus Pipistrelle Bat
Early record on 30/3/03 (TR)

INSECTIVORA

Erinaceus europaeus Hedgehog
Three in Westwood Road, Tilehurst SU666742 on 10/9/03 (JH)
One dead on Greys Road, Henley on 31/3/03 (JWM)
No Cholsey records again this year. (TR)

Sorex araneus Common Shrew
Still the third most commonly seen small mammal on site after Field and Bank Voles. (TR) One dead on Moor Copse path on 12/4/03 (MR) One live at Moor Copse on 7/5/03 (MR)

Sorex minutus Pigmy Shrew
First records for the site this year, probably overlooked before. (TR)
One in dormouse box at Moor Copse on 18/7/03 (MR)

Neomys fodiens Water Shrew
First and only record for Red Cow, one seen to drop into pond on 30/3/03 (TR)

Talpa europaea Mole
No specific records, but still plenty of molehills to be seen in the Cholsey area. (TR)

CARNIVORA

Meles meles Badger

One dead beside Tidmarsh Road near Englefield on 10/9/03. (TR) New dung pits in Hogmoor Wood on 6/3/03,

footprints suggest they came from outside the Moor Copse reserve. (MR) Signs of resident badger activity at Moor Copse on 16/4/03 (MR). One running on road near Little Wittenham SU571917 at 23.00 on 15/9/03. One dead on A417 before Aston Tirrold SU562848 on 23/10/03. A freshly used latrine in Red Cow meadow corner on 26/3/03. Another latrine dug in same area found on 20/5/03. A dead young female in the centre of a field opposite Cholsey Church SU586871 on 25/12/03. No obvious cause of death. (All TR). One seen in Caps Lane, Cholsey SU599869 on 3/7/03 (CW). Badgers regularly visited a back garden in Kidmore End Road, Emmer Green in the year. On 4/6/03 a pair seen mating on the patio outside the kitchen door at 4am. (JWM)

Mustela nivalis Weasel
One at Westridge Copse Aldworth on 5/1/03 (ProfCB)
Stoat/Weasel on 9/6/03 on Goring & Streatley Golf Course. Seen catching a young rabbit. A golfer intervened in an attempt to save the rabbit, drove the mustelid away but only enabled a crow to make off with the dead rabbit. (ANO)
One at Crowmarsh Hill SU626889 on 27/8/03, and another crossing Wallingford Rd, Cholsey by Cholsey Brook SU596874 on 25/12/03. (TR)

Mustela putorius Polecat
One dead on road near Newington SU606974 on 27/4/03 . One seen at same spot near farm two years previous. (RR)

Mustela vison American Mink
One in mink trap at Moor Copse on 28/1/03. (MR)

Vulpes vulpes Fox
One seen in neighbour's garden in Long Lane, Tilehurst on 8/1/03 (CB). Another in a back garden in Kidmore End Road on 16/1/03. (JWM)
One crossing road at Beale Park, Lower Basildon on 13/11/03 at 22.30. (TR) Male basking in sun in middle of bracken area before disappearing down a hole at Moor Copse on 11/5/03 (MR)
No Cholsey sightings, but plenty of evidence of their night time visits. (TR)

ARTIODACTYLA

Muntiacus muntjak Muntjac

A doe disturbed in wooded garden in Kidmore End Road Emmer Green on 10/6/03, barking angrily as it moved away. In the same area a fawn disturbed on 12/6/03. (JWM) One in Cholsey orchard on 7/1/03. (TR) One in Park Wood inside deer fencing on 14/2/03. Two in Park Wood on 31/8/03. In 5 acre field at Moor Copse one youngster on 25/2/03 and a male on 17/3/03 and 12/4/03. In Hogmoor Copse one youngster on 28/7/03 and two deer on 3/12/03 (All MR from Moor Copse reserve)

Capreolus capreolus Roe Deer

One in a Kidmore End Road Emmer Green front garden on 11/5/03 (JWM). Four at Hithercroft, Cholsey SU589883 on 7/1/03. Three at Old Field Centre, Churn on 28/1/03. Three between Cholsey & Mackney SU574896 on 2/12/03. (All TR) Female in Hogmoor Copse on 25/10/03 (MR). Three on the island, Moor Copse on 29/10/03 (MR). One on Grove Road, Sonning Common SU731776 on 5/8/03 at 6AM (JW)

LAGOMORPHA

Lepus capensis Brown Hare

Two ran across road between arable fields at Dunsden on 12/2/03 at 8.45 AM. (JWM)

One at Dunsden Green on 5/8/03 at 6.30AM (JW). Three at Huttons Farm, Hambleden on 8/8/03 (JWM). One crossing the road by Beale Trust at Lower Basildon on 14/10/03. (FH)

Two at Hithercroft, Cholsey SU592883 on 7/1/03. One ran across A417 just beyond Streatley SU588816 at 22.30 on 27/1/03. One in East End Farm paddock, Cholsey on 15/5/03 and 15/9/03. One 6/8/03 in Red Cow meadow, Cholsey on 6/8/03 and 14/8/03 both at 7.30 AM and again on 16/9/03 at 6.30 AM. One in field beyond the same meadow on 20/9/03. (TR)

CONTRIBUTORS

Thanks are due to the following members for their submissions:

(CB) Cath Butcher, (CD) Colin Dibb, (Rd/A) Rod d'Ayala, (FH) Fiona Hoggarth, (JH) Jan Haseler, (JWM) John Marshall, (MR) Martin Raper, (ProfCB) Chris Bucke, (RR) Ro Rayner, (TR) Tony Rayner, (JW) Janet Welsh, (CW) Ces Wheeler, (RDA) Reading & District Angling Association.

Oryctolagus cuniculus Rabbit

No specific records, but general opinion is of a sizeable increase in numbers. Those employed to kill rabbits in S Oxon said to be fully occupied. (TR)

RODENTIA

Sciurus carolinensis Grey Squirrel

Regular visitors to Red Cow despite squirrel proof feeders and swift dogs. (TR)

Rattus norvegicus Brown Rat

Thankfully no Cholsey records. (TR)

Apodemus sylvaticus Wood Mouse

Only 5 definite sightings but still considered common on the site. (TR)

One in dormouse box in nest of dry leaves at Moor Copse on 26/4/03 (MR)

Found in several dormouse boxes at Moor Copse on 4/11/03 (MR).

Microtus agrestis Field Vole

Over 150 sightings in the year, several nests of live young found. (TR)

One at Moor Copse on 18/3/03 and 18/7/03. Two babies in dormouse box in nest of leaves at Moor Copse on 7/9/03.(MR)



Clethrionomys glareolus Bank Vole

Clethrionomys glareolus Bank Vole

Easily the second most commonly seen small mammal on site (after Field Vole). Nests of live young found including one on 8/1/03. (TR) One caught in Longworth trap at Moor Copse on 21/2/03 (MR)

Arvicola terrestris Water Vole

One swimming in a golf course pond at Drayton SU478932 on 19/9/03. (TR)

MARSUPIA

Macropus sp. Wallaby

One dead by road near the Fox at Bix April/May03 (Rd/A)

THE WEATHER AT READING DURING 2003

Ken Spiers

Department of Meteorology, University of Reading

After a wet January, the year to the middle of November, was dominated by high-pressure systems over or near to the British Isles. This produced very dry, warm and sunny conditions, with July and August experiencing spells of very high temperatures. Only two months had mean pressure below average, June and November. The mean pressure for the year was the highest since 1973 and the second highest since 1960. The year will always be remembered for the record high temperatures in August; overall, the annual mean temperature was only bettered by the years 1921 and 1949, with the annual mean maximum the highest since 1921. Up to the middle of November, it looked as if 2003 was going to be the driest on record. However November was very wet, so the annual total was only the lowest since 1997 and the eighth lowest since 1921 and the number of rain and wet days the lowest since 1996. This was the sunniest year since 1959 and the second sunniest since 1956, when sunshine records were first kept. Only May and July were below average, with August the sunniest month since July 1999 and the 14.2 hours sunshine on 13th July, the highest daily total since May 1997.

January started cold, with temperatures well below average. Light to moderate snow showers, were reported on three days during this period, and with a minimum temperature of -6.6° Celsius recorded on the 12th, the lowest for any day in January in the last ten years. However, by the middle of the month it became unsettled with rain, heavy at times. Temperatures began to rise, resulting in a short warm spell, in the last week of the month, producing the second highest maximum temperature since 1987, 14.3° Celsius on the 27th. The last couple of days saw the start of another cold spell, with snow on the 30th. Throughout the month it remained very sunny, with the total for the month making this January the sunniest since 1984.

February was a cold month, with the mean temperature the lowest since 1996. Most days during the first half witnessed showers, some falling as snow. By the middle of the month pressure began to rise and this brought with it dry, sunny conditions with widespread frosts at night. After the 13th, there was no significant amount of rainfall until the 28th, with the total for the month the lowest since 1999. Sunshine was once again in abundance, especially from the 14th onwards, which witnessed some very sunny days. The total for the month was the highest since 1998

March began unsettled with rain and showers, sunny periods and frosts. From the 12th high pressure had established itself across the British Isles, with the rest of the month warm, dry and very sunny. Towards the end of the month it became very mild, with daytime temperatures around five degrees above average. As a result, this March was the warmest since 1998 and the mean daytime temperature was the highest since 1961. March was the driest since 2000 and from the 8th to the end of the month, twenty-four days, no rainfall was recorded; the longest period without rain in March since before 1968. However the main feature of the month was the sunshine, with some very sunny days in the second half of the month. This meant March was the sunniest since 1995 and the second sunniest since 1956.

April was a dry, sunny and warm month. However from the 7th to the 11th, temperatures did drop below average, cold enough for sleet on the 9th and a snow shower on the 10th. From the 13th temperatures began to rise dramatically, culminating on the 16th when a temperature of 25.7° Celsius was recorded, the highest for any day in April since 1949. Overall, this was the warmest April since 1985. Once again April was very sunny, continuing the very sunny start to the year, with most of the month's rainfall falling in the last week.

May was a disappointing month with temperatures near average and the first month this year to record sunshine below average. The redeeming features were that this was the fourth month in a row with its total rainfall below average and the last four days saw temperatures during the day begin to rise to the mid-twenty's degrees Celsius.

June began wet with temperatures around average, but the days produced a reasonable amount of sunshine. By the middle of the month it became warm, dry and very sunny. Although there were a few wet days towards the end of the month, daily amounts of sunshine remained high, resulting in the total sunshine for June being the highest for any month in the year for two years. From the 10th onwards

temperatures remained above average, with the mean for the month the highest since 1976. Rainfall total was just below average, but the 22nd, with 22mm, was the wettest June day since 1998.

July had temperatures near normal, dry and cloudy at times. After an uninspiring start to the month, temperatures began to rise rapidly in the second week, reaching a peak on the 15th when a maximum of 32.3° Celsius was attained. This was the highest July temperature since 1989. From then on temperatures remained around average to the end of the month. However from the 16th, it became unsettled, with most of the month's rainfall falling in this period. Overall it was another month with rainfall below average, the sixth month in a row, however it was the first month this year with its sunshine total below average.

August was the best 'summer month' for a very long time, very dry and sunny, with a notable heat wave during the first and second weeks. With high pressure in control, warm air began to be drawn up from the continent and temperatures rose rapidly. As a result a record high was recorded on the 10th, 36.4° Celsius, bettering the previous high by 0.9 degrees. Six other days recorded temperatures above thirty degrees during this period. Temperatures remained above average until the last few days of the month. They dipped below, when the weather became a little unsettled. Only four days recorded any rainfall, producing the driest August since 1995. Seventy per cent of the sunshine was recorded in the first half of the month, with the total the highest for any month in the year since August 1998.

September saw high pressure positioned in the vicinity of the British Isles acting as block. It carried on in the same vein as August: warm, sunny and very dry. Temperatures reached a peak during the third week, helping to make the daytime mean maximum temperature for the month the highest since 1959. During this period this period, daily sunshine totals remained high, helping to make this the sunniest September since 1971. Only three days recorded rainfall, during the month the lowest number since 1986. As a result, this made this September the driest since 1959 and the third driest since 1921.

October was an unsettled start to the month with temperatures above average and light rain at times. As the month progressed, it became dry and sunny. At the same time temperatures began to drop, especially at night. Many of the nights were very clear and this produced the highest number of ground frosts since 1992. Overall, the mean temperature for the month was the lowest since 1992 and it was also the first month since July 2002, with its mean temperature below average. Once again it was a dry month, the driest October since 1995 and the ninth month in row with its total below average. With daily sunshine totals holding up for most of the month, the sunniest since 1999, made this the eighth month this year with its total above average.

November had temperatures above average with a fairly wet start but quite sunny. It became drier for a time with a few odd days with rain. By the 17th a very dull period of weather set in and it became very wet. The 22nd recorded a total of 28.7 mm, the highest daily amount since 1974. The total for the month was the third highest in the last thirty years and the ninth highest since 1921. From the 17th to the 23rd inclusive, no sunshine was recorded. This was the longest period without any sunshine since October 2002. However, with three-quarters of the sunshine being recorded in the first half of the month coupled with a recovery in the last week, made this the ninth month this year with its sunshine total above average. Throughout the month temperatures had remained above average, with a maximum temperature on the sixth recording 17.8° Celsius, the highest since 1984. The mean temperature for the month was the third highest since before 1958.

December was an unsettled month throughout only punctuated during the third week when high pressure dominated. During this period it was dry and very sunny with air frosts at night. After this period there was very little in the way of sunshine. Making this December only the third month this year with its sunshine total below average. Apart from two short cool spells, temperatures remained above average. Another month with the mean temperature above average this year. Nearly every day in the second half of the month recorded rain, with snow on the 28th. The rainfall for the month was just below average, the tenth month this year with rainfall below average.

DAILY WEATHER RECORDS: 2003 – UNIVERSITY OF READING (WHITEKNIGHTS)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Mean Daily Temperatures °C													
Maximum	7.8	8.4	13.2	15.1	17.2	22.0	23.1	25.6	21.2	14.1	12.1	8.5	15.7
Minimum	2.0	1.2	3.7	5.0	8.1	11.6	13.7	14.3	9.1	5.8	6.0	2.5	6.9
Mean	4.9	4.8	8.5	10.1	12.7	16.8	18.4	19.9	15.1	9.9	9.1	5.5	11.3
Range	5.8	7.2	9.5	10.1	9.1	10.4	9.4	11.3	12.1	8.3	5.7	6.0	8.7
Extreme Maximum	14.3	14.3	17.1	25.7	27.4	26.3	32.3	36.4	27.0	19.3	17.8	13.5	36.4
Date	27th	26th	23rd & 27th	16th	31st	16th	15th	10th	17th	8th	6th	13th	10th Aug
Extreme Minimum	-6.6	-3.9	-1.1	-2.6	1.3	8.2	10.2	6.4	1.4	-2.6	-0.7	-4.1	-6.6
Date	1st	15th	1st	14th	2nd	1st	22nd	2nd	30th	19th	18th	18th	1st Jan
Extreme Grass													
Minimum	-12.3	-11.5	-10.8	-12.5	-7.1	-1.5	1.9	-2.0	-6.7	-9.6	-5.6	-10.8	-13.5
Date	12th	18th	17th	9th	15th	13th & 29th	12th	31st	24th	28th	28th	8th	9th Apr
Days with:													
air frost	11	10	3	6	0	0	0	0	0	4	1	8	43
ground frost	23	22	22	18	9	2	0	2	10	18	11	20	157
Hours at/below 0°CXX	XX	XX	6.0	19.0	0.0	0.0	0.0	0.0	0.0	24.0	4.0	44.0	125.2
Sunshine Hours													
Total	88.2	100.1	174.5	186.1	187.1	215.1	184.9	231.1	177.5	143.8	79.0	42.7	1810.1
% of possible	33.4	35.5	47.5	44.8	38.9	43.6	37.2	51.3	46.8	43.2	29.3	17.2	40.7
Daily Mean	2.8	3.6	5.6	6.2	6.0	7.2	6.0	7.5	5.9	4.6	2.6	1.4	5.0
Precipitation													
Amount in mm	68.8	22.8	18.7	35.2	37.7	50.0	37.9	14.2	5.0	32.7	127.5	61.9	512.4
Rain days	15	9	5	9	13	13	12	3	3	12	16	19	129
Maximum rain in one day													
mm	14.2	5.6	8.9	7.8	6.6	22.0	10.9	7.2	3.2	10.8	28.7	10.4	28.7
Date	18th	10th	5th	30th	13th	22nd	16th	28th	22nd	30th	22nd	12th	22nd Nov
Mean wind speed													
mph	3.1	1.6	2.5	4.1	4.2	3.7	3.8	3.4	2.4	3.0	4.3	4.4	3.4
Days with:													
Snow or sleet	4	4	0	2	0	0	0	0	0	0	0	10	11
snow lying	7	2	0	0	0	0	0	0	0	0	0	0	9
fog at 09.00 GMT	0	2	1	0	0	0	0	0	0	1	2	2	8
thunder	1	0	0	1	2	1	0	0	0	0	0	0	5
hail	0	0	0	0	1	0	0	0	0	0	0	0	1
Mean Pressure													
mbs	1016.2	1019.7	1023.2	1017.2	1016.0	1016.3	1020.3	1020.2	1021.4	1015.0	1012.4	1017.9	1018.0
Highest	1038.3	1039.3	1040.1	1034.1	1026.9	1024.8	1029.2	1024.6	1033.5	1020.9	1028.5	1031.8	1040.1
Date	24th	17th	16th	28th	7th	13th	9th	1st	24th	16th	7th	16th	16th Mar
Lowest	981.2	996.6	1010.6	996.2	1005.3	1004.4	1007.9	1006.9	1005.9	973.4	986.6	988.1	973.4
Date	2nd	3rd	2nd	28th	17th	30th	1st	29th	22nd	31st	26th	1st	31st Oct