

# The Reading Naturalist

No. 50



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# THE READING NATURALIST

No 50 for the year 1997

The Journal of the  
Reading and District Natural History Society

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## EDITORIAL

Last year I introduced "space fillers" where an article or report ended part way down a page. I am pleased that the innovation was welcomed, I even received a card expressing approval. This year there are some "fillers" of mine but others are contributions from members, for which I thank them. Please continue to send me short items for future issues.

The Entomological and Invertebrate Reports are this year separated by what might well be relevant to members with interests in either or both subjects. Norman Hall's account of an unpleasant experience gives useful guidance to any who may have a similar problem at one of the 'Mothing Nights'!

There will be one notable change in the next edition of "The Reading Naturalist". After 45 years there will be a new Entomological Recorder! Yes, this issue sees the last compilation of the records by Brian Baker and it indeed marks the end of an era. I personally must thank Brian for his prompt submission of lists and for his unflinching help in checking and correcting my errors. I am sure that all present members, in fact several generations of members, must thank Brian on his splendid achievement.

I am pleased that Ken Speirs is happy to continue sending a Report on the Weather at Reading. We are most grateful for this contribution which has been a feature of the publication for many years.

Members are advised to keep this edition of "The Reading Naturalist" as it contains 'The Rules of the Society' as revised at the Annual General Meeting. An organization cannot operate successfully without rules and this revision brings up-to-date some aspects which needed clarification. We should all know what is expected of us and to what we are entitled as members of the Society.

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## EXCURSIONS 1996 - 1997

### Graham Saunders

Meryl Beek led a meeting of general interest to the Nuffield area on 6th. November. It was attended by nine people. Field Fares and Redwings were sighted and a number of fungi, including a very fresh Stinkhorn, *Phallus impudicus*, were found in the wooded part of the walk. Various large conifers were seen and discussed, amongst them a fine Monterey Pine, *Pinus radiata*. Back at Nuffield, just before darkness descended, the party looked inside Nuffield church. It has some early 14th. century work but also heavy Victorian 'improvements'.

Alan Brickstock's bird walk at Theale Gravel Pits on 14th. December had been so widely advertised that we were afraid that we might be swamped with people, but in the event there were only ten of us. The resident Peregrine was in evidence on top of his favourite pylon, and a Kingfisher appeared on cue as usual here. However, there was not much variety of water birds: a couple of Goldeneye, one male Shoveler and the usual common species. However the weather was nice, and the afternoon was much enjoyed by us all.

Six people and a dog joined the walk along the Kennet and Avon Canal led by David Young on 15th. January. On a day of indifferent weather, there were no particularly interesting items to record.

The 15th. February was a sunny and very warm day when eleven members and friends met at Slimbridge. What a wonderful place it is! Instead of standing on the coast being cut to the quick by a biting east wind, looking through an unsteady telescope at a speck with wings three miles away (that only Martin Sell can identify!), one can walk into the Visitor Centre and look out over two large ponds only a few feet away and see half the British duck species. As the sun was shining, we ventured out along the walkways armed with an obligatory bag of bird food. Tufted Duck, Shoveler, and Gadwall vied for food and further along were Smew and Goldeneye. There were many exotic species with ducks and geese waddling about everywhere. It was hard to believe that the Ne Ne, ubiquitous here, was nearly extinct in 1947 in its native Hawaii. The Tropical House warmed us up, although one had to be eagle-eyed to spot the birds! Besides the ponds, the surrounding fields were covered with thousands of birds, ducks, geese, swans and waders, which could be viewed from the comfort of the hides. Even the Restaurant, serving good food, looked out over the flamingo ponds. An excellent educational but leisurely day was enjoyed by all aged from two to eighty. It was well worth the drive of about two hours. The occasional bird watcher would see more birds in one day than in a year!

On 15th. March, Sean O'Leary led members to study mosses and liverworts at Burnham Beeches. A large nest of ants was noticed with great activity amongst its denizens.

A group of eight members, led by Beryl Horswell, met for the first of the Field Excursions of the Summer season on 19th. April at Satwell. The sun was shining and we strolled off confidently expecting to find the woodland floor festooned with daffodils. The daffs, of course, had different ideas and in the unseasonably mild Winter and early Spring had already flowered and nicely gone to seed. So advanced was the season that the bluebells were already starting to flower.

On a fine morning Martin Sell led the dawn chorus meeting at Theale on 3rd. May. Garden Warblers, Blackcaps and Nightingales were in full song, also a Whitethroat or two and a few Sedge Warblers. On the South coast, a sea watch produced several Arctic Skuas and a Pomerine Skua passing Selsey Bill between 9.30 and 10.30 am., then several flocks of Common Scoter and a few Whimbrel on migration, with the usual Common, Sandwich and Little Terns fishing offshore. At Church Norton there were Dunlin, Redshank and a few Grey Plover, while at Sidlesham Ferry, two Bar-tailed and several Black-tailed Godwits and a Common Sandpiper were seen with other waders.

For the Coach outing to Swanage on 10th. May, 28 members set off on an unpromising day weather-wise. There were no major hold ups on the way so we arrived at Worth Matravers after about three hours only to find that coaches were banned from entering the village! After being set down by the road like a load of refugees we waved goodbye to the coach and to the less energetic and more sensible members who were to spend the day at Durlston Country Park which has a good Visitor Centre. At this point the heavens opened and the sea breezes tried to blow us back to Swanage. Undaunted we marched down through Worth Matravers and on towards the coast. The rain stopped and the sun tried to shine and the birds started to sing. A sheltered bushy gully provided good views of Blackcap, Garden Warbler and Yellowhammer. In a quarry on the coast we found the first of the Early Spider-orchids, *Ophrys sphegodes*. We stopped for lunch overlooking the sea thrashing on the rocks

below, nobody went for a swim! Continuing on amongst the gorse, heather and grizzled Hawthorn, we were scolded by Stonechats and kept entertained by Wall Brown butterflies, *Lasiommata megara*, in a sheltered quarry. Further stunted Early Spider-orchids were found but, in general, the flora was rather sparse, probably due to the very dry weather over the previous twelve months. The walk ended in Durlston Country Park, six miles in six hours after which we had all been thoroughly blow dried! It was a pleasure to meet Humphry Bowen in the car park and to sample his excellent home-made wine.

Martin Sell led the evening walk along the Kennet and Avon Canal and Woolhampton Pits on 23rd. May where Grey Wagtails were seen along the canal. Blackcaps were singing at the Gravel Pit, a variety of Swallows, Sand Martins and Swifts were hawking insects, two Shoveler and Great Crested Grebes with young were seen and two Shelduck arrived as we watched. There were also some Roe Deer on the far bank, feeding in the evening light. As we walked back along the canal, at least three Nightingales were in full song, and finally as we arrived at the starting point a Woodcock flew over, "roding" or beating the bounds of its territory,

An evening walk in Homefield Wood (BBONT, Forestry Commission) on 31st. May, led by Rod d'Ayala and Bill Havers was attended by 20 members. The site is currently one of three for the Military Orchid, *Orchis militaris*, in the UK. Because of the early season most plants had finished flowering. It was refound in Britain here in 1947 by J.E. Lousley, two other Chiltern locations have been found since then (only one current) and one in Suffolk. After a period of overall stability, plant numbers at Homefield are on the up again, as they were refound in one of their old locations following the clearing of trees planted in the 1960's. Other orchids seen were White Helleborine, *Cephalanthera damasonium*, Fly Orchid, *Ophrys insectifera* and Bird's-nest Orchid, *Neottia nidus-avis*.

Later in the evening of the same day, a mothing meeting was led by Martin Harvey. A good number of species were recorded. Following the very hot weather in May there were some abnormally early flying species, e.g. Willow Beauty, *Peribatodes rhomboidaria*, which would normally be on the wing a month later. Two of the most interesting species were Blomer's Rivulet, *Discoloxia blomeri*, a rarity well known for Homefield but a real Chiltern speciality. The only moth new to the reserve was the Buttoned Snout, *Hypena rostralis*. This is a Nationally Scarce moth, on the Biodiversity Action Plan list. It overwinters as an adult (sometimes found in garden sheds), the larvae feed on Hop, *Humulus lupulus*.

The meeting on 7th. June was led by June Housden when a small number of members came on the walk to the south of Mapledurham Estate. The variety of habitats included lane and cornfield edges, hedgerows and a large patch of waste ground adjacent to Chazey Wood. Of particular note were Myrobalan Plum / Cherry Plum, *Prunus cerasifera*, in fruit, Spindle, *Euonymus europaeus*, trees flowering abundantly and Houndstongue, *Cynoglossum officinale*. The highlight of the walk was locating a greater Spotted Woodpecker's nest in a Scots Pine, *Pinus sylvestica*. We had good views of a well-grown and vociferous youngster peeking out and being fed by a parent.

On 21 June a small group led by Malcolm Storey visited Ashridge Wood, by kind permission of the Gerald Palmer Trust. The weather remained dry despite the wet morning and we saw much of interest, including Harsh Downy-rose, *Rosa tormentosa*, Narrow-leaved Everlasting-pea, *Lathyrus sylvestris*, Meadow Saffron, *Colchicum autumnale*, Venus's-looking-glass, *Legousia hybrida*, and huge numbers of Spiked Star-of-Bethlehem, *Ornithogalum pyrenaicum*. The wood is an SSSI and private land, though several footpaths and green lanes pass close by.

The meeting at Bernwood Meadows, a BBONT Reserve, on 5th. July was attended by 12 members. The speciality of the reserve, the Black Hairstreak, *Strymonidia pruni*, of course, had already been and gone but it was an extremely pleasant sunny day, strolling through the wild flower meadow with the attendant ever busy butterflies. In the "ridge and furrow" area one could note those species which prefer the slightly moister conditions in the furrows. Several colonies of a coprophilous fungus species, *Coprinus niveus*, were growing on cow dung. In the wood White Admirals, *Ladoga camilla*, were seen and later along one of the rides a single Wood White, *Leptidia sinapis*. Common Spotted-orchids, *Dactylorhiza fuchsii*, were frequent by the path in the woodland.

Brian Baker writes of the meeting on 19th. July: "There is no better place to be on a hot Summer's day than Pamber Forest", anon. Approval of this statement was not sought from the 20 or so members and friends, for it was self-evident that they were enjoying the occasion which began for most in the early afternoon and which ended for others as dawn was breaking. Highlights of the afternoon were sights of a beautifully camouflaged Brimstone butterfly caterpillar hanging within a bush and awaiting its transformation to a chrysalid, and the steady passage of hornets into a former woodpecker hole which they had commandeered as a nesting site, thereby demonstrating the meaning of the 'in word',

biodiversity! We thank Graham Dennis for showing us both of these highlights. Five mercury vapour lights were operated during the night by Graham Dennis, Norman Hall, Martin Harvey, David Young and myself and from the individual notes a joint list of 125 species was compiled by John Robbins, a fellow entomologist from Exmoor. Thus ended the 31st. Annual Mothing Night.

The Warden, Richard Herbert, kindly showed us around the BBONT Baynes and Bowden Wood Reserve on 2nd. August. It is bisected by a small stream which has created a steep sided valley. It is remarkable how high the vegetation grows given the right conditions of soil and moisture! On occasions we were peering up at flowers. A Sparrowhawk flew overhead calling. A Rowan, *Sorbus aucuparia*, had grown over an old tree stump with exposed roots trailing around the sides of the stump. The warden related his tales of constant battles to keep the canopy open and to contain the Bracken, *Pteridium aquilinum*.

16th. August turned out to be a very hot day when ten members attended the meeting led by Cath Butcher. After leaving the car park near Henley many frogs were seen in a small pond which was also frequented by a number of blue damselflies and which contained a thriving colony of Fringed Water-lily, *Nymphoides peltata*. Along a hedgerow Speedwells with galls caused by the gall-midge, *Jaapiella veronicae* were very common. In the parkland alongside the Thames it was noticed that a number of Dawn Redwoods, *Metasequoia glyptostroboides*, have been planted. After passing Shiplake Lock the Thames path was followed to the outskirts of Shiplake before turning back. By the riverside the two introduced Balsams, Orange and Indian, *Impatiens capensis* and *Impatiens glandulifera* were present in good numbers.

Stephen Jury led the meeting at the Micheldever Spoil Heaps on 30th. August. Unfortunately there was a very poor attendance at what turned out to be a most interesting afternoon. The principle plant of interest was *Teucrium botrys*, Cut-leaved Germander. Although many plants were well over, some were beautifully in flower and there were many seedlings. However, it is known that most of these perish in the winter. As usual, after photographing a small plant with flowers, the party discovered a much better specimen, 30cm tall. There were numerous other plants of interest, including: Basil Thyme, *Clinopodium acinos*; Red Hemp-nettle, *Galeopsis angustifolia*; Sharp-leaved Fluellen, *Kickxia elatine*; Deadly Nightshade, *Atropa belladonna*, Spring Cinquefoil, *Potentilla neumanniana*, not flowering, and the mosses *Thuidium abietinum* and *Entodon concinnus*. Moonwort, *Botrychium lunaria*, known to occur was not seen. On leaving the reserve two large clusters of fungi were noted on Beech, *Coriolus hirsutus* on a fallen trunk and *Pleurotus pulmonarius* at the base of a living tree.

A note on the history of the reserve appears on page 20.

The walk on 6th. September led by Rod D'Ayala, with 15 members and friends, started from Turville village green, moving off west through the roadside woods. Here the group looked at and identified woodland grasses, amongst those found were several clumps of Wood Barley, *Hordelymus europaeus*, a scarce species nationally, whose stronghold is the Chilterns. There were very few fungi, but one good example of *Amanita inaurata* was found. On climbing up the valley side the group was treated to the sight of a soaring Red Kite. The South Chilterns currently holds about 50 breeding pairs of this bird following the reintroduction scheme of the 1980's. Afternoon tea break was held in the churchyard of Ibstone Church. Small Teasel, *Dipsacus pilosus*, grows in the rough wood just outside the churchyard next to the footpath - a plant that initially baffled everybody since it was so unexpected. Much of some peoples' break was spent pouring over the lichens on the gravestones. Just as the party set off again a flock of Crossbills was heard flying overhead and into the nearby woodland. In the woods between the church and the windmill there were several bushes of Spurge Laurel, *Daphne laureola*, one of which unusually had fasciated stems. The open grassland areas towards the end of the walk contained the usual chalk flowers, with the target of the walk, a few scattered Chiltern Gentians, *Gentianella germanica*. These, and other flowers, were few and far between on the heavily (over) grazed slopes close to the Windmill. There was a good show of arable flowers on the field margin at the foot of the hill.

Roger Frankum, Warden of the BBONT Hungerford Marsh Reserve, led a meeting on 20th. September which was attended by 16 members. The reserve follows the course of the River Dun downstream for some 300 metres. A good variety of riverside plants were seen as well as a Brown Hawker dragonfly, *Aeshna grandis*, and a Kingfisher. Although common it was unusual to find a Shield Bug, *Picromerus bidens*, which is predatory on the larvae of butterflies, moths and beetles, actually feeding on a caterpillar. After leaving the reserve the party walked through Freemans Marsh to Marsh Lock on the Kennet and Avon Canal. Water voles are known to live in the river bank and a 'plop' in the water was thought to be caused by a vole seeking shelter. Mr Frankum pointed out the difference in

the pith of Hard Rush, *Juncus inflexus*, compared with that of Soft Rush, *Juncus effusus*. Other plants seen were Square-stalked St. John's-wort, *Hypericum tetrapterum*, and Marsh Ragwort, *Senecio aquaticus*, while both Marsh-marigold, *Caltha palustris*, and Ragged-Robin, *Lychnis flos-cuculi*, were found in flower.

The Fungus Foray to Lackmore Wood and College Wood on 5th. October was led by Alan Brickstock who writes: After a prolonged dry spell, both sites were much poorer than usual, with 48 species found in the morning in Lackmore Wood, and only 34 species in the afternoon in College Wood. For once there were a few Russulas about, with eight species found, but none of them in any great numbers. There were also a few Boleti. This is usually a good site for Death Caps, but none were to be found this time, although there were various other Amanitas.

Many thanks to a number of leaders who have supplied information on excursions during the 1996 - 1997 season. They are; Brian Baker, Meryl Beek, Alan Brickstock, Rod D'Ayala, June Housden, Stephen Jury and Martin Sell.

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## WEDNESDAY AFTERNOON WALKS

Alan Brickstock

Once more six very enjoyable walks, and the weather was again kind to us every time, with up to 18 people and one or two dogs taking part.

As well as having some good walks, we topped the 100 species of plants on no less than four of the six walks, one short of our previous record, with 118 in May, setting a new high of 143 in June, followed by 130 in July and still 106 in September. Perhaps such riches might tempt a few more members to join us next year?

The rather uncommon Yellow Figwort was found in two separate locations near Bucklebury on the May walk.

On the June walk we looked briefly in the Hurley Chalk Pit, but found this sadly overgrown, with disappointingly few species to be found. We did record a few Fragrant and Pyramidal Orchids, Bee Orchid and some Candytuft. At Warren Row, Ken Thomas pointed out to us the site of a complex of tunnels, which served a variety of purposes, including an aircraft factory during the second world war, later as a storage place for articles from the British Museum. During the 'cold war' it became RSG6, one of the provisional seats of local government. In 1988 it was used as a wine store, and at present it proclaims itself to be the centre for 'New Logistics', whatever that might be. The Tin Chapel here was built from a catalogue design for the price of £104, by J.C. Humphries of Knightsbridge. These churches are now very rare, since most have been pulled down. We learn a lot on these walks!

The July walk in the Beech Hill area was notable, apart from flowers, for the number of butterflies. Species seen included Holly Blue, Purple Hairstreak, Speckled Wood, Tortoiseshell, Gatekeeper, Ringlet, Marbled White, Large White, and a sizeable colony of Essex Skippers, close to the Riseley bypass. I subsequently discovered that this colony was well known to Brian Baker.

Fewer flowers on the August walk - a mere 78 species - but more peripheral interest in Kidmore End church. This is an 1852 rebuild of a 13th century church, with a rounded apse. This design apparently derives from the Roman judgement hall, where the judge sat in the rounded end.

Finally to the September walk, with still over 100 species, notably including Cut-leaved Self Heal and Marsh Woundwort. This walk was also notable for a number of species of birds, including two Buzzards, a Peregrine and a Little Owl. Ken pointed out that a multiple murderer is interred in Cholsey churchyard, in the form of Agatha Christy. The Manor farm here had the largest barn in England, 365 feet long.

As always our thanks are due to Ken Thomas for working out some excellent walks, and for his fascinating discourses on local church history and other topics. We see a marvellous variety of different churches during these walks, and learn a lot of interesting things.

## MEETINGS 1996 - 1997

### Meryl Beek

1996

The season began on 24th. October with 'Trees, Herbs and Charcoal Burners' by Chris Howkins. The 39 members present enjoyed an invigorating talk, as Chris gave an historical review of charcoal burning and its revival today. There is a renewed market for charcoal in medicinal and artistic fields, but a greater reason for retaining charcoal burning is its use as a conservation measure. As trees are coppiced again, many threatened species of wildlife return in greater numbers. It is a serious subject, but Chris laced it well with amusing anecdotes and folklore!

On 7th. November, 42 members listened to Tim Astin speak on his experience of 'Summer in North East Greenland', a little known region, and were treated to a remarkable selection of slides taken on his expedition to carry out geological surveys. He explaining the techniques used to obtain his results, and showed slides of mosses and other small tundra plants. The evening was completed with pictures of utter tranquility only captured in such remote places.

Mr. E.T.J. Bingham spoke on 'The Natural History of British Deer' on 21st. November. The life cycles of Fallow and Red Deer, and the growth and development of the antlers on the males was explained to 44 members and guests. Only when the antlers are fully formed do the deer mate. On the other hand, Muntjacs and Roe Deer use their antlers for defence. Mr. Bingham illustrated his talk with slides and specimens of antlers. The evening evoked a large number of questions, for the subject has not been used in a meeting for a very long time.

1997

'British Woodland Mammals' was the title of the talk give by Paula Cox on 9th. January. Paula (who needs no introduction) took 33 members and friends through the habitats, likes and dislikes, and movements of Wood Mice, Field Voles, Common and Pygmy Shrews, Moles, Harvest Mice, Hedgehogs, Weasels, Stoats, Dormice, Grey and Red Squirrels, Foxes, Badgers and finally Bats! A feast of an evening which did not ignore the problems and necessary conservation of many of these creatures.

On 23rd. January, Victor Scott gave a talk on 'The Flowers and Countryside of Andalusia' to 43 member and friends, who were treated to a memorable evening of exotic and colourful goodies! Mr. Scott has traveled to this southern province of Spain twelve times, and the inland mountains are completely unknown to the average coastal tourist. In the warm climate, sand dunes exhibit plants found across the Mediterranean in North Africa. In the Sierra Nevada are the pink flowers of an Autumn Crocus, *Colchicum triphyllum*, which despite its English name, flowers in Spring, often near melting snow! In the limestone gorges grow many rarities, including various Iris species, mini Narcissus and Peony. It was remarked that to go on holiday here would be worth saving for!

'The World of Fungi' was the subject of Alan Brickstock's lecture on 13th. February. For many centuries fungi were regarded with a mixture of superstition and dread, this is reflected in some of the common names; Fairy Cups, Devil's Snuffbox, Witch's Butter, etc. Some "Chamber of Horror" species were discussed by Alan to the 37 people present, including Death Cap, *Amanita phalloides*, Ergot, *Claviceps purpurea*, Honey Fungus, *Armillaria mellea*, and stinking slime truffles! On a more serious note, the talk concluded with a look at Slime Moulds, which hover uncertainly between the animal and vegetable kingdoms. Thank you, once again, Alan.

Andy Swash, ecological adviser to MAFF and editor of 'Birds of Berkshire' spoke to 30 people about 'Birding in Brazil' on 27th. February. He had visited three regions of the country. The Itatiaia Nature Park, north west of Rio de Janeiro, was the home of Humming Birds, stunning Tanagers and the rare, elusive Sharp-tailed Stream-creeper. The Panatal, half the size of France and the world's largest wetland was the next stop where the highlights were the Giant Otter (hardly a bird!) and the endangered Hyacinth Macaw. The spectacular scenery of the Iguanza Falls in south west Brazil, with its butterflies and birds, completed this fascinating evening.

On 13 March, Jim Asher spoke on 'The Butterflies of France'. This talk also contrasted three regions - but this time in Europe. 46 people, including friends from the Butterfly Conservation Society, saw slides of Brittany butterflies, including the Scarce Swallowtail, *Iphiclides podalirius*, and the Short-tailed



Blue, *Everes argiades*, which are extremely rare migrants to England. In the Alps, where the seasons become telescoped as you climb higher, careful checking of field guides is needed to identify species of such groups as Browns and Fritillaries. The Cévennes, with the rivers in deep clefts, had a wealth of butterflies such as Queen of Spain Fritillary, *Issoria lathonia*, Lesser Purple Emperor, *Apatura ilia*, and Two-tailed Pasha, *Charaxes jasius*. An evening of enjoyment and worthy of being held in memory!

A Christmas Party was held on 5th. December, and the final meeting was a Members Evening on 27th. March. It has been an enjoyable season of learning, intermingled with less serious asides, which should always be the mark of a good programme. Our grateful thanks to Alan Burt for making all the arrangements.

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## MEMBERSHIP

At the Annual General Meeting the Treasurer reported there were seven Honorary members and 149 Ordinary members of the Society. This was five less than the number reported at the 1996 AGM.

The balance to the end of September was £474.85 which was £237.31 less than for the previous year. Rising costs necessitated an increase in subscription rates and it had been agreed in Committee that £8.00 for an Adult subscription and £12.00 for a Joint subscription would insure that there would not be a continuing drain on the Society's finances. The proposed new subscription rates were agreed by those members present at the meeting.

The Society welcomes the following new members who joined during the year 1997:

Ms. Carol E. Moloney, Mr. W.E. Winter, Mrs. D.M. (Dot) Lincoln, Mr. Clifford & Mrs. Moira Lovett, Mr Roland Ramsdale (Renewed Membership), Mr. David G. Notton, Mrs. Mhorag M. James.

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## Revision of the Rules of the Society

The Revision of the Society's Rules was considered at the Annual General Meeting held on Thursday, 9th. October 1997. It was agreed that the Rules be amended according to the recommendations of the Committee with two amendments proposed and seconded at the Meeting. The Revised Rules are set out on page 46.

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The Editor is indebted to Alan and Mary Burt for the first space-filler and to Alan Brickstock for the second.

### Crows along the Thames

One fine day last June, Mary and I watched a crow land on the bank of the Thames at Pangbourne. After a little hesitation it dropped down out of our sight onto one of the concrete landing stages at water level, only to re-emerge 20 seconds later carrying a freshwater mussel. We watched as it opened the shell, ate the mussel and flew off leaving the shell undamaged, even the hinge intact. We searched the concrete pad, the adjacent river bank and other similar spots along the river, but could find no other mussels.

During the Christmas holidays I found another neatly opened shell about 400 yards from the June example. The crow was still at it. I asked members, 'How did a crow learn that mussels are good to eat, who showed him how to find them and how to open them so cleanly?' There were no suggestions.

The Journal of the Abingdon Naturalists Society, Autumn 1997, carries a report of a crow carrying mussels up to a height of about 12 feet and dropping them onto a gravel path to crack the shells and get at the contents, but the Berkshire crows seem a little more sophisticated than Oxfordshire's. But we don't know how they find the answers.

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The Daily Telegraph of 26th. June 1997 reported that Anders Pederson, working at the Danish biotechnology company Novo Nordisk, has discovered that the Inkcap mushroom contains an enzyme that removes any rogue dyes in the wash water from maverick items of clothing. Some soap powders already contain polymers to mop up escaped dyes, but laboratory tests have shown that the mushroom enzyme is more efficient than any other known substance. Dr. Pederson said he was confident that his company's system "will bleach virtually any dye".

# WHAT PRICE CONSERVATION?

## PRESIDENTIAL ADDRESS BY MARTIN SELL

This evening I want to put to you some ideas and facts on conservation and the environment - the two subjects are inextricably linked. Politicians always refer to the environment, but they usually do not mean the natural, or semi-natural environment, of which in Britain there is very little left, but the human environment. This perception may be changing, but it is a slow process. A girl in our office in London once referred to the countryside as "boring", and it took me some time to realise what she meant; it related to a remark made by one of BBONT's Conservation Officers, who referred to "England's green and pleasant land, courtesy of the major chemical companies". Since introduction of the Common Agricultural Policy in the UK, much of our wildlife has been badly hit by the intensification of agriculture, and some of the monocultures it has produced.

We have all heard of the word "biodiversity", but do we know exactly what it means, and what's more, do the politicians and opinion-formers know? Do we know exactly what we want to conserve, how to set about it, and what price we are prepared to pay? The deliberate or accidental introduction of alien species has had dramatic effects on our native wildlife. For example the Coypu undermined banks and damaged watercourses in East Anglia until a determined effort eradicated it. We have not been so fortunate with the Mink and the Grey Squirrel, both introductions from North America. The former has been a major factor in the loss of about 90 per cent of our Water Vole population, the latter is a forestry pest, damaging trees severely in the Spring, but it is also a major bird's nest predator and has driven out our native Red Squirrel from most of its previous territory, due to its ability to eat nuts and fruit well before they are ripe, thus depriving the Red Squirrel of enough food to survive.

The old saw about accountants knowing the cost of everything, but the value of nothing could well apply to nature conservation. Rich countries can afford, and should afford, nature conservation, or as much conservation of "man-made" habitats as required, (with a few exceptions, there are no "natural" habitats left in the developed world) but poor countries in the Third World need massive Western assistance. These countries are of course where the vast majority of species exist, and if the rich Western World sees fit to provide both finance and resources, some measure of this rich biodiversity can be handed on to future generations.

The size of the problem is truly gigantic - a recent study put the value of the natural environment at 20 trillion pounds (presumably American trillion), but no breakdown of these values is easily obtainable. At least it is a step in the right direction. As a commodity, trade in flora and fauna is second only to illicit drugs, a multi-billion pound worldwide trade.

The appearance of man on the planet, in evolutionary terms, is very recent - in fact, if the existence of life on Planet Earth is compared with the 365 days in a year, man appeared at one minute to midnight on New Year's Eve, but is the major cause of degradation of the natural environment and accelerating species' extinction today.

The problems that conservation faces are legion, but I would like to elaborate a little on some of them.

### Population

This is the human time bomb, ticking inexorably away, and not tackled pragmatically, because of social, religious or other constraints. There can be no doubt that this is the biggest single factor in the subjugation of all other life-forms on the planet. The world population is now around five billion, and is estimated to rise to ten billion by the year 2050, unless earlier stabilisation takes place (estimates of 9.4 billion have been mooted more recently). Eighty per cent of the world's population is in the developing countries, where growth rates are fastest, but also where the world's biodiversity is greatest, and where there is most need for financial and resource aid to help the conservation effort. One quarter of the world population is in China, where there is almost complete domination of the whole landscape by agriculture, merely to keep the vast population of over one billion alive. There is little spare room for wildlife here. In India, the population has grown from 300 million in 1937 to 900 million today, putting extreme pressure on the Nature Reserves set up to preserve the increasingly endangered Tiger and the very rare Asiatic lion. No welfare system here means that larger families are needed so that the young can take care of their parents in old age.

Every five years, an extra 300 million people are born on the planet, equivalent to another Europe: this poses major problems, for example in the additional demands for firewood, reduction of forests, more livestock grazing and related desertification, and removal of water; this latter aspect will be the critical flash-point in many areas in the next century.

## Affordability

Poor or Third World countries need Western help and expertise. To this end agronomists, experts in water conservation and financial advisers are often working on major projects in these countries, with funding supplied by the United Nation's agencies or the European Union. Despite this, however, the level of foreign aid has fallen from the target figure of 0.7 per cent of the richer countries' GNP, to 0.34 per cent, and more recently to 0.27 per cent, an unacceptably low figure for the future.

### "Holier than thou" approach

Western countries have destroyed most of their forests and other natural habitats, and are now reduced to conserving fragments of what is left. Why should we, of all people, say the Third World countries, dictate to others what they should do? Malaysia and Indonesia have been particularly vociferous in accusing the West of "humbug" in their efforts to persuade the Asian countries to conserve their biodiversity, the richest in the world.

### Political and tactical opposition

There is a failure to see the problems of conservation for what they really are, both in the developed and developing world. Species are disappearing faster than we can imagine, some of which may be vital to the survival of humans on the planet. A "major extinction" not seen since the demise of the dinosaurs is now in progress, mankind being the main reason. 168 mammals and the same number of bird species are critically endangered throughout the world. Of plants and other forms of life, we have no real idea, but it is suggested some 20 are disappearing per hour as forests are destroyed and desertification continues.

Political objections reducing the levels of fish catches over the years have prevailed over scientific facts, with the loss of Cod stocks off Newfoundland and the destruction of thousands of fishermen's jobs. The collapse of Herring stocks in the North sea in 1974, and continued overfishing, is because politicians will not listen to scientific evidence. Cultural differences, such as China and Japan believing that all natural resources should be for human consumption, cause major problems for conservation.

### Consumerism

A Western individual uses ten times as many resources as an Indian or Pakistani, and for North America, the ratio is about twenty times as much. The unlimited use of natural resources is causing major climate change, and this will have a vast, but unquantified effect on the natural environment. The USA, which has four per cent of the world's population, produces twenty per cent of the world's carbon dioxide, one of the major greenhouse gases, and is unwilling to see its lifestyle changed. With the inevitable rise in sea levels, land will disappear and flooding will become more common worldwide. Pacific islands, such as the Maldives, will disappear under the sea, together with large areas of Bangladesh, one of the world's most populous countries. From the natural environment point of view, salt marsh on the British East coast is seriously threatened, and will be a very hard habitat to recreate.

### Interests of other groups

The farming lobby is much stronger in the rest of Europe than it is in the UK, but Britain is part of Europe, and the Common Agricultural Policy, to which the UK contributes three billion pounds annually, is destroying wildlife-rich habitats in the farmed countryside. Birds, once common on farmland, have declined dramatically in the past 25 years, Tree Sparrows by 89 per cent, Grey Partridges by 82 per cent, Corn Buntings by 80 per cent, Turtle Doves by 77 per cent, Song Thrushes by 73 per cent and Lapwings by 62 per cent, to name but a few. The planting of Winter wheat means that there are now no Autumn stubbles with their seeds. Due to the intensive use of chemicals, there are no insects, either harmful or beneficial, in any numbers on farmland. Degradation of upland habitats is caused by too many sheep. Moorland can sustain two ewes per hectare, but due to headage payments, more than seven per hectare are grazing many moors. The result is over-grazed heather, reverting to grass. Britain's 60.000 hill farmers now have 44 million sheep in their care, or four fifths of a sheep for every person in the UK!

Farmers are now even buying up cheap plains in Hungary, and blackmailing the European Union to pay them not to plough it up, as they are aware that this area is one of the last remaining habitats for the Great Bustard.

### Economic development and urbanisation

This is another cause of large-scale habitat loss. In the UK, an area the size of Bristol disappears under concrete each year. Plans to build an additional 4.4 million homes by 2020 will have a considerable effect on what is left of our countryside.

### Poaching

This is a perennial problem for conservation. China, with its demand for "traditional" medicines, has used all parts of the Tiger, and with increasing affluence in the Far East, the demand for Tiger parts has increased. With about 100,000 animals at the turn of the century, there are now estimated to be 3,000 to 5,000 left, and of the eight sub-species, there remain only five. Project Tiger was set up in India in 1972 to help preserve the Tiger, but it excluded the local people, who were relocated outside the Reserve areas. They were not averse to helping the Tibetans poach the Tigers on behalf of their Chinese paymasters. Corruption and decadence in high places, both India and Russia, since the collapse of Communism, has hastened the Tiger's demise.

Black Rhinos in Africa are now down to about 4,000 animals. Somali weaponry and lack of funds for Park rangers in Kenya and Tanzania has not helped. The market for dagger handles in the Yemen, and recently as a treatment for AIDS, and an aphrodisiac in the Far East, have not been quelled.

Ivory poaching, although dramatically reduced, has meant that elephants, which numbered 2 million 25 years ago, are now down to between 250,000 and half a million. Ivory poaching has now extended to hippopotamus tusks instead of elephant ivory.

### Lack of Education

Many examples of this aspect exist. The children in Ghana who catch Terns at the end of a fishing line and "play" with them, usually causing their death in the process. Councils who plant the wrong trees due to lack of proper advice. Farmers who remove hedgerows and then see half of their topsoil dumped in the adjacent road by the March winds. The use of chemical rather than biological warfare on insect pests and weeds.

The lack of knowledge as to the effect in the loss of biodiversity in plant species is alarming. We may never know what we have lost in the way of medicinal plants and wild stocks from which our modern vegetables are derived.

### Changes in Habitat

We all know of the vast losses in semi-natural habitats in the UK, accelerating over the last 50 years. Over 90 per cent of our wet meadows and old pastures have gone, together with the majority of our Southern heaths and woodland, but in the Third World the scale of destruction is truly frightening. As far as rainforest is concerned, every year an area the size of Belgium disappears. In the Amazon basin alone, 11,000 to 15,000 and globally 130,000 square kilometres are lost.

In Zaire, the National Park which is home to half the world population of Mountain Gorillas, has been invaded by refugees from the Civil War. They have taken firewood from the Park, set up camp, and killed some of the Gorillas for food. The area right up to the Park boundary is, or was farmed, and any further incursions are likely to be very difficult to reverse.

### Development of "eco-tourism"

This often has its "downside", as it can destroy the very things and the habitats it seeks to preserve, with too frequent air flights, giving too easy access. Often money does not go to local people, but to corrupt Governments, and the economic benefits are squandered. In Nepal, many of the mountain areas are fragile, and with increased trekking, paths are being severely eroded. Litter has increased dramatically, and in some places the environment cannot cope. The same is true nearer to home in the Peak National Park, where 17 million people are within a 50 mile drive of the area and erosion is considerable.

### Some subjects are "unglamorous"

The Heather Beetle on Dartmoor is a case in point where 30,000 acres are overgrazed by cattle and heather is lost by burning. If an area of 200 to 300 acres could be managed for this Beetle, it could be

saved. Bugs, worms and many insects are restricted to micro-habitats, and need the financial and management resources to enable them to avoid extinction, but they do not appeal to the general public, as do animals and birds

Having spoken of the problems, what are the solutions?

### Population

This is the most intractable of all the problems, and has a "knock-on" effect on most, if not all, of the others. Political manipulation is difficult, as there are religious and other constraints to overcome. Local education and empowerment of women in Third World countries can have a dramatic effect, but it is a herculean task, particularly at village level in countries like India and Africa. Often this work is largely done by welfare groups and charities, not Government bodies.

China has realised that without a population policy of one child per family in the cities (it is very difficult to enforce in the countryside), an increase to 1.6 billion people would mean mass starvation, and not a very good advertisement for the regime. This should mean that there will be room to initiate "Panda corridors" to help the remaining 1,000 or so Giant Pandas still left in the wild.

Generally, economic and social development means smaller families, and could help stabilise the world population at a lower level than predicted, but with increased wealth comes the greater demand on natural resources.

### Affordability

Cost-effective help to the Third World is critical. A recent computer based plan for Uganda's wetlands, giving optimum use for people and wildlife, (SWAMP), has been developed at minimal cost, and could be used to advantage in the UK. ICBP (now Bird Life International) has purchased Cousin Island in the Seychelles as a Nature Reserve, and more schemes like this are possible. With its membership of one million, and income of 35 million pounds per annum, the RSPB has been able to buy major areas of wildlife habitat, such as Abernethy Forest, where management for Black Grouse and Capercaillie is taking place, and Lakenheath, where new reedbeds are being planted to create a suitable habitat for the endangered Bittern. The Worldwide Fund for Nature is continually providing major resources, both financial and advisory, for projects throughout the globe.

### "Holier than thou" approach

We can and should set an example to others in conservation matters. European legislation on environmental and conservation aspects has been streets ahead of UK legislation in recent years, but we are improving. We have our industrialisation, and have had a bad past, but a diplomatic approach to the problem can pay off.

### Political and tactical opposition

Convincing of politicians by lobbying is an ancient art, but it produces results. In the UK the badger has an Act of Parliament to itself, and with ten years full protection, numbers have increased from about 250,000 to 440,000, more than the population of foxes. Cleaning of rivers has produced an increase in plant and fish life, and the Otter is making a gradual return to some of its old haunts.

Scientific evidence is putting global pressure on Governments worldwide to act to curb forest fires, as in Indonesia. It has also persuaded the erstwhile whaling nations to curb their activities. Italian and French hunters are having pressure put on them by newly formed bird protection societies to stop the slaughter of migrant birds in the Spring and Autumn, pressure which will in turn persuade the EU countries concerned to enforce existing laws. In Cyprus there have already been beneficial effects of this action. "Selling" of biodiversity to national Governments is also producing results. The Worldwide Fund for Nature's efforts with the Japanese and Chinese Governments to stamp out the Tiger trade is continuing, and is having an effect.

### Consumerism

The reduction and eventual stopping of the increase in global warming is a matter of political will. Encouraging of tree planting and wildlife gardening is the easiest part, but cutting down on car use and packaging will be more difficult. Governments are becoming more aware that solutions to these

problems will have to be found sooner rather than later as we run out of holes in the ground to dump our waste, and pollute the atmosphere to an unacceptable level with toxic emissions from vehicle exhausts, never mind those that add to the problem of global warming.

Sources of funding are becoming increasingly available for land restoration and habitat recreation, often with EU money, to redress past excesses in industrial dereliction and prodigal land use. Funding is available for such aspects as heathland restoration in Dorset, to link existing fragments, and the RSPB is also embarking on a major project to restore reedbeds in the Fens of East Anglia, using some erstwhile farmland to increase the total area involved.

### Interests of other groups

If the future membership of the European Union is to include Eastern European countries, as expected, the Common Agricultural policy will have to undergo drastic reform, or the Budget will simply not be able to tolerate farmers' "demands". Farmers will have to be paid much more realistic amounts for environmentally-friendly farming, with reduced subsidies and more realistic prices for their products. Increasing pressure is being put on the EU to achieve these ends already. The proportion of "set-aside" land is being reduced from 15 to 5 per cent. Independent measures are already being taken to reduce dependence on chemicals and sprays. The popularity of organic produce is growing. Hedgerows are being replanted, and an exercise has been undertaken with the Game conservancy to leave wider verges at the edge of cornfields to encourage an increase in Grey Partridge numbers. This has also been beneficial to chalk flora, and has left seeds for birds to feed on in Autumn and Winter. At Aston Upthorpe, involvement with the Countryside Stewardship Scheme has promoted an increase there of the original Grade 1 SSSI from 39 to about 250 acres, with introduction of wildflower seed on to areas originally planted with Winter wheat. It will be interesting to see how long it is before the effects of chemicals and fertilizers wear off on the newly "naturalised" areas.

Money is available for all such schemes to make farming more environmentally-friendly. The critical point must come when the farmer is paid more for this sort of measure than he is given in subsidy for intensive arable or livestock farming. Another example where an endangered species is being given help is that of the Cirl Bunting in the West Country, where the RSBP and local farmers have drawn up a ten-year Management Plan which provides payment for Spring sowing on arable land, leaving of stubbles in the Autumn for weed seeds, restoration of some pastures and grass leys and less intensive use of chemicals. With the help of the Countryside Stewardship Scheme and English Nature, the population of the Cirl Bunting has tripled since the 1980's and now stands at about 350 pairs.

With hill farming, a reduction in intensity of grazing is required to encourage upland birds, and subsidies can be withdrawn if overgrazing occurs. However, substitute payments could prove to be the answer to this problem, striking a balance between dereliction and overgrazing.

### Economic development and urbanisation

With the enormous pressures being exerted on Governments to provide more dwellings, better use of city centres for living is needed. Planning and land use regulations need tightening, including "zoning" measures as in Holland, providing urban parks friendly to wildlife and "green lungs" for urban residents. Central planning can have advantages, as for example in Kazakhstan, where an edict from Moscow in Communist days ensured that tree planting was carried out along all major roads and railways in three or more rows on either side. This has provided very useful habitat for birds, which, in areas of open Steppe country with no other trees, could use them as corridors for passage or for breeding.

### Poaching

One of the solutions to this problem is to involve local people in conservation measures. The Worldwide Fund for Nature is now doing this in India and elsewhere. Provision for access for the Masai people in Africa, who are nomadic, avoids fences for elephants in national parks, and provided cattle numbers are controlled, helps the local people co-exist with wildlife.

A more drastic solution in Namibia is to shoot poachers on sight, but in the Waterberg Plateau Park, a vast area on top of a sandstone bluff is used to conserve and rear endangered species. It is virtually poacher-proof, access being limited to a state-run bus service into the park twice daily by the only road, booking in advance being necessary.

The use of alternatives to "traditional" Chinese medicines is being developed, so as to avoid the use of Tiger parts and Rhino horn, but changing an ancient culture is proving to be very difficult. In Russia, since the collapse of Communism, volunteers have taken over the conservation of the remaining 200 to 300 Siberian Tigers left in the wild. These are dedicated people, but they are fighting a difficult battle. The creation of fenced reserves in Africa, for species like the Black Rhino, will only preserve a small number of these animals, but at least it will help until the trade in Rhine horn is stopped.

#### Lack of Education

The RSPB now have an education programme with local people, operating in Ghana, and the catching of Terns has been substantially reduced.

Arboriculturists are employed by many Councils to give advice on the best trees to be planted. The Farming and Wildlife Advisory Group is there to advise farmers on environmental matters, although in many cases the current "fashion" catches on with farmers, such as the planting of trees in field corners and elsewhere. On the Berkshire Downs recently a large area has been given over to native deciduous trees, adjacent to an area left as rough grassland. This has proved to be popular with Short-eared Owls and Hen Harriers in Winter, and for breeding Curlew in Spring. Much more selective insect control is now available, but the message is also getting through that hedges and grass verges to fields have beneficial effects in harbouring predators to prey on pest species in the fields themselves. Pressure groups and the provision of full scientific surveys are invaluable in monitoring the health or otherwise of bird or mammal populations, and often turn the balance towards conservation at Planning enquiries.

Sometimes organisations with apparently diametrically opposed objectives can come together to provide a solution for wildlife which, on first sight, would not have been thought possible. A well-managed grouse moor, for example, not only has larger numbers of Grouse than elsewhere, but also has many other bird species which can cohabit with the Grouse without doing too much damage to shooting interests, eg Merlin and Hen Harrier. The latter species do take Grouse chicks, but the level of predation is sustainable, and co-operation between the various interests is necessary to achieve a balance.

#### Changes in habitat

It is possible to reverse some of the changes in habitat which have happened in recent years, to the detriment of wildlife. It is becoming increasingly clear that this will have to be done on a much larger scale than hitherto, if some species are to survive. As already mentioned, the RSPB are in the process of increasing the areas of heathland in Dorset to benefit the Dartford Warbler, Sand Lizard and Smooth Snake, and in Sussex, a large area of water meadows have been re-created at Pulborough Brooks for over-wintering wildfowl and waders. In Norfolk, the Broadlands Authority has been co-operating with Local Councils and the RSBP to provide a large area of rough grazing at Halvergate Marshes, near Great Yarmouth, for migrant Geese and Swans, reversing the trend to arable land. Barn and Short-eared Owls have also benefited. Planting with wildflower seed is another option in suitable areas, but two much larger projects are the creation of a National Forest of broad-leaved trees in the East Midlands, 100 square kilometres in size, and the conversion of the former Air Base at Greenham Common to open heathland.

In the developing world, the problem has been to try to arrest rapid changes which are detrimental to the environment. The "slash and burn" approach by landless peasants in Brazil, and farming and logging companies in Indonesia, can be halted or at least reduced by grants for re-settlement, legislation and the setting up of National Parks. This has already happened in Brazil, but can be made more effective by anthropologists putting pressure on the Government there to provide more protection for indigenous tribes in the jungle, who live by sustainable means. EU funding for projects in Asia, Africa and Indonesia, which provide for sustainable development, has been a regular feature. In Madagascar "slash and burn" has been carried to extremes, with other than in National Parks only fragments of the original forest left. Focussing on projects with local communities has been most successful in persuading the people that conservation of their natural environment has economic benefits as well. "Owning" the solutions to environmental problems seems to be the answer here, as in other parts of the world.

## Development of eco-tourism

Various systems offer themselves here - limited access, together with price increases is one way. Bhutan, for example, only allows 8000 tourists per annum. Tighter rules in National Parks should be enforced. In Kenya, for example, minibuses in Game Parks can have their licences revoked if they stray off recognised tracks, but this is rarely enforced. Airstrips in the Parks themselves and balloon flights over the Reserves play havoc with the game, causing it to disperse unnaturally. These activities should be curtailed or stopped altogether.

More of the revenue generated from tourism should go to the local people. One new Reserve in Africa is now providing income to the Masai people, which means much greater involvement and commitment.

Too many vehicles in Parks is an increasing problem. In the Peak Park in the UK, for example, much greater use has had to be made of minibuses and walking, to combat congestion.

## Some subjects "unglamorous"

Explanations, in different ways, of how these "unglamorous" subjects all contribute to biodiversity, such as forming part of the food chain, are part of the answer to this problem. Conservation organisations are rapidly becoming more professional, and aware of other organisations' interests. The RSPB manages its Reserves for butterflies and plants, as well as for birds, and there are increasing numbers of groups which specialise in the more obscure types of insect.

The real solution, however, is the more rapid cataloguing of flora and insects, particularly in the Third World, to determine their status and how much they are threatened.

## Outlook and conclusions

In the developed world, wildlife will probably survive in a somewhat similar form as we know it today, with some species less numerous. We may even have some success in creating areas of natural environment which are scarce today, in addition to National Parks, Reserves and other "cases". The National Trust is the country's biggest landowner and the RSPB owns or manages 100,000 hectares, an area equivalent to the Isle of Wight in size, but as Gro Harlem Brundtland, Norway's former Prime Minister said, democracy is the problem. It is difficult to get what you want unless there are votes for it - in a democracy you cannot ban or restrict the use of the motor-car, for example, unless you have the support of the public, and it does not threaten their lifestyle. In a centrally organised state like the former Soviet Union, such measures could be taken and appropriate edicts issued, but as recently as ten years ago in the United States, the environment appeared to be taking a back seat due to unenlightened policies being pursued, with logging companies and ranchers in the ascendancy. These were only modified due to public pressure at the last minute.

In the Third World, people in most places are only concerned with their own survival, and are too poor to consider conservation unless encouraged to do so by the West. Population is still expanding by up to three per cent per annum in some countries, religion and ignorance often preventing a reduction in the birthrate. The "Green revolution" to increase crop yields has probably gone as far as it can in many countries and future constraints will probably be lack of water followed by famine.

It is ironic that the greatest biodiversity is in somewhere like Indonesia. It has the largest number of bird species, but there the natural habitat is being destroyed fastest. The population increase is one of the most rapid, but the Government policy is to translocate the "surplus" people to virgin areas of unspoilt rainforest.

Wildlife is fighting a rearguard action everywhere. Population pressures and human consumption will mean that natural habitats will continue to be eroded. In the Third World education and wealth cannot come soon enough for there to be sufficient wildlife habitat left for serious observation measures to be taken in addition to those already in place, which are often considerably abused. Lack of space for the projected human populations will mean that the larger animals are likely to disappear even if poaching and markets for trophies were to cease. Half of all primates (235 species), for example, are threatened with extinction. In India sheer numbers of people are exerting enormous pressure on Park boundaries, threatening the Asian Lion and the Tiger, which needs a home range of 25 square kilometres per adult male.



Other species which can adapt to living with humans are more likely to survive in the longer term. In the UK the aggressive Canada Goose, an introduction from North America, numbered 2,000 forty years ago but now numbers 60,000. Magpies are now in force in urban areas as there is more food here than in the countryside. Woodpigeons have also invaded urban areas and have reached pest status. Cormorants have taken advantage of gravel pits artificially stocked with fish and now breed inland. Grey Squirrels are also a pest. Muntjac and Roe Deer are becoming so, with grave effects on young trees, bluebell woods and much of the native flora. It is often the case that introductions into an environment are the most successful, as with the Raccoon in Australia, European birds in New Zealand where they form 60 per cent of the avifauna, and the European Starling in the USA.

The most endangered species worldwide are usually the endemic species on small islands, as in the Seychelles or Galapagos where some bird species have been reduced to populations totals of less than twenty. Rats, feral cats, goats, pigs and other species introduced by man have decimated island populations, and continuous vigilance will be needed to see that none of these severely threatened species become extinct. Tourism in the Galapagos, for instance, may need to be curtailed to save some of the species there.

Global warming will probably mean some shift in populations of birds, with places like the UK seeing more Southern species breeding here in the next 50 years, but with Northern species like the Dotterel and Snow Bunting ceasing to breed on the Cairngorms and Alpine plants ceasing to grow there. Some countries will become wetter, but many areas of high population will become drier, with resultant desertification. Birds can adapt relatively quickly to this sort of change, but plants cannot. Animals can only do so if there is suitable habitat within reach, and no large stretches of water to cross.

#### So what future for conservation?

The collective will of human populations on the planet is the key to its success or failure. If it is the will of mankind to conserve large areas of natural or semi-natural habitat for wild animals, birds or plants, well and good, but the portents are not encouraging. At the World Environment Conference in Rio de Janeiro in 1992, speeches were made, but people carried on much as before without regard to consumption or pollution levels. Although the evidence of significant climate change is becoming apparent, instead of giving a lead to developing countries, for the richer countries it is "business as usual". The political will to stop or reduce global warming is not there. In my view, until small islands in the Pacific disappear under the ocean, and the recent increase in icebergs from the Greenland icecap cause half the Gulf Stream to be diverted southwards to the Mediterranean, plunging Western Europe into an Arctic winter every year, action will not be taken to attempt to alter Western lifestyles to any extent. We cannot gauge the effects of the chain reaction we have unleashed by pumping ever increasing levels of Carbon Dioxide and other gases into the atmosphere.

On the plus side, European levels of emission have stabilised, or are actually declining. This is due to several factors - the politically-contrived demise of the coal industry in the UK, the collapse of Communism, which has caused the closure of lignite plants in former East Germany, and heavy industry in the Czech Republic, which was dependant on brown coal with its high sulphur content. As a result, German forests now appear in much better health than appeared to be the case only a decade or so ago. There has certainly been a reduction in the levels of acid rain here.

However, in India and China, development of industry is proceeding apace. With the development of a new middle class in both countries, consumption and the increased use of cars and road transport is bound to have a detrimental effect on the human and natural environment. Increasing populations in both countries, particularly India, where no population policy is in place, will mean that there will be progressively less room for wildlife. With the climate changing faster worldwide in the last 100 years than in the last 10,000 (since the previous Ice Age), we are travelling headlong into the unknown.

So, while there is still hope for wildlife and conservation, there is absolutely no room for complacency. In democratic countries - most of the Western world with their large per capita consumption - vital decisions for conservation of the environment cannot be taken because they would be unpopular. Electorates cannot or will not contemplate what might happen beyond their own lifespan. Greed and selfishness will probably prevail, with large-scale extinction of flora and fauna, including eventually mankind. I would wager, however, that we shall be outlived as a species by a variety of insects, including ants and cockroaches, but would not like to put too firm a timescale on all this happening, although I feel it is inevitable!

# THE RECORDER'S REPORT FOR BOTANY 1997

B.M. Newman

Records of several plant species seen in 1997 were sent in by members. Old localities were confirmed and new ones reported.

Among the scarcer plants mentioned were **Green Bristle-grass** (*Setaria viridis*), **Yellow Figwort** (*Scrophularia vernalis*), **Wood Barley** (*Hordelymus europaeus*) and **Small Teasel** (*Dipsacus pilosus*). The single plant of **Violet Helleborine** (*Epipactis purpurata*) is the first record of this species the Society has from Sulham.

The selection of records printed below is arranged according to the "List of Vascular Plants of the British Isles" by D.H. Kent 1992. Where a family name has changed the older name is in brackets after the modern one. An alien taxon is indicated by an asterisk (\*) and the English names are from "English Names of Wild Flowers" by Dony, Jury and Perring 1986. Alternative English names in common use are also given.

## OPHIOGLOSSACEAE

*Ophioglossum vulgatum* L. **Adder's-tongue**

Hartslock, 22.5.97 (AB); Crowsley Park Woods, hundreds of plants, 13.6.97 (JDDW).

## DRYOPTERIDACEAE

*Polystichum aculeatum* (L.) Roth **Hard Shield-fern**

Basildon Park, 21.7.97 (AB).

## CUPRESSACEAE

*Juniperis communis* L. **Juniper**

One mature bush, about four miles west of Streatley on the Ridgeway, 30.3.97 (JW).

## RANUNCULACEAE

*Ranunculus fluitans* Lam. **River Water-crowfoot**

Pang valley, 14.5.97; Cholsey, 24.9.97 (AB).

*Aquilegia vulgaris* L. **Columbine**

Hartslock, 16.5.97(AB).

## FAGACEAE

\**Quercus rubra* L. **Red Oak**

Beech Hill, 16.7.97 (AB).

## BETULACEAE

\**Alnus incana* (L.) Moench **Grey Alder**

Crowsley Park Woods, 19.5.97 (JW). There is a 1986 record of the planting of *A. incana* here.

## CHENOPODIACEAE

\**Chenopodium glaucum* L. **Oak-leaved Goosefoot**

Beech Hill, 16.7.97 (AB).

*Atriplex prostrata* Boucher ex DC **Spear-leaved Orache**

Beech Hill, 16.7.97; Chazey Heath, 20.8.97; Fox & Hounds, Sheffield Bottom, 5.6.97 (AB).

## CARYOPHYLLACEAE

*Arenaria serpyllifolia* L. **Thyme-eaved Sandwort**

Cockpole Green, 18.6.97; Basildon Park, 21.7.97 (AB).

\**Agrostemma githago* L. **Corncockle**

Warburg Reserve, Bix, 12.6.97 (AB).

## CLUSIACEAE (HYPERICACEAE)

\**Hypericum calycinum* L. **Rose-of-Sharon**  
Crowsley Park Woods, 26.7.97 (JW)

*Hypericum androsaemum* L. **Tutsan**  
Chazey Heath, 20.8.97 (AB)

## BRASSICACEAE (CRUCIFERAE)

*Arabidopsis thaliana* (L.) Heynh. **Thale Cress**  
Woodcote, 16.4.97 (AB)

\**Isatis tinctoria* L. **Woad**  
Warburg Reserve, Bix, 12.6.97 (AB)

\**Erysimum cheiranthoides* L. **Treacle Mustard**  
Cholsey, 24.9.97 (AB)

\**Hesperis matronalis* L. **Dame's-violet**  
Fox & Hounds, Sheffield Bottom, 5.6.97 (AB)

*Rorippa palustris* (L.) Besser **Marsh Yellow-cress**  
Fox & Hounds, Sheffield Bottom, 5.6.97 (AB)

*Iberis amara* L. **Wild Candytuft**  
Cockpole Green, 18.6.97 (AB)

\**Lepidium draba* L. **Hoary Cress**  
Cockpole Green, 18.6.97 (AB); car park of bowling club in Beech Lane Earley, where it was recorded in 1989. The car park was cleared of weeds and resurfaced in the early 1990's but several plants appeared this year in their old position (BMN).

## PRIMULACEAE

*Lysimachia nemorum* L. **Yellow Pimpernel**  
Cockpole Green, 18.6.97 (AB)

*Anagallis tenella* (L.) L. **Bog Pimpernel**  
Decoy Heath Reserve, flowering in shallow water at northern end of Reserve, 13.7.97 (KHG)

## GROSSULARIACEAE

*Ribes rubrum* L. **Red Currant**  
Crowsley Park Woods, 19.5.97 (JW); Moor Copse, 4.5.97; Basildon Park, 21.7.97 (AB)

## CRASSULACEAE

*Sedum telephium* L. **Orpine**  
Crowsley Park Woods, 26.7.97 (JW)

## ROSACEAE

\**Rosa rugosa* Thumb. ex Murray **Japanese Rose**  
Basildon Park, 21.7.97 (AB)

\**Prunus cerasifera* Ehrh. **Cherry Plum**  
Woodcote, 16.4.97 (AB)

## FABACEAE (LEGUMINOSAE)

\**Galega officinalis* L. **Goat's-rue**  
Footpath between the M4 and old gravel pit to the south, near Theale, 2.7.97 (MS)

*Lathyrus linifolius* (Reichard) Bassler **Bitter-vetch**  
Crowsley Park Woods, 26.7.97 (JW)

*Ononis spinosa* L. **Spiny Restharrow**  
Cholsey, 24.9.97 (AB)

\**Melilotis officinalis* (L) Lam. **Ribbed Melilot**  
Prospect Park, 17.6.97; Beech Hill, 16.7.97 (AB)

## ONAGRACEAE

\**Epilobium ciliatum* Raf. **American Willowherb**  
Beech Hill, 16.7.97 (AB)

\**Oenothera biennis* L. **Evening-primrose**  
Beech Hill, 16.7.97 (AB)

## VISCACEAE

*Viscum album* L. **Mistletoe**  
On lime and maple at the Berkshire College of Agriculture, Burchetts Green, 27.2.97 (JW)

## BUXACEAE

*Buxus sempervirens* L. **Box**  
Sulham, 29.5.97; Basildon Park, 23.7.97 (AB)

## LINACEAE

\**Linum usitatissimum* L. **Flax**  
Warburg Reserve, Bix, 12.6.97 (AB)

## BALSAMINACEAE

\**Impatiens parviflora* DC **Small Balsam**  
Beech Hill, 16.7.97 (AB); roadside verge on B471 at Whitchurch-on-Thames, south of War Memorial, 4.8.97 (MS)

\**Impatiens glandulifera* Royle **Indian Balsam**  
Pang valley, 14.5.97 (AB)

## APIACEAE (UMBELLIFERAE)

*Sanicula europaea* L. **Sanicle**  
Crowsley Park Woods, 19.5.97 (JW)

*Berula erecta* (Hudson) Cov. **Lesser Water-parsnip**  
Moor Copse, 15.5.97; Cholsey, 24.9.97 (AB)

*Oenanthe aquatica* (L.) Poiret **Fine-leaved Water-dropwort**  
Sulham, 29.5.97 (AB)

*Sison amomum* L. **Stone Parsley**  
Beech Hill, 16.7.97 (AB)

*Angelica sylvestris* L. **Wild Angelica**  
Moor Copse, 15.5.97 (AB)

## APOCYNACEAE

\**Vinca major* L. **Greater Periwinkle**  
Fox & Hounds, Sheffield Bottom, 5.6.97 (AB)

## SOLANACEAE

*Atropa belladonna* L. **Deadly Nightshade**

Crowsley Park Woods, 14.6.97 (JW); The Holies, 19.6.97 (AB)

## CUSCUTACEAE

*Cuscuta epithimum* (L.) L. **Dodder**

Kent's Hill, Oxon., on Wild Marjoram, *Origanum vulgare* and Hedge Bedstraw, *Galium mollugo* 21.7.97 (JW).

## MENYANTHACEAE

*Nymphoides peltata* Kuntze **Fringed Water-lily**

Fox and Hounds, Sheffield Bottom, 5.4.97 (AB).

## BORAGINACEAE

\**Pentaglottis sempervirens* (L.) Tausch ex L. Bailey **Green Alkanet**

Watlington Hill, 21.6.97 (AB).

*Cynoglossom officinale* L. **Hound's-tongue**

Crowsley Park Woods, 14.6.97 (JW).

## LAMIACEAE (LABIATAE)

\**Lamium maculatum* (L.) L. **Spotted Dead-nettle**

Wasing Woods, several plants along and near a ride, 31.3.97 (KHG).

*Lamium hybridum* Villars **Cut-leaved Dead-nettle**

Cholsey, 24.9.97 (AB).

*Marrubium vulgare* L. **White Horehound**

Cockpole Green, 18.6.97 (AB).

\**Melissa officinalis* L. **Balm**

Warburg Reserve, Bix, 12.6.97 (AB).

*Clinopodium acinos* (L.) Kuntze **Basil Thyme**

Crowsley Park Woods, 26.7.97 (JW).

*Salvia pratensis* L. **Meadow Clary, Meadow Sage**

Warburg Reserve, Bix, 12.6.97 (AB).

## SCROPHULARIACEAE

\**Scrophularia vernalis* L. **Yellow Figwort**

Several plants at each of two locations near Bucklebury, 14.5.97 (AB).

*Kickxia elatine* (L.) Dumont **Sharp-leaved Fluellen**

Turville Hill, 6.9.97 (AB).

*Kickxia spuria* (L.) Dumort **Round-leaved Fluellen**

Turville Hill, 6.9.97 (AB).

\**Linaria purpurea* (L.) Miller **Purple Toadflax**

The Holies, 19.6.97 (AB)

## CAMPANULACEAE

*Campanula trachelium* L. **Nettle-leaved Bellflower**

Crowsley Park Woods, 26.7.97 (JW); Turville Hill, 6.9.97 (AB).

## ADOXACEAE

*Adoxa moschatellina* L. **Moschatel**  
Woodcote, 16.4.97 (AB).

## DIPSACACEAE

*Dipsacus pilosus* L. **Small Teasel, Shepherd's Rod**  
Footpath at south-west corner of Calleva, 16.7.97; footpath at Stratfield Saye fishing grounds, 28.7.97 (MS); Turville Hill, 6.9.97 (AB).

## ASTERACEAE (COMPOSITAE)

*Inula conyza* (Griess.) Meikle **Ploughmans-spikenard**  
Crowsley Park Woods, 26.7.97 (JW).

*Chamaemelum nobile* (L.) All. **Chamomile**  
Sulham, 29.5.97 (AB).

*Chrysanthemum segetum* L. **Corn Marigold**  
Flax field near footpath from Calleva museum to Calleva, 16.7.97; footpath at rear of Douai Abbey, 21.7.97; footpath opposite the Turner's Arms at Mortimer, 29.7.97 (MS).

*Senecio viscosus* L. **Sticky Groundsel**  
Basildon Park, 21.7.97 (AB).

*Tussilago farfara* L. **Colt's-foot**  
Decoy Heath Reserve, flowering in shallow pond in about six inches of water, 31.3.97 (KHG); Beech Hill, 16.7.97; Fox and Hounds, Sheffield Bottom, 5.6.97; Warburg Reserve, Bix, 7.6.97; Watlington Hill, 21.6.97; Basildon Park, 21.7.97 (AB).

## JUNCACEAE

*Luzula forsteri* (Smith) DC. **Southern Wood-rush**  
Crowsley Park Woods, 19.5.97 (JW).

## CYPERACEAE

*Carex filiformis* L. **Downy - fruited Sedge**  
Hartslock, 22.5.97 (AB).

## POACEAE (GRAMINEAE)

*Hordelymus europaeus* (L.) Jessen **Wood Barley**  
Turville Hill, 6.9.97 (AB).

\**Setaria viridis* (L.) P.Beauv. **Green Brittle-rass**  
Englefield Road, in a lay-by, 3.8.97 (MWS).

## LILIACEAE

*Polygonatum multiflorum* (L.) All. **Solomon's - seal**  
Redhill Copse, 14.5.97 (AB).

*Allium ursinum* L. **Ramsons**  
Redhill Copse, 14.5.97 (AB).

*Allium vineale* L. **Wild Onion**  
Roadside verges in the vicinity of Sulhamstead Abbots. There are at least five local sites, plus one at Tadley, comprising more than a dozen individual plants. June and July 1997 (MS).

## IRIDACEAE

*Iris foetidissima* L. **Stinking Iris, Gladdon, Roast-beef Plant**  
Watlington Hill, 21.6.97 (AB).

## ORCHIDACEAE

*Cephalanthera damasonium* (Miller) Druce **White Helleborine**

Crowsley Park Woods, 50 - 100 plants, 19.5.97 (JW); Warburg Reserve, Bix, 12.6.97 (AB).

*Epipactis purpurata* Smith **Violet Helleborine**

Sulham, one large specimen, 3.8.97 (AB)

*Epipactis helleborine* (L.) Crantz **Broad-leaved Helleborine**

Roadside verge adjacent to pond / picnic area, Burghfield Common, on eastern side of the Mortimer road approximately two yards before end of kerb, a single plant, 5.8.97; footpath / drive 100 yards south of above crossroads and 100 yards west, a single plant (over) on southerly verge, 19.8.97 (MS).

*Listera ovata* (L.) R.Br. **Common Twayblade**

Crowsley Park Woods, 100 - 200 plants, 20.4.97 (JW).

*Anacamptis pyramidalis* (L.) Rich. **Pyramidal Orchid**

Crowsley Park Woods, 14.6.97; Kent's Hill, Oxon., 21.7.97 (JW); Cockpole Green, 18.6.97 (AB).

*Dactylorhiza fuchsii* (Druce) } Soó **Common Spotted-orchid**

Crowsley Park Woods, two plants, 14.6.97 (JW).

*Ophrys apifera* Hudson **Bee Orchid**

Cockpole Green, 18.6.97; Crowsley Park Woods, three plants, 26.7.97 (JW).

## CONTRIBUTORS

Thanks are due to the following contributors:

Alan Brickstock (AB), Kenneth Grinstead (KHG), Betty Newman (BMN), Michael Sheridan (MS), Malcolm Storey (MWS), Janet Welsh (JW), Jerry Welsh (JDDW).

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Although this fills a space, appropriately with the Botany Report, it is not a "space-filler" as are the Editor's contributions. I am most grateful to Stephen Jury for this article, his notes on the recent visit to the reserve are given under Excursions. Editor

## The Micheldever Spoil Heaps Reserve

When the Micheldever tunnels were excavated in the 1840's, the chalk waste was tipped in a 100 metre-long heap adjacent to the railway. The site is now a Reserve of the Hampshire & Isle of Wight Wildlife Trust, visit is by permit only and it is necessary to know the number of the padlock to open the gate into the reserve. It is the home of a number of rare and interesting plants, the principle being Cut-leaved Germander, *Teucrium botrys*. This is a biennial species on the edge of its range in Great Britain, where it is now restricted to five sites. It is much more common further south in Europe. It has been known from this area of Hampshire since 1811, but is now known only on the bare chalk banks of the reserve. I had noted that there was a specimen of *Teucrium botrys*, collected by G.C. Druce from the site in 1930, in the University of Reading Herbarium. I visited the site some years ago before it was a reserve and prepared a report on the flora and its significance at the request of Mrs. Charles Church, owner of the land. At the time the family were happy for local motorcyclists to use the area for scrambling, to the concern of environmentalists. Now the scrub is regularly cleared and the site is well managed by the Wildlife Trust rather than the local bikers!

## THE RECORDER'S REPORT FOR FUNGI 1997

Alan Brickstock

Another year with a very long, dry spell, and again many normally abundant species were found in ones and twos instead of hundreds, and we wondered if the 'season' would ever really start. But what is normal of recent years? There was an early 'flush' of some species in July, during a cool spell after heavy rain. Our garden had *Lepiota rhacodes*, *Amanita rubescens* and *A. vaginata* in July, and numerous *Boletus impolitus* in August. *Boletus albidus* was found at Ufton Nervet on August 8th. There were *Amanita phalloides* and *Tricholoma ionides* at Sulham on August 21st. Then the long, dry spell started, and things disappeared again. It was not until mid-November (!) that the 'season' started. Suddenly, in many of our local woods, there was a fantastic 'explosion' of *Collybia butyracea*, with great areas covered with hundreds of complete rings, to the almost complete exclusion of any 'singletons'. I have never seen such a profusion of this species. Alick Henrici of BMS commented that the season proper also started in mid-November in the London area. *Clitocybe nebularis* also appeared in large numbers of rings, some of them several metres across. There were also daunting numbers of *Mycenas* about, particularly when Fungus Group were doing recording for the Forestry survey at The Lookout and at Alice Holt. Two uncommon species found at Heath Lake on October 12th were *Boletus parasiticus*, a small Bolete which grows on old Earth-balls, and *Asterophora lycoperdoides*, which grows on decaying *Russula nigricans*. An exciting find at Alice Holt was *Typhula spathulata*, growing on dead ash. There are only very few British records for this species. We shall keep a watch for this again next year! We also recorded several very uncommon species over the year. The total number of species so far to hand is 517, a new record. However, there will no doubt be some more to add to this total, as at present I have less than half the 200 or so species from a foray at Bix on 14th. October. There will also be more species from our Forestry Surveys when specimens have been examined.

### GILL FUNGI

*Agaricus lanipes* (Moell. & Schff.) Sing.  
Harpsden, 20.09.97 (RFG)

*Agaricus niveolutescens* Huijism.  
Hambleton, 02.11.97 (HB & RF)

*Agrocybe erebia* (Fr.) Kühn.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Amanita gemmata* (Fr.) Bertillon  
Virginia Water, 18.10.97 (BMS)

*Arrhenia spathulata* (Fr.) Redhead  
The Old Bomb Dump, 19.10.97 (MWS)

*Asterophora lycoperdoides* (Bull.) Ditm. ex Gray  
Heath Lake, 12.10.97 (RFG)

*Clitocybe inornata* (Sow. ex Fr.) Gillet  
The Old Bomb Dump, 19.10.97 (MWS)

*Clitocybe phyllophila* (Fr.) Quéf.  
Heath Lake, 12.10.97 (RFG)

*Conocybe arrhenii* (Fr.) K. van Wav.  
The Lookout, 06.12.97 (RFG)

*Conocybe magnicapitata* Orton  
Hambleton, 02.11.97 (RFG)

*Cortinarius sodagnitus* Henry  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Crepidotus cesatii* (Rabh.) Sacc.  
Hambleton, 02.11.97 (HB & RF)

*Crepidotus subsphaerosporus* (Lge.) Kühn. & Romagn.  
Hambleton, 02.11.97 (HB & RF)

*Cystolepiota hetieri* (Boud.) Singer  
Upper Bucklebury, 28.09.97 (MWS). Growing under Pear and Rhododendron sps.



*Dermoloma cuneifolium* (Fr.) Singer ex Bon  
Bucklebury Common Cemetery, 14.10.97 (MWS)

*Entoloma hebes* (Romagn.) Trimbach  
Hambleden, 02.11.97 (RFG)

*Gyroporus castaneus* (Bull.) Quél.  
Bucklebury Lower Common, 21.09.97 (MWS). Growing under Oak.

*Hygrocybe calyptraeformis* (Bk. & Br.) Fay.  
St. Mark's, Cold Ash, 21.09.97 (MWS)

*Hygrocybe marchii* Bres.  
Virginia Water, 18.10.97 (BMS)

*Camarophyllopsis foetens* (Phill.) Arnolds  
St. Mark's, Cold Ash, 08.11.97 (MWS). In damp, shady mossy patch on NE corner of church.

*Hygrophorus leucophaeus* (Scop.ex.Fr.) Fr.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Inocybe corydalina* Quél.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Inocybe haemacta* Bk. & Br.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Inocybe splendens* Heim  
Hambleden, 02.11.97 (RFG)

*Lactarius albivelus* Romag.  
Holly Wood, 29.09.97 (MWS)

*Lepiota brunneo-incarnata* Chod. et Mart.  
Bucklebury Upper Common, 27.09.97 (MWS)

*Lepiota fulvella* Rea  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Lepiota xanthophylla* Orton  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Limacella vinosorubescens* Furrer  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Macrolepiota excoriata* Schff. ex Fr.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Marasmius recubans* Quél.  
Hambleden, 02.11.97 (RFG)

*Melanoleuca arcuata* (Fr.) Sing.  
Nuney Green, 09.11.97 (RFG)

*Mycena longiseta* Hoehn.  
Nuney Green, 09.11.97 (RFG)

*Mycena olivaceomarginata* (Mass.) Mass.  
Nuney Green, 09.11.97 (RFG)

*Mycena seynii* Quél.  
Bowdown House, 10.10.97 (MWS, identity confirmed by E Emmett).

Malcolm Storey writes: This is only the sixth time that *M. seynii* has been recorded in Britain. It is a continental species and in this country has been found growing on the cones of imported conifers. Cones collected from a fallen Monterey Pine, *Pinus radiata*, just outside the grounds of Bowdown House have been kept on a sunny patio. Fruit bodies of the fungus have appeared previously in Autumn on these cones but none have been found on cones at the original site. It may be that a good baking by the sun is needed to induce fruiting.

*Oudemansiella pseudoradicata* Mos.  
Hambleton, 02.11.97 (RFG)

*Pluteus luteovirens* Rea  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Pluteus minutissimus* R. Mre.  
Hambleton, 02.11.97 (HB & RF)

*Pluteus xanthophaeus* Orton  
Hambleton, 02.11.97 (RFG)

*Psathyrella bifrons* (Bk.) Smith  
Hambleton, 02.11.97 (RFG)

*Rhodocybe popinalis* (Fr.) Singer  
East Ilsley Church, 17.10.97 (MWS)

*Tephroclybe anthrocophila* (Lasch.) Orton  
Hambleton, 02.11.97 (HB & RF)

*Tephroclybe rancida* (Fr.) Donk  
Nuney Green, 09.11.97 (RFG)

*Tricholoma stiparophyllum* (Lund.) Karst.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

## BOLETI

*Boletus parasiticus* Bull. ex Fr.  
Bucklebury Upper Common, 27.09.97 (MWS); Heath Lake, 12.10.97 (RFG).

*Leccinum holopus* (Rostk.) Watl.  
Heath Lake, 12.10.97 (RFG); Warburg Reserve, Bix, 11.10.97 (AB)

## APHYLLOPHORALES

*Antrodia xantha* Erikss.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Athelia bombacina* (Pers.) Jülich  
The Lookout, 06.12.97 (RFG)

*Ceriporia excelsa* (Lund.) Parm.  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Ceriporia viridans* (Berk. & Br.) Donk  
Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Ceriporia purpurea* (Fr.) Donk  
Hambleton, 02.11.97 (HB & RF)

*Dacryobolus karstenii* (Bres.) Oberw. Ex Parm.  
The Lookout, 06.12.97 (RFG)

*Ganoderma lucidum* (Curt. ex Fr.) Karsten  
Frilsham Common, 02.11.97 (MWS)

*Hericium erinaceum* (Bull.) Pers.  
Virginia Water, 18.10.97 (BMS)

*Hyphoderma radula* (Fr.) Donk  
Hambleton, 02.11.97 (RFG); Hambleton, 02.11.97 (HB & RF)

*Hyphoderma setigerum* (Fr.) Donk  
The Lookout, 06.12.97 (RFG)

*Hyphodontia sambuci* (Pers.) Erikss.  
Hambleton, 02.11.97 (RFG); Warburg Reserve, Bix, 04.10.97 (AH & NL)

*Resinicium bicolor* (A. & S. ex Fr.) Parm.  
Burnam Beeches, 06.10.97 (PEC)

## GASTEROMYCETES

*Geastrum pectinatum* Pers.  
Sulham, 15.10.97 (RFG) A very uncommon Earthstar, which I had never seen before. Several specimens growing within a yard or two of *G. triplex* and *G. sessile*. These two I have found at Sulham for a number of years, but these were in a location where I have not found Earthstars before.

## HETEROBASIDIOMYCETES

*Tulasnella violea* (J.Olsen in Bref.) Juel  
Burnam Beeches, 06.10.97 (PEC)

## ASCOMYCETES

*Camarops polysperma* (Mont.) Miller  
Virginia Water, 18.10.97 (BMS)

*Chaetosphaeria myriocarpa* (Fr.) Booth  
Warburg Reserve, Bix, 20.04.97 (RFG)

*Coprobria granulata* (Bull.ex.Fr.) Boud.  
Hambleton, 02.11.97 (HB & RF)

*Eutypa acharii* Tulasne  
Hambleton, 02.11.97 (RFG)

*Eutypa spinosa* (Pers.) Tul. & C.Tul.  
Burnam Beeches, 06.10.97 (PEC)

*Hypocrea pulvinata* Fuckel  
Heath Lake, 12.10.97 (RFG)

*Hypoxyton serpens* (Pers.ex.Fr.) Fr.  
Burnam Beeches, 06.10.97 (PEC)

*Leptosphaeria* (Fr.) Karst.  
Warburg Reserve, Bix, 20.04.97 (RFG)

*Nectria desmazierii* Becc. & De Not.  
Basildon Park, 23.11.97 (MWS)

*Orbilbia xanthostigma* (Fr.) Fr.  
The Lookout, 06.12.97 (RFG)

*Peziza sepiatra* Cooke  
Warburg Reserve, Bix, 11.10.97 (PEC)

*Rosellinia aquila* (Fr.) De Not.  
Whiteknights, 22.11.97 (PEC)

*Rosellinia britannica* Petrini  
Sulham, 15.10.97 (RFG)

## FUNGI IMPERFECTI

*Cytospora leucostoma* Sacc.  
Warburg Reserve, Bix, 04.10.97 (RFG)

## CONTRIBUTORS

Many thanks to all my contributors, especially to Henry Beker, Paul Cook and John Wheeley for many of the identifications, and also to Malcolm Storey for his extensive Pang Valley list.

Henry Beker (HB), Alan Brickstock (AB), British Mycological Society foray (BMS), Paul Cook (PEC), Gordon Crutchfield (GC), Richard Fortey (RF), Alick Henrici (AH), Nick Legon (NL), Reading Fungus Group foray (RFG), Malcolm Storey (MWS).

# THE RECORDER'S REPORT FOR ENTOMOLOGY 1997

Brian R. Baker

The order and nomenclature used in this report are those given in Kloet and Hincks (1964-1978), supplemented by Bradley and Fletcher (1979,1986).

## EPHEMEROPTERA : MAYFLIES

*Ephemera lineata* Eaton

Hargrave Road, Maidenhead, 9.7.97, 9.8.97 (MVA); Matlock Road, Caversham, 1.8.97, indicating a dispersal flight from the River Thames (half a mile distant) under very warm conditions (BRB).

*Paraleptophlebia submarginata* (Steph.)

Longmeadow Plantation (SU 594 721), 12.5.96, one sub-imago (MCH).

## ODONATA : DRAGONFLIES

*Cordulegaster boltonii* (Donovan) **Golden-ringed Dragonfly**

Decoy Heath Reserve, 13.7.97, a female settled on open ground below the electricity power lines (KHG).

*Sympetrum sanguineum* (Müller) **Ruddy Darter**

Decoy Heath Reserve, 13.7.97, several males generally distributed throughout the reserve (KHG).

## PLECOPTERA : STONEFLIES

*Leuctra fusca* (L.)

Moor Copse Reserve, 21.9.96, a male swept from riverside vegetation (MCH).

## ORTHOPTERA : CRICKETS, BUSH-CRICKETS, GRASSHOPPERS, GROUND-HOPPERS

*Metrioptera roeselii* (Hagenbach) **Roesel's Bush-cricket**

Kennylands Field, Sonning Common, Upper Basildon and Cholsey. Numerous at all these localities in 1997 (MCH); Pamber Forest Reserve, numerous from 15.7.97 until well into August (GJD).

*Conocephalus discolor* (Thun.) **Long-winged Conehead**

Pamber Forest Reserve, noted on many occasions (GJD); Boxford Water Meadows SSSI and in dry grassland at Upper Basildon (MCH).

## HEMIPTERA : PLANT BUGS, WATER BUGS, LEAF HOPPERS, APHIDS

*Elasmotethus interstinctus* (L.) **Birch Shield Bug**

Coombe Wood SSSI near Frilsham, Basildon Park. This bug was numerous in August with over 50 at a time being attracted to mercury vapour lamps (MCH det. MWS); Hargrave Road, Maidenhead (MVA).

## NEUROPTERA : ALDERFLIES, SNAKEFLIES, LACEWINGS

*Osmylus fulvicephalus* (Scop.) **Giant Lacewing**

Pamber Forest Reserve, 26.5.97, observed near Honey Mill stream (GJD).

## LEPIDOPTERA : BUTTERFLIES AND MOTHS

*Incurvaria oehlmanniella* (Hübner)

Coombe Wood, near Frilsham, 4.5.97 (MCH).

*Adela cuprella* (D. & S.)

Pamber Forest Reserve, 10.4.97, a cloud (c. 20) of these bronzy golden little moths observed flying high over a Goat Willow, *Salix caprea*, (GJD).

*Zeuzera pyrina* (L.) **Leopard Moth**

Bucklebury Common, 6.7.97, a freshly emerged female with the pupal exuvium protruding from the birch stem in which the larva had fed (MWS, MCH); Leighton Park, 5.7.97, two males at midnight to mercury vapour light on lawn in parkland (TDH); Mortimer West End, 8.7.97, 22.7.97 (GJD).

*Adscita statices* (L.) **The Forester**

Kennylands Field, Sonning Common, 9.7.97, c. 200 specimens seen with up to ten on a single Scabious flower (MCH).

*Caloptilia populetorum* (Zell.)

Broadmoor, bred ex *Betula*, 8.10.97 (NMH). Second Berkshire vice-county record (BRB).

*Caloptilia azaleella* (Brants) **Azalea Leaf Miner**

Harcourt Drive, Earley, 28.7.97, 31.7.97 (NMH). Second Berkshire vice-county record (BRB).

*Phyllonorycter tenerella* (Joannis)

Dinton Pastures Country Park, bred ex *Carpinus*, 15.3.97 (NMH). Second Berkshire vice-county record (BRB).

*Phyllonorycter leucographella* (Zell.)

Lower Earley, bred ex *Pyracantha*, 9.4.97 (NMH); Upper Bucklebury, 30.11.97, very small mines in leaves of *Pyracantha* (MWS).

*Depressaria daucella* (D. & S.)

Thatcham, 28.7.95 (MCH, confirmed J.R. Langmaid).

*Depressaria badiella* (Hübner)

The Holies, 19.7.96 (MCH, det. J.R. Langmaid).

*Sitochroa palealis* (D. & S.)

Kiln Ride, Upper Basildon, 7.8.97 (MCH).

*Alispa angustella* (Hübner)

Emmer Green, 18.2.97, a specimen hatched from Spindle berries used as house decoration (JHFN); Hartslock Reserve, 22.8.97 (CMR, MCH).

*Homoeosoma nebulella* (D. & S.)

Kiln Ride, Upper Basildon, 16.8.96 (MCH). First Berkshire vice-county record since 1920 (BRB).

*Anthocharis cardamines* (L.) **Orange Tip**

Barnsdale Road, Reading, 30.3.97, very early (MDB); Pamber Forest Reserve, 31.3.97, also early, continuing through for some weeks and last seen 16.6.97 (GJD); Aldermaston, 10.4.97 (PGS); Emmer Green, 2.4.97 (JHFN); Little Court, Goring, 10.4.97, 1.5.97 (EVW).

*Strymonidia w-album* (Knoch) **White-letter Hairstreak**

Sulham Woods, larvae beaten commonly on mature Wych Elms, *Ulmus glabra*, during May (DAY); Leighton Park, 19.6.97, one butterfly found resting on bramble leaf at 20.00 hrs. (TDH); Upper Basildon, 22.6.97, one on flowers of Hogweed, *Heracleum sphondylium* (MCH).

*Lysandra bellargus* (Rott.) **Adonis Blue**

Near Goring, an exceptionally good year for this local speciality, both broods appearing two weeks earlier than the normal times (EVW).

*Celastrina argiolus* (L.) **Holly Blue**

Pamber Forest Reserve, 10.3.97 (very early) and a total of 55 recorded on the transects over the entire season (GJD); Hargrave Road, Maidenhead, 31.3.97, 12.4.97, 26.5.97; Little Court, Goring, first seen 27.3.97 and then on subsequent occasions during the summer (EVW); Emmer Green, 7.4.97, 4.9.97 (PGS); Emmer Green, 9.4.97 (JHFN); both broods common and noted from many urban and rural areas and the flight extended until early October (DAY); Caversham Court, 22.9.97, which I consider to be third brood (BRB).

*Apatura iris* (L.) **Purple Emperor**

Pamber Forest Reserve, 8.7.97, one seen on the ground, 10.7.97, one seen in its normal high soaring flight (GJD).

*Cynthia cardui* (L.) **Painted Lady**

Sulhamstead, 18.5.97, a single specimen (DAY); Emmer Green, 11.7.97, only three seen during the season (JHFN); These records are in stark contrast to the exceptional abundance noted in 1996 (BRB).

*Aglais urticae* (L.) **Small Tortoiseshell**

Post hibernation specimens noted at Tilehurst in late March, and plenty of larval nests at various localities in May, June and late July/August (DAY); Emmer Green, 10.3.97, and 85 seen during the season (JHFN); Pamber Forest Reserve, 10.3.97 (GJD); Tilehurst, early September, these colourful butterflies were numerous in their second brood, with 55 recorded on a patch of Stonecrop, *Sedum* (vars. Carmen and Brilliant) (PAS).

*Argynnis aglaja* (L.) **Dark Green Fritillary**

Hartslock Reserve, 13.6.97 (PGS); Pamber Forest Reserve, 14.6.97 and a different specimen on 23.6.97. Last seen in Pamber Forest in the mid-1980's (GJD).

*Archiearis notha* (Hübner.) **Light Orange Underwing**

Pamber Forest Reserve, 2.4.97, 10.4.97 (GJD).

*Scopula marginepunctata* (Goeze) **Mullein Wave**

Harcourt Drive, Earley, 19.8.97 (NMH). Second Berkshire vice-county record for this mainly coastal species (BRB).

*Idaea vulpinaria atrosignaria* Lempke **Least Carpet**

Emmer Green, 12.7.97 (JHFN); Heelas' Window, Broad Street, Reading, 14.7.97, a very unusual locality (DGN); Tilehurst, 12.7.97 (DAY); Harcourt Drive, Earley, 13.7.97, 15.7.97 (NMH); Mortimer West End, 15.7.97 (GJD). These records indicate a steady spread of a species new to our district as of last year (BRB).

*Epirrhoe rivata* (Hübner.) **Wood Carpet**

The Holies, 19.7.96, first Berkshire record since 1971 (MCH).

*Anticollix sparsata* (Treits.) **Dentated Pug**

Berrys Road, Upper Bucklebury, 17.6.97, one in the garden Heath Trap, presumably dispersed from the Kennet Valley (MWS, det. MCH).

*Discoloxia blomeri* (Curtis) **Blomer's Rivulet**

Homefield Wood, 31.5.97, one seen during the RDNHS's field meeting (MCH).

*Semiothisa notata* (L.) **Peacock Moth**

Lords Wood, Pamber Forest, 8.6.97, 12.6.97, (DAY); Mortimer West End, 24.8.97 (GJD).

*Angerona prunaria* (L.) **Orange Moth**

Lords Wood, Pamber Forest, 8.6.97, 12.6.97, (DAY).

*Eilema sororcula* (Hufn.) **Orange Footman**

Upper Basildon, 1.5.97, two, Ashampstead Common, 9.5.97, one (MCH); Mortimer West End, 17.5.97 (GJD); Lords Wood, Pamber Forest, 8.6.97, 12.6.97 (DAY).

*Agrotis cinerea* (D. & S.) **Light Feathered Rustic**

Hartslock Reserve, recorded on many occasions from the exceptionally early date of 19.4.97 until 3.6.97 (CMR).

*Agrotis trux* (Hübner.) ssp. *lunigera* Steph. **Crescent Dart**

Emmer Green, 7.7.97 (JHFN). A remarkable record for this predominantly coastal species and identification confirmed by Martin Honey, British Museum (Nat. Hist.)

*Xestia rhomboidea* (Esp.) **Square-spotted Clay**

Emmer Green, 1.8.97, three noted during the season (JHFN, DGN).

*Cucullia verbasci* (L.) **The Mullein Moth**

Padworth, larvae common on waste ground mulleins (DAY).

*Lithophane ornithopus* (Hufn.) **Grey Shoulder-knot**

Tilehurst, 10.3.97 (DAY); Harcourt Drive, Earley, 13.3.97, 6.10.97 (NMH); Mortimer West End, 30.4.97 (GJD); Hargrave Road, Maidenhead, 26.9.97, 30.9.97 (MVA); Emmer Green, 8.10.97 (JHFN).

*Xanthia citrigo* (L.) **Orange Sallow**  
Tilehurst, 28.9.97, first garden record (DAY).

*Acronicta aceris* (L.) **The Sycamore**  
Baughurst, 19.8.97, 20.8.97, a larva was found in the house on each date, both were unusual in that the dense tufts of hairs on the body were all reddish, none were pale yellow, 22.8.97, both larvae had pupated. 25.8.97, a larva with the usual yellow and red coloured tufts was found in the garden. It is assumed that all three larvae had been feeding on the oak tree near the house (KHG).

*Hydraecia petasitis* Doubl. **The Butterbur**  
Woolhampton, 22.8.97, 24.8.97 (DAY).

*Celaena leucostigma* (Hüb.) **The Crescent**  
Cholsey Marsh Reserve, 15.8.97, fifteen to mercury vapour light and another fifteen to sugar ropes (MCH).

*Spodoptera exigua* (Hüb.) **Small Mottled Willow**  
Mortimer West End, 16.6.97 (GJD).

*Pyrrhia umbra* (Hufn.) **Bordered Sallow**  
Matlock Road, Caversham, 30.6.97 (BRB); Mortimer West End, 15.7.97 (GJD).

*Parascotia fuliginaria* (L.) **Waved Black**  
Ashampstead Common, 15.6.97, two larvae inside rotten beech log, Berrys Road, Upper Bucklebury, 30.7.97, one at light (MWS); Emmer Green, 16.7.97 (JHFN); Pamber Forest Reserve, 19.7.97, one during the RDNHS Annual Moth Meeting (BRB); Pamber Forest Reserve, 8.8.97 (GJD); Mortimer West End, 8.7.97, 15.7.97 (GJD); Harcourt Drive, Earley, 31.7.97, 1.8.97 (NMH).

*Hypena rostralis* (L.) **Buttoned Snout**  
Emmer Green, 27.5.97 (JHFN); Homefield Wood, 31.5.97 (MCH).

*Pechipogo strigillata* (L.) **Common Fan-foot**  
Mortimer West End, 19.6.97 (GJD).

## COLEOPTERA : BEETLES

My thanks go to HHC for the usual preselection of records from the comprehensive list submitted by TDH.

TDH writes:- Please note the following corrections:

1. Previous records for *Atomaria nigripennis* Kugelann refer in fact to *A. munda* Erichson.
2. All previous records for *Oulema melanopus* should be discarded since this species has been split into two.

*Hydroporus tessellatus* Drapiez  
Bramshill Plantation, 16.6.96, in shallow muddy pool in ditch beside land-fill site (TDH). Two old records (HHC).

*Gyrinus urinator* Illiger  
Near Hall Farm, Shinfield, 11.1.96, netted out of River Loddon in rural area (TDH). Two old local records (HHC).

*Ochthebius dilatatus* Stephens  
Bramshill Plantation, 16.6.96, in shallow muddy pool in ditch beside land-fill site (TDH). No previous record (HHC).

*Agathidium varians* Beck  
Near Hall Farm, Shinfield, 11.1.96, under bark of fallen willow tree in copse of deciduous trees in area of river meadows (TDH). One old local record (HHC).

*Cephennum gallicum* Ganglbauer  
The Ridges, Finchampstead, 13.3.96, extracted from sphagnum by means of Tullgren funnel, moss collected from bank of pond in birch woodland (TDH). No local record (HHC).

*Dropephylla gracilicornis* Fairmaire & Laboulbene

"Flashings", Warren Heath, 20.4.96, under bark of birch log on heathland (TDH). No previous record (HHC).

*Hypopycna rufula* Erichson

Leighton Park, 22.10.96, in flight-interception trap with dead leaves, on grass lawn beside hedgerow at edge of parkland (TDH). No previous record (HHC).

*Acrolocha sulcula* Stephens

Leighton Park, 1.10.96, in flight-interception trap on grass lawn beside hedgerow at edge of parkland (TDH). One previous local record (HHC).

*Bledius opacus* Block

Leighton Park, 2.9.96, caught in Robinson light trap on grass lawn in parkland (TDH). One old local record (HHC).

*Medon brunneus* Erichson

Shirburn Hill, near Watlington, 26.12.96, extracted from frozen moss by means of Tullgren funnel, moss collected from base of young box plants on chalk downland (TDH). No previous record (HHC).

*Hypomedon debilicornis* Wollaston

Near Heckfield, 23.10.96, in farmer's manure heap in a meadow (TDH). No previous record, second UK record (HHC).

*Astenus pulchellus* Heer

Near Heckfield, 23.10.96, in farmer's manure heap in a meadow (TDH). No previous record (HHC).

*Philonthus subuliformis* Gravenhorst

Leighton Park, 1.7.96, obtained from "bird nest trap" (fish head wrapped up in moss in wire cage) in hole in Horse Chestnut tree within deciduous woodland in park (TDH). One previous old record (HHC).

*Quedius brevicornis* Thomson C.G.

Leighton Park, 1.7.96, obtained from "bird nest trap" in hole in Horse Chestnut tree in deciduous woodland (TDH). Four previous old local records (HHC).

*Mycetoporus angularis* Mulsart & Rey

"Flashings", Warren Heath, 20.4.96, in sphagnum on heath with birch and willow scrub (TDH). One previous record (HHC).

*Sepedophilus lusitanicus* Hammond

Leighton Park, 24.6.96, in pit-fall trap baited with peanut butter (small mammal trap) in hedgerow (TDH). No previous record (HHC).

*Oligota punctulata* Heer

Near Wellington Country Park, 2.10.96, on underside of piece of oak bark, part of which had decayed, in grass field (TDH). No previous record (HHC).

*Gyrophaena joyi* Wendeler

Near Shinfield, 9.1.96, extracted from moss by means of Tullgren funnel, the moss covered two logs in log pile beside pond in copse of deciduous trees (TDH). One previous record (HHC).

*Placusa pumilio* Gravenhorst

The Coombes near Wokingham, 8.5.96, under bark of oak stump in deciduous wood (TDH). No previous record (HHC).

*Amischa decipiens* Sharp

Near Shinfield, 9.1.96, resting on log surrounded by flood water in flooded field (TDH). No previous record (HHC).

*Amischa nigrofusca* Stephens

Near Shinfield, 9.1.96, resting on log surrounded by flood water in flooded field (TDH). No previous record (HHC).

*Atheta gyllenhali* Thomson C.G.

Near Shinfield, 13.1.96, obtained by shaking piles of wind-swept leaves over a sheet, leaves lay on top of flood refuse in hedgerow (TDH). No previous record (HHC).



*Atheta harwoodi* Williams

Leighton Park, 1.7.96, obtained from "bird nest trap" in hole in Horse Chestnut tree in deciduous woodland (TDH). No previous record (HHC).

*Atheta vilis* Erichson

Near Shinfield, 9.1.96, extracted from moss by means of Tullgren funnel, the moss covered logs in a log pile beside pond in copse of deciduous trees (TDH). No previous record (HHC).

*Alianta incana* Erichson

Sheffield Bottom, Theale, 2.11.96, in leaf sheaves of Bulrush, *Typha latifolia* on bank of flooded gravel pit (TDH). No previous record (HHC).

*Calodera aethiops* Gravenhorst

The Ridges, Finchampstead, 13.3.96, extracted from sphagnum by means of Tullgren funnel, moss was growing around the base of a birch tree beside a pond (TDH). No previous record (HHC).

*Calodera rufescens* Kraatz

Near Shinfield, 28.2.96, under moss on log at edge of pond in copse of willows (TDH). No previous record (HHC).

*Oxypoda haemorrhoea* Mannerheim

Near Heckfield Heath, 8.12.96, in hay bale in grass field (TDH). No previous record (HHC).

*Oxypoda lentula* Erichson

"Flashings", Warren Heath, 20.4.96, in sphagnum on heath with birch and willow scrub (TDH). No previous record (HHC).

*Oxypoda umbrata* Gyllenhal

Near Shinfield, 19.4.96, in flood refuse on bank of river (TDH). No previous record (HHC).

*Leucanus cervus* L. **The Stag Beetle**

Cockney Hill, Reading, 17.5.97, a 'swarm' of these impressive beetles, some crawling, some flying, noted in late evening (a neighbour of Alan Brickstock).

*Cetonia aurata* (L.) **Rose Chafer**

Emmer Green, 4.6.97 (PGS); Decoy Heath Reserve, 13.7.97, seen feeding on flowers of Creeping Thistle, *Cirsium arvense* (KHG).

*Ischnoglossa prolixa* Gravenhorst

Near Watlington, 18.2.96, under bark of dead but still standing larch in deciduous wood (TDH). No previous record (HHC).

*Aleochara bilineata* Gyllenhal

Hitchcops Pit, 22.8.96, under dog faeces in disused sand pit (TDH). No previous record (HHC).

*Aleochara intricata* Mannerheim

Near Shinfield, 9.1.96, extracted from moss by means of Tullgren funnel, the moss covered logs in a log pile beside pond in copse of deciduous trees (TDH). Two old records (HHC).

*Rybaxis laminata* Motschulsky

Near Shinfield, 25.9.96, obtained by beating pollarded willows in marsh (TDH). No previous record (HHC).

*Brachygluta fossulata* Reichenbach

The Ridges, Finchampstead, 13.3.96, extracted from sphagnum by means of Tullgren funnel, moss growing around base of birch tree beside pond in birch woodland (TDH). Two old records (HHC).

*Calyptomerus dubius* Marsham

Near Westridge Green, Streatley, 17.12.96, in hay bales on arable farmland (TDH). No previous record (HHC).

*Cyphon hilaris* Nyholm

Cothill Fen, 12.6.96, obtained by sweeping grasses and sedges in fen (TDH). No previous record (HHC).

*Trachys scrobiculatus* Kiesenwetter

The Warburg Reserve, Bix, 9.3.96, extracted from moss by means of Tullgren funnel, moss was growing on ground in area of hazel scrub in deciduous wood (TDH). Two old records (HHC).

*Sericus brunneus* Linnaeus

Near Eversley Common, 5.6.96, resting on the resinous young green shoots of young pine on heath land (TDH). No previous local record (HHC).

*Melasis buprestoides* Linnaeus

Whiteknights, 4.5.96, specimens emerged from birch logs, found in a deciduous wood on 8.2.95, and kept in a sealed aquarium (TDH). Three old local records (HHC).

*Trixagus obtusus* Curtis

Near Shinfield, 13.1.96, collected from crack in fence post in area of river meadows (TDH). No recent local record (HHC).

*Pria dulcamarae* Scopoli

Near Wellington Country Park, 2.6.96, obtained by sweeping plants of Large Bitter-cress, *Cardamine amara* in deciduous wood (TDH). Two old records (HHC).

*Meligethes atratus* Olivier

Pamber Forest, 1.9.96, obtained by shaking flower heads of Betony, *Stachys officinalis*, plants growing on grassy ride in oak wood (TDH). Four old records (HHC).

*Meligethes flavipes* Sturm

Dry Sandford Pit, 22.8.96, inside corollas of Wild Basil, *Clinopodium vulgare*, plants growing in disused sand pit. Near Gatehampton Manor, Goring, 25.8.96, in corollas of Black Horehound, *Ballota nigra*, plants growing in tree-lined hedgerow (TDH). No previous record (HHC).

*Meligethes ovatus* Sturm

Hartslock NR, 5.5.96, obtained by shaking over sheet plants of Ground-ivy, *Glechoma hederacea*, found growing at base of hedge on top of calcareous slope (TDH). Two old records (HHC).

*Soronia grisea* Linnaeus

Near Shinfield, 19.4.96, under bark of dead but standing conifer in plantation (TDH). One old non-local record (HHC).

*Pityophagus ferrugineus* Linnaeus

Warren Heath, 20.4.96, caught in flight (with a pond net) as they approached a conifer log pile in conifer plantation (TDH). Four old records (HHC).

*Silvanus bidentatus* Fabricius

Leighton Park, 17.8.96, between two vertically stacked tree logs of deciduous tree beside hedge in parkland (TDH). No previous record (HHC).

*Paramecosoma melanocephalum* Herbst

Near Shinfield, 19.4.96, in flood refuse on bank of river (TDH). No previous record (HHC).

*Cryptophagus acutangulus* Gyllenhal

Near Pingewood, 2.11.96, in rotting hay in grass meadow (TDH). No previous record (HHC).

*Cryptophagus dentatus* Herbst

Leighton Park, 1.7.96, in fruit bodies of *Polyporus squamosus* on beech log in log pile in deciduous wood (TDH). No previous record (HHC).

*Cryptophagus pilosus* Gyllenhal

Near Heckfield, 29.10.96, in straw taken from farmer's manure heap in meadow (TDH). No previous record (HHC).

*Micrambe vini* Panzer

Silchester Common, 14.5.96, obtained by beating flowers of Gorse, *Ulex europaeus* in area of gorse scrub on heath land (TDH). Three old local records, one non-local (HHC).

*Atomaria barani* Brisout

Near Shinfield, 13.1.96, in crack in fence post in area of river meadows, identification confirmed by Colin Johnson (TDH). No previous record (HHC).

*Atomaria gutta* Stephens  
Near Shinfield, 11.1.96, in cracks in fence posts in area of river meadows (TDH). One old record, no locality (HHC).

*Atomaria strandi* Johnson  
Near Shinfield, 25.9.96, under flake of burnt bark on burnt willow in hedge (TDH). No previous record (HHC).

*Holoparmecus caularum* Aubé  
Near Heckfield, 29.10.96, in decomposing straw taken from farmer's manure heap in meadow (TDH). No previous record (HHC).

*Dienerella ruficollis* Marsham  
Near Pingewood, 2.11.96, in rotting straw in meadow (TDH). One old record without data (HHC).

*Corticaria inconspicua* Wollaston  
Leighton Park, 4.10.96, in old tit's nest taken from nest box which was sited on ornamental conifer tree in parkland (TDH). No previous record (HHC).

*Sulcacis affinis* Gyllenhal  
Leighton Park, 28.10.96, inside fruit bodies of *Pseudotrampetes gibbosa* on oak log in deciduous wood (TDH). One old record, no data (HHC).

*Cis festivus* Panzer  
Whiteknights, 26.5.96, under small fruit bodies of *Stereum hirsutum* on deciduous log in deciduous woodland (TDH). No previous record (HHC).

*Cis hispidus* Paykull  
Whiteknights, 22.5.96, on underside of fruit bodies of *Coriolus versicolor* on trunk of dead birch tree in deciduous wood (TDH). No previous record (HHC).

*Cis micans* Fabricius  
Near Coombe Park, Whitchurch-on-Thames, 3.1.96, under bark of ash log in deciduous wood on bank of river (TDH). One old record, no data (HHC).

*Eulagius filicornis* Reitter  
Leighton Park, 27.8.96, beaten from oak and beech in parkland (TDH). No previous record (HHC).

*Abdera quadrifasciata* Curtis  
Leighton Park, 27.8.96, beaten from dead branches of living oak in clump of deciduous trees within parkland (TDH). One old record (HHC).

*Anaspis rufilabris* Gyllenhal  
Pamber Forest, 26.6.96, resting on umbel of Hemlock Water-dropwort, *Oenanthe crocata* in overgrown ride within oak woodland (TDH). One old record (HHC).

*Anthicus bifasciatus* Rossi  
Near Shinfield, 30.10.96, in decomposing straw taken from compost heap at edge of deciduous woodland (TDH). One old non-local record (HHC).

*Oulema rufocyanea* Suffrian  
Near Shinfield, 11.1.96, in cracks in fence posts in area of flooded river meadows (TDH). No previous record (HHC).

*Phyllotreta vittula* Redtenbacher  
Near Shinfield, 9.1.96, on log surrounded by flood water in field beside river (TDH). Five old records (HHC).

*Cneorhinus plumbeus* Marsham  
Leighton Park, 16.6.96, resting on leaf of bramble at edge of damp meadow (TDH). Two old records, one non-local (HHC).

*Pissodes castaneus* Degeer  
Warren Heath, 20.4.96, caught in flight (with a pond net) as it approached conifer log pile in conifer plantation (TDH). Three old records (HHC).

*Acalles ptinoides* Marsham

The Ridges, Finchampstead, 13.3.96, extracted from sphagnum by means of Tullgren funnel, moss growing around base of birch tree in birch woodland (TDH). One old record (HHC).

*Ceutorhynchus pericax* Weise

Near Wellington Country Park, 27.5.96, resting on Large Bitter-cress, *Cardamine amara* on marshy ground in deciduous wood. First record for Hampshire (TDH). No previous record (HHC).

*Rhynchaenus iota* Fabricius

Near Eversley Common, 5.6.96, obtained by sweeping plants of Bog-myrtle, *Myrica gale* on damp heath land (TDH). No previous record (HHC).

*Hylastes cunicularius* Erichson

Near Shinfield, 19.4.96, under bark of fallen conifer tree in plantation, identification confirmed by Tim Winter (TDH). One old record (HHC).

*Xyleborus dispar* Fabricius

Pamber Forest, 14.5.96, resting on cut surface of deciduous tree log in log pile in oak woodland (TDH). One old non-local record (HHC).

## **HYMENOPTERA : SAWFLIES, ICHNEUMONS, ANTS, BEES AND WASPS**

*Sapyga quinquepunctata* (Fabricius) a solitary wasp

Ten Kiln Ride, Upper Basildon, 25.5.97, one male on fence post in which holes had been drilled to attract bees and wasps (MCH).

*Lasius brunneus* (Latreille) **Brown Ant**

Moor Copse Reserve, 31.3.97, two workers of the Nationally Scarce ant found in the stump of a fallen Ash, *Fraxinus excelsior* (MCH, identification confirmed by Tony Prince).

*Priocnemis exaltata* (Fabricius) a spider-hunting wasp

Upper Basildon, 6.7.97, one adult (MCH, identity confirmed by Andy Davidson).

*Priocnemis perturbator* (Harris) a spider-hunting wasp

Ten Kiln Ride, Upper Basildon, 27.4.97, one adult found running through grass on bank (MCH det. Andy Davidson).

*Vespa crabo* L. **The Hornet**

Ten Kiln Ride, Upper Basildon, 25.5.97, one adult (MCH); Pamber Forest Reserve, 10.6.97 (BRB); seen many times from 17.5.97 until 17.10.97 and a nest discovered in an old woodpecker hole in String Lane Copse (GJD).

*Andrena clarkella* (Kirby) a solitary bee

Snelmore Common Country Park, 6.4.97, one adult (MCH det. Chris O'Toole).

*Megachile willughbiella* (Kirby) **Willughby's Leaf-cutter Bee**

Upper Basildon, 26.7.97, several bees seen flying around large log, with freshly-made leaf nest cells found under bark of log (MCH det. Chris O'Toole).

*Nomada fucata* Panzer a nomad or mason bee

Ten Kiln Ride, Upper Basildon, 1.8.97 and 11.8.97 (MCH det. Matt Smith).

*Anthrophora plumipes* (Pallas) **Hairy-footed Flower Bee**

Upper Basildon, March 97, several seen visiting Comfrey, *Symphytum* sp. flowers (MCH).

*Melecta albifrons* (Forst.)

Hargrave Road, Maidenhead, 3.5.97 (MVA).

## **DIPTERA : TRUE FLIES**

*Tipula (Vestiplex) hortorum* L.. a crane fly

Ashampstead Common, 9.5.97, at mercury vapour light (MWS).

*Tipula (Lunatipula) livida* Wulp a crane fly

Hartslock Reserve, 5.8.96, one female, one male; the first British record of this Nationally Scarce species was at Goring in the 1950's (see Carter, *A list of the Diptera of the Reading area*) (MCH).

*Tipula (Lunatipula) selene* Meigen a crane fly

Ashampstead Common, 21.4.96, a larva of this provisionally Red Data Book species was found under the bark of a large fallen beech trunk. An adult female emerged on 13.5.96 (MCH).

*Keroplatus testaceus* Dalman a fungus gnat

Padworth Common, 16.8.97, one adult of this Nationally Scarce species was seen in a garden (MCH, identification confirmed by P.J. Chandler)

*Stratiomys potamida* Meig. a soldier-fly

Hogmoor Copse, Moor Copse Reserve, 27.7.97 (MWS).

*Asilus crabroniformis* L. a robber-fly

The Holies SSSI, 16.8.97 (MCH).

*Ogcodes pallipes* Latreille a hump-backed fly

Bucklebury Common, 6.7.97, one adult swept from the lower branches of a pine tree. This seems to be the first Berkshire record for this Nationally Scarce fly. Acrocerid flies parasitise spiders, thus gaining a small degree of revenge for the millions of flies which end their lives in spider's webs! (MCH).

*Triglyphus primus* Loew a hoverfly

Hogmoor Copse, Moor Copse Reserve, 24.8.96, one male of this Nationally Scarce species visiting flowers of Wild Angelica, *Angelica sylvestris* (MVH).

*Volucella inanis* (L.) a hoverfly

43 Berry's Road, Upper Bucklebury, 27.7.97, on Wild Marjoram, *Origanum vulgare* (MWS).

*Volucella inflata* (Fabricius) a hoverfly

Hogmoor Copse, Moor Copse Reserve, 18.6.97, path between Compartments 3 and 4 (MWS).

*Pherbellia annulipes* (Zet.)

Sulham Wood, 24.5.97, on wet decorticated rotting beech log (MWS).

## CONTRIBUTORS

This Report has been made possible by the work of the following members:

Martin Albertini (MVA), Maurice Budden (MDB), Hugh Carter (HHC), Graham Dennis (GJD), Kenneth Grinstead (KHG), Norman Hall (NMH), Thomas Harrison (TDH), Martin Harvey (MCH), David Notton (DGN), John Notton (JHFN), Christopher Raper (CMR), Peter Silver (PGS), Phillip Staines (PAS), Malcolm Storey (MWS), Eric Watson (EVW), David Young (DAY).

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## A MOTH IN THE EAR

Norman Hall

While I was moth trapping in the Avon Valley, Salisbury, on August 11<sup>th</sup> 1997, I felt a large moth crawl into my left ear, and immediately realised that it would have no chance of turning round and crawling out. I could feel it 'throbbing' continuously inside the ear, as though 'revving up' preparing to fly. This sensation was quite bearable, but, every five minutes or so, the moth made serious attempts to fly, bashing against the ear-drum. While not particularly painful, the sensation was now almost intolerable. My automatic reaction was to try to shake the moth out of the ear – in the same way as I would try to shake water out of my ears after swimming - but such efforts were futile.

I had heard from my friend Barry Goater of occasions when a moth had entered one of his colleague's ears, and could vaguely remember that the unfortunate victim had to be taken to hospital to have it removed. In my situation, however, there was no-one about who could drive me to hospital and I considered that driving myself with such unpleasant and disorientating sensations would be dangerous. I was also in a slight state of shock, and very anxious about the possibility of the moth getting into the inner ear and doing serious damage. I *now* know that there is no danger of this - because the ear's external canal is completely sealed off from the inner ear by the ear-drum. It would have been greatly reassuring to have known that at the time!

At this point, according to the Hospital Consultant I saw next day, I should have tried to kill off the moth as quickly as possible to prevent it causing any damage. Surprisingly, he recommended pouring **beer** into the ear to drown the moth, though he said **water** would have been the best alternative if my beer supply had run out. Beer has an anaesthetising effect and will immobilise a moth more quickly than water. After the moth was dead, I could have returned to my moth trapping, as he said there would have been no urgency to remove the corpse. I could then have gone to my GP to get the ear syringed next day - or even several days later. In fact, he said that there is no absolute need to remove a corpse *at all* - since the outer ear is a self-cleaning system and should be able to cope with almost anything biological given time. However, leaving a large moth in my ear would have left me rather deaf – and I would not have been willing to put my ear's self-cleaning capacity to such a test!

I wish I had known this at the time, for in the event I had no idea what to do, and the possibility of killing the moth never occurred to me. Fortunately, however, I was close to a friend's house and was able to get there on foot, stopping occasionally to writhe about whenever the moth tried to fly. We telephoned a GP, who advised killing off the moth by pouring warm olive oil down the ear. This we did and it gave instant relief, but my enthusiasm for further moth trapping that night was somewhat dented. This was particularly unfortunate as it was an ideal mothing night – just the sort of night when moths are buzzing round your ears all the time.

Next morning I went to Casualty at Salisbury Hospital, and after seven people had looked down my ear, none of whom could work out what they were looking at, I was passed on to the specialists "with the right equipment" at the E(ar)N(ose)T(hroat) Clinic. There, the Consultant removed the moth very quickly using a mini vacuum cleaner, commenting that using olive oil had made his job much more difficult. The moth was *Xestia c-nigrum*, (Setaceous Hebrew Character), perhaps a new record for ears. It is a large noctuid moth with a wingspan of about 32mm.

After twenty years of moth trapping, this is the first time a moth has entered one of my ears. However, it appears that such occurrences are not all that uncommon, and moth collectors should know what to do if it happens to them. The usual species involved is *Ochropleura plecta* (Flame Shoulder). Barry Goater, in *Moths of Great Britain & Ireland* Vol. 9, p152, states that *plecta* "is a wild flier and the author has witnessed at least three instances when it entered the ear of a fellow entomologist who was working at light, disappearing inside and causing acute discomfort!". He had in mind Clifford Redgrave who was unlucky enough to have a moth in his ear three times in a single season! Another entomologist, Ted Wiltshire, wrote a highly entertaining article about an occasion when '*Ochropleura plecta kami-kazi*', entered his ear while trapping in France. (E. P. Wiltshire, 'Entomological Miadventures – I', Proc. Trans. Brit. Ent. Nat. Hist. Soc, 1977, Vol 10, p104). This is thoroughly recommended reading.

Having experienced moth-in-ear syndrome myself, I feel sure that future victims will mostly do exactly what I and Ted Wiltshire & Clifford Redgrave did – i.e. turn up at hospital with a live moth in the ear. What they should do is pour themselves a glass of beer, spare a little for the moth, and carry on enjoying life.

A version of this account is to be published in the entomological magazine ATROPOS.

## RECORDER'S REPORT FOR INVERTEBRATES OTHER THAN INSECTS 1997

Hugh H. Carter

### ARACHNIDA

*Misumena vatia* Clerck

Female in garden of 10 Northbrook Road, Caversham Park, 8.8.97

*Salticus scenicus* (Clerck)

One or two in garden at 10 Wellington Crescent, Baughurst, May to July 1980 - 1997 (KHG); three or four in garden of 10 Northbrook Road, Caversham Park on woodwork or walls, 1988 - 1997.

*Pholcus phalangioides* (Fuesslin)

One at 10 Northbrook Road, 30.7.97; one at 3 Elstow Avenue, 1.8.97; both are Caversham Park.

*Achaeearanea lunata* (Clerck)

One adult at Moor Copse, found in hollowed out end of fallen tree trunk, 31.3.97 (MCH)

*Gonatium rubens* (Blackwall)

One male at Moor Copse, feeding on a crane fly (*Tipula* sp.) at least ten times its own size, 31.3.97 (MCH)

### ISOPODA

*Haplophthalmus danicus*

Several of this tiny woodlouse found at Ten Kiln Ride, Upper Basildon, in wood of rotting cherry log, 7.12.97 (MCH).

The Recorder expresses his appreciation to Martin Harvey (MCH) and Kenneth Grinstead (KHG) for their contributions.

## THE RECORDER'S REPORT FOR VERTEBRATES 1997

Hugh H. Carter

### FISH

*Leuciscus cephalus* (Linnaeus) **Chub**

Several about 130 mm (5 inches) long at Mill End, 5.10.97.

### AMPHIBIANS

*Triturus cristatus* (Schreber) **Crested Newt**

One at Decoy Heath Reserve near deepest end of pond at west end of reserve, 16.4.97 (KHG).

*Triturus vulgaris* (Linnaeus) **Smooth Newt**

Newts probably of this species at Netherleigh, Pangbourne; one hiding in *Erica*, August, and one later in the year only ½ inch (13 mm) long, both very pale (CF).

*Bufo bufo* (Linnaeus) **Toad**

One dead on road at Holyrood Crescent, Caversham Park, 8.3.97 (MJC); one dead on road at Row Lane, Dunsden, 20.9.97; one 2 year old in various parts of vegetable garden at Netherleigh, Pangbourne, April, August, October 1997 (CF). Very few records this year (c. 50 in 1996). Total sightings 5 (about 50 in 1996).

### REPTILES

*Anguis fragilis* Linnaeus **Slow Worm**

One in Gullet Woodland, Maidenhead, 21.3.97 (MB).

*Mus musculus* Linnaeus **House Mouse**

One dead on Christchurch Meadow, 8.8.97 (MJC).

*Sciurus carolinensis* Gmelin **Grey Squirrel**

Dreys in Caversham Heights, 13.1.97; one dead in Forbury Road, 25.1.97; three in Wordsworth Court, Emmer Green, 1.2.97; five there 12.2.97; one there, 19.12.97, crossing Kiln Road into Clayfield Copse by ascending a tree and leaping from the outermost branches into a tree on the other side, 19.12.97; signs in Morgan's Wood, Sonning Common, 20.3.97; one south of Cray's Pond, 25.5.97; one dead on road at Alpenrose, Sonning Common, 13.6.97; one in St. Barnabas Road, Emmer Green, 29.6.97; one in Blackhouse Wood, Dunsden, 1.8.97, three there, 23.11.97, one there, 10.12.97, three there, 17.12.97; one dead on Caversham Park Road, 5.9.97; one Dean's Farm, 3.10.97; one at Bluecoat School, Sonning, 18.10.97; one at Yeldall Manor, Hare Hatch, 5.12.97; one Clayfield Copse, Emmer Green, 10.12.97.

Total sightings 28 (54 in 1996, 14 in 1995).

*Muscardinus avellanarius* (Linnaeus) **Dormouse**

One in hedge at west end of Sports Field, Caversham Park, 29.6.97 (MJC)

My thanks are due to the following contributors:

Maurice Budden (MB); Elizabeth Carter (EMC); Mary Carter (MJC); Claire Frank (CF); Kenneth Grinstead (KHG).

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Space-fillers, the first two contributed by Alan Brickstock, the last by the Editor.

**Rot Hounds**

Suspected dry-rot? A Surrey firm has three dogs, Sammy, Scrappy and Goldie, who have been trained to sniff out dry-rot. They can apparently detect *Serpula lacrymans* at an early stage, checking a five-bedroomed house in less than an hour. One more case of 'dogs are wonderful'.

**Test Tube Truffles**

The Weekend Telegraph of 6th. September 1997 reported that a Japanese scientist, Kazunari Inaba, and mushroom specialist, Yoshinori Takano, after some years of research, have recently succeeded in cultivating *Tuber aestivum* truffles in a culture mixture of beer yeast, Soy bean bran and oak dust, inoculated with truffle spores and kept at 24°C for 40 days. 100 golf ball sized truffles were produced. This time scale compares with one French method of cultivation which takes 7 years!

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**What's in a name?**

English names of flowers are sometimes confusing. For example what is the connection between Greater Burnet, Salad Burnet, Burnet Rose and the Burnet Saxifrages?

Burnet derives from Old French burnete, meaning dark brown, whence "brunette". The flowers of both Greater Burnet and Salad Burnet are red-brown so that makes sense. The Burnet Rose and the Burnet Saxifrages certainly do not have brown flowers but their leaves resemble those of the Burnets and there is the connection.

Botanically the Burnet Saxifrage is *Pimpinella saxifraga* and the Burnet Rose, *Rosa pimpinellifolia*, where again the connection is the similarity of leaf form.

However in Italian pimpinella can be the Salad Burnet, for an Italian proverb says "The salad is neither good nor good-looking where there is no pimperl", while in France the Greater Burnet is called "Grande Pimprenelle".

I hope that all is now clear and the niceties of botanical nomenclature in the vernacular of several languages and in scientific terminology can be appreciated.



# THE WEATHER AT READING DURING 1997

Ken Spiers

Department of Meteorology

University of Reading

Although the year started very cold, the rest of the year recorded temperatures that were near or above the expected values. Spring was very dry and quite a few months recorded above average sunshine. Overall the year was pleasantly warm, dry and sunny at times.

January was the only month to record a mean monthly temperature below average. The rest of the months were just above to well above average. This produced a very warm year, with the mean temperature at 11.2°C, 1.1°C above the 25 year average. 1990 was the warmest year recorded at the University Meteorological site, with a mean temperature of 11.3°C. If December had not suffered from short spells of cold weather, it would certainly have equaled 1990. At the other end of the spectrum, the minimum temperature on the 2nd. January, - 6.2°C, was the lowest for any day of the year since 1992.

Spring was the driest of the four seasons. Together with January and September, which had low rainfall totals, they produced another dry year. This year's total rainfall was 18 percent below the annual average. With 1996 the two year total was 20 percent below average. These figures are in common with many meteorological sites locally which are still experiencing drought conditions.

This year was the third in a row with its annual sunshine well above the yearly average. However the summer months of June and August were very disappointing, but this was more than made up for by very sunny Spring and Autumn seasons. Overall the year was the tenth sunniest since 1956.

**January** was very cold, with anticyclones dominating the weather over the British Isles throughout the month, bringing easterly winds and snow showers. As a result of the low temperatures, especially during the first ten days of the month, the mean temperature was the lowest for any January since 1987. As would be expected with the prevailing conditions, the number of air and ground frosts were the highest since 1987 and 1985 respectively. All this resulted in the driest January since 1987 and the second driest since 1921. The first half of the month was very dull and the number of sunless days were the highest since 1921. However the total for the month was only just below the monthly average.

**February** was a complete opposite to January, with cyclones and their associated rain bearing clouds and very high winds sweeping in from the Atlantic seaboard, causing death and damage. With the main thrust of the weather from the Atlantic, daytime and night-time temperatures kept well above average. The mean for the month was the highest since 1990. The high daily temperatures culminated on the 25th., with 13.1°C, this being the highest daily maximum since 1990. Rainfall was well above normal, with the monthly total 76 percent above average. However the number of days with snow, nil, was the lowest since 1980. With the unsettled weather there was a lack of sunshine at times, the number of sunless days being the highest since 1979. Undoubtedly the main feature of the month was the wind. Nine days recorded gusts over 40 mph, the 19th. recording a gust of 62 mph, the highest for any day in February since 1990 and the third highest since before 1960.

**The Winter season** Following two months that were very cold and dry, February was a month of recovery. Temperatures were well above the average during the daytime and night-time and this had the effect of bringing the mean temperature for the Winter season up to the expected average. The number of ground and air frosts for the first two months were also well above average. However with the warmer and more unsettled weather from the Atlantic in the last month of Winter, the number of frosts was well down and this brought the total nearer to the seasonal average. Although February was wet, the previous two months were very dry and consequently the season's total rainfall was only 60 per cent of the expected average. This made the Winter the driest since 1991/92 and the tenth driest since 1921. There were several periods during the season when days recorded no sunshine, especially in December and January. The result was that the number of sunless days was the highest since 1991/92. However there were quite a few days that had clear skies throughout the day and this helped the total number of hours of bright sunshine to just below the Winter average.

**March** was one of the finest months for a long time. Anticyclone positioned over the southern part of the British Isles dominated the weather patterns for the month. This helped us to enjoy very sunny,

warm and dry conditions. Temperatures remained high throughout the month, especially during daytime, with the result that the mean was the highest since 1957 and the fourth highest since 1921. There was also a lack of ground frosts, with the number for the month the lowest for any March since 1992. There is no doubt that rainfall, or lack of it, was the main feature of the month. Most fell on the 3rd. and with the total only 21 percent of the expected average, this helped to make March the driest since 1990 and the ninth since 1921. With anticyclones dominating the British Isles, there were many days with long periods of sunshine. This added up to March being the sunniest since 1982.

**April** continued in the same vein as March, with anticyclones acting as a block, so producing very dry, warm and sunny weather. The close proximity of the anticyclones meant that the mean barometric pressure was the highest since before 1960. Daytime temperatures remained high throughout the month, however many nights had clear skies and this gave rise to the highest number of ground frosts since 1990. This in turn affected the mean minimum temperature, which was the lowest since 1991. The lack of rainfall during the month was once again the main feature, with only 28 per cent of the monthly average being recorded, making it the driest April since 1984. The combination of March and April totals made it the driest two month period since September and October of the year 1969. The period from 26th. March to the 24th. April was the longest without any rain since the record Summer of 1976. The University Meteorological Station did not have a sunshine recorder, due to the original one being stolen, until much later in the month. However on looking at figures received from the nearby site at Beaufort Park, run by the Meteorological Office, it does seem as if the month was very sunny, possibly the sunniest since 1990.

**May** was another memorable month, dry, very sunny and warm. Temperatures, except at the end of the first week, were well above normal, especially in the daytime. The first time since 1984, an air frost was recorded on the 7th., with a minimum of - 0.7°C. Soon after temperatures recovered and this May became the warmest since 1992. Up to the 23rd., the aggregate rainfall was running about average. However the total for the month was some 72 per cent below average, due to no rain being recorded during the last week. The 6th. was cold enough for snow to fall as a shower. This was the first time since 1979 that snow had been reported in May. The main feature of the month was the sunshine, with the total 30 per cent above the expected monthly average. This made May the sunniest since 1992 and the fifth sunniest since 1856.

**The Spring** of 1990, which was remarkable, was the only one in recent times to better this year. Many days had long clear periods and above normal temperatures and there was very little in the way of rain. Temperatures during the daytime were well above the seasonal average and with higher than average night-time temperatures, this Spring was the warmest since 1992 and the sixth warmest since 1921. The season's total rainfall was only 41 per cent of the expected average. This only exasperated an already desperate situation, 1996 also having been very dry. Helped by the number of rain days being the lowest since 1921, this was the driest Spring since 1990. The anticyclonic weather that was prevalent in the first two months of the season contributed to many fine and sunny days, helping to make this Spring the sunniest since 1990. If the records from the Suttons Seeds Meteorological Station are included, then this was the sunniest Spring since before 1939 in the East Reading area.

**June** weather, after a fine start, deteriorated very rapidly and became stormy by the end of the month. With the anticyclones receding from the British Isles, the weather became changeable. Winds began blowing from a more northerly direction, keeping daytime temperatures below average. Depressions and their associated bands of cloud and rain dominated the weather for the rest of the month. The number of days with rain recorded was the highest since 1991, making it the wettest since that year. Also, as expected in such conditions, there was very little in the way of sunshine, with the total for the month the lowest since 1991 and the third lowest since 1956.

**July** pressure remained high throughout the month, except early and late when cool and wet conditions prevailed. The first four days were very cool, however temperatures recovered to remain above average for the rest of the month. Most of the rain fell in two days, on the 3rd. and 26th. The rest of the month was dry, with only a few of the days recording light rain. It was the fifth month this year to record below average rainfall, it being only 72 per cent of that expected. The month seemed very sunny after a dull June. However, although July was the first month to record no sunless days, the total number of hours of bright sunshine was only five hours above the expected average.

**August** by contrast, was a dull, wet, warm and very humid month. Anticyclones positioned over or near the British Isles for most of the month were very weak. At times low pressure systems would feed the anticyclones with bands of cloud which with high day and night-time temperatures produced very humid weather. The mean maximum temperature was the fourth highest since 1971 and the mean minimum temperature was the highest since 1921. Together, these produced the third warmest August since 1921, only bettered by 1995 and 1947. It was also very wet at times, with most of the rain

falling early and late in the month. It made this August the wettest since 1992, and the wettest month of the year. The year's highest daily rainfall of 23 mm was recorded on the 6th., the highest since July 1996. The number of sunshine hours was well down, with constantly dull anticyclonic weather. The total was 19 percent below the expected monthly average, making it the dullest since 1992

**The Summer season** was very warm at times as well as being wet and dull. After a very disappointing June, temperatures recovered enough to make this Summer one of the warmer ones on record. It was the fifth warmest since 1950. The reason for this was that night-time temperatures remained well above the seasonal average for most of the Summer, with the mean minimum temperature the highest since before 1950. There was plenty of rain during the season, with only July recording below its monthly average. The season's total was 45 mm above the expected seasonal value and 32 per cent above the average. Over the long term period it was the twenty-fifth wettest summer since 1921. The amount of sunshine was well down, as would be expected with unsettled weather at times. Both June and August were well below average and this brought the total for the season to 85 per cent of the seasonal average, making it the eighth dullest Summer since 1956.

**September** was a fine early Autumn month, very dry, warm and sunny. The main feature of the month was the lack of rainfall. Only 6.3 mm was recorded against the 25 year average of 57.4 mm. This made the total for the month the lowest since 1958 and the lowest for any month since August 1995. September was a very sunny month throughout, with several days recording double figures in sunshine hours. It was not surprising then, that the total number of hours of sunshine was the highest since 1971. Temperatures reflected the fine, dry weather and remained above normal throughout the month. As a result of this, the month was the warmest since 1991. The lowest maximum temperature recorded in the month was 16.5°C, on the 19th., this was the highest since 1964. The 14th. saw the first ground frost of the season.

**October** carried on in the same vein as September, fine, warm and dry. However a more unsettled regime replaced the start, with all of the month's rainfall being recorded in this period. The weather turned more settled with anticyclones positioned to the west and north of the British Isles. This in turn produced fine, dry days and cool nights for the rest of the month. On the 1st. a maximum temperature of 24.7°C and a minimum of 15.6°C were recorded, both were the highest since 1985. Towards the end of the month, there were some very low night-time temperatures, culminating on the 29th. when a minimum of - 4.4°C was recorded. This was the lowest minimum for any October day since 1931 and the second lowest since 1921. In this period there were six air frosts recorded, the highest for any October since 1951. However hours of sunshine were in abundance, especially in the second half of the month. The total for the month was the highest since 1958, when records were first kept at the University, so continuing a very fine Autumn season.

**November** came in as quite a shock after two very good Autumn months. There were no anticyclones blocking any weather systems as in the previous two months. Depressions and bands of clouds passed over the British Isles at frequent intervals, with the result that it became very wet and dull by the end of the month. The barometric pressure readings rarely reached the norm for the month, the mean being 12.1 mbs below average. This was the lowest since 1963 and the lowest for any month since January 1988. However on the bright side, if one could say there was one, temperatures remained above average for most of the month and as a result of this, November was the warmest since before 1958.

**The Autumn season** was one of the more enjoyable and will be remembered for a long while. This was mainly due to the months of September and October being fine, dry and warm. Temperatures remained above normal throughout the season, especially during the daytime. The mean maximum temperature was the highest since 1959 and this in turn helped make this Autumn the fourth warmest since before 1960. With September being the driest month and the total rainfall of the following two months being near average, this produced the driest Autumn since 1990 and the seventh driest since 1921. The weather in the first two months also recorded high values of sunshine which helped make this Autumn the sunniest since 1971 and the fourth sunniest since 1956, when records were first kept.

**December's** weather became very changeable and saw quite a few extremes. Snow showers accompanied two short cold spells. This produced the second highest number of days with snow for the month in the last ten years. However the underlying temperature trend throughout the month was for it to be above normal, making it the warmest December since 1994 and the third warmest in the last ten years. Up to the 15th., the amount of sunshine was running about average but no sunshine was recorded from the 16th. to the 22nd. inclusive and very little after the 23rd. This contributed to the total for December being 34 per cent below the month's average, the lowest since 1984. December was the eighth month to record below average rainfall, the total being 12 per cent below the average.

**Table 1 WEATHER RECORDS 1997**  
**UNIVERSITY OF READING (WHITEKNIGHTS)**

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Mean Daily Temperatures °C													
Maximum	5.1	10.3	13.1	14.7	17.5	19.1	22.5	24.4	19.8	15.3	12.0	9.2	15.3
Minimum	- 0.2	3.9	5.1	4.6	7.4	11.5	12.7	15.2	10.2	6.3	5.2	3.5	7.1
Mean	2.5	7.1	9.1	9.7	12.5	15.3	17.6	19.8	15.0	10.8	8.6	6.4	11.2
Range	5.3	6.4	8.0	10.1	10.1	7.6	9.8	9.2	9.6	9.0	7.0	5.7	8.2
Extreme Maximum Date	11.4 25th.	13.1 25th	17.4 11th.	20.0 9th.	24.6 2nd.	25.9 10th.	26.9 23rd.	30.2 10th.	24.0 18th.	24.7 1st.	16.0 16th.	14.1 10th.	30.2 10th. Aug.
Extreme Minimum Date	- 6.2 2nd.	- 3.5 3rd.	- 0.3 22nd.	- 2.6 21st.	- 0.7 7th.	8.0 20th.	9.5 3rd.	9.4 26th.	4.9 14th.	- 4.4 29th.	- 2.8 1st.	- 1.7 5th.	- 6.2 2nd. Jan.
Extreme Grass Minimum Date	- 13.2 2nd.	- 8.5 3rd.	- 5.9 31st.	- 11.4 21st.	- 7.1 7th.	- 1.4 9th.	2.5 20th.	3.9 26th.	- 2.5 14th.	- 12.1 29th.	- 9.9 1st.	- 6.8 5th.	- 13.2 2nd. Jan.
Days with air frost	15	4	1	1	1	0	0	0	0	6	4	9	41
Days with ground frost	25	12	13	20	10	0	0	0	4	11	10	16	121
Hours at or below 0°C	208.5	18.0	2.0	6.0	1.0	0	0	0	0	23.0	23.5	14.0	296
Sunshine Hours													
Total	52.7	60.5	144.2	204.1	247.4	132.6	208.0	157.8	170.6	154.1	56.4	31.8	1620.2
% of possible	20.0	21.4	39.1	-	51.5	26.8	41.9	35.1	44.8	46.4	20.9	12.9	35.0
Daily Mean	1.7	2.2	4.7	6.8	8.0	4.4	6.7	5.1	5.7	5.0	1.9	1.0	4.4

Table 1 (continued)

## WEATHER RECORDS 1997

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Precipitation													
Amount in mm	13.3	70.7	10.8	12.1	34.8	66.4	32.4	84.9	6.3	53.6	66.4	56.6	508.3
Rain days	7	16	7	3	12	16	10	12	5	9	21	16	134
Max. rain in one day mm	5.5	11.3	7.9	10.5	5.8	10.3	15.3	23.0	2.5	13.7	12.5	7.4	23.0
Date	21st.	17th.	3rd.	25th.	10th.	6th.	26th.	6th.	19th.	14th.	19th.	9th.	6th. Aug.
Mean wind speed mph	2.9	7.4	3.9	3.3	4.0	4.3	2.6	2.4	2.5	2.7	2.9	4.4	3.6
Snow or sleet days	5	0	0	0	0	0	0	0	0	0	0	2	8
Days with snow lying	2	0	0	0	0	0	0	0	0	0	0	1	3
Days with fog at 09.00 GMT	7	1	3	0	1	0	0	0	1	2	3	1	19
Days of thunder	0	0	0	0	2	3	0	2	0	0	0	0	7
Days of hail	0	1	0	0	1	0	0	0	0	0	0	0	2
Mean Pressure mb	1022.0	1015.1	1024.3	1023.0	1014.3	1009.2	1018.8	1015.4	1022.0	1018.1	1003.6	1011.8	1016.5
Highest	1042.7	1032.0	1034.9	1033.5	1031.2	1024.3	1029.4	1024.0	1028.8	1037.8	1028.7	1033.4	1042.7
Date	29th.	8th.	11th.	12th.	25th.	1st.	6th.	14th.	20th.	29th.	1st.	15th.	29th. Jan.
Lowest	1006.6	989.4	1009.8	1006.6	989.3	991.3	1004.5	995.4	1005.2	994.9	984.4	995.1	984.4
Date	19th.	25th.	23rd.	28th.	5th.	21st.	1st.	28th.	12th.	7th.	6th.	18th.	6th. Nov.

**Table 2 MONTHLY AND ANNUAL WEATHER AVERAGES****UNIVERSITY OF READING (WHITEKNIGHTS)****1971 - 1996**

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Mean Barometric Pressure mb	1015.3	1015.9	1014.3	1015.4	1015.4	1016.6	1017.0	1016.7	1016.3	1015.0	1015.7	1015.3	1015.7
Mean Temperature °C	4.4	4.3	6.5	8.4	11.8	14.6	17.2	16.8	14.0	10.7	7.1	5.3	10.1
Mean Maximum Temperature °C	7.2	7.3	10.1	12.5	16.4	19.2	22.1	21.6	18.3	14.4	10.2	8.1	14.0
Mean Minimum Temperature °C	1.5	1.3	2.9	4.2	7.2	10.0	12.4	12.0	9.7	7.1	3.9	2.6	6.2
Daily Range Temperature °C	5.7	6.1	7.2	8.3	9.2	9.3	9.7	9.6	8.6	7.3	6.2	5.5	7.7
Soil Temperature °C 5 cm	3.1	3.0	5.3	8.9	13.8	17.1	19.5	18.3	14.4	10.0	6.0	4.2	10.3
" " " 10 cm	3.4	3.2	5.1	8.1	12.6	16.1	18.3	17.4	13.9	9.8	6.2	4.4	9.9
" " " 20 cm	4.1	3.9	5.5	8.0	11.9	15.1	17.5	17.1	14.3	10.7	7.2	5.2	10.0
" " " 30 cm	5.0	4.8	6.3	8.6	11.9	14.9	17.1	17.1	14.8	11.8	8.5	6.2	10.6
" " " 50 cm	5.5	5.2	6.5	8.6	11.6	14.4	16.6	16.9	15.1	12.4	9.2	6.8	10.7
" " " 100 cm	6.6	6.0	6.6	8.1	10.6	13.2	15.2	16.0	15.0	13.0	10.5	8.0	10.7

**Table 2 (continued) MONTHLY AND ANNUAL WEATHER AVERAGES**

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Year
Number of Air Frosts	10	10	6	2	0	0	0	0	0	1	5	8	42
Number of Ground Frosts	20	19	18	15	8	3	0	1	4	10	15	17	130
Mean Grass Minimum °C	-1.9	-2.1	-0.9	0.2	3.0	5.1	8.5	7.9	5.6	3.1	0.4	-0.8	2.4
Mean Bare Soil Minimum °C	-0.8	-1.0	0.4	1.5	4.4	7.4	9.9	9.3	6.9	4.2	1.5	0.2	3.7
Mean Concrete Minimum °C	-0.5	-0.5	1.0	2.5	5.7	8.9	11.2	10.4	7.8	3.1	1.8	0.4	2.1
Rainfall mm	61.7	40.1	50.8	43.2	48.2	48.5	40.6	9.7	57.4	60.6	55.9	64.3	621.0
Number of Rain Days	16	13	16	13	13	11	10	11	11	13	13	15	155
Number of Wet Days	12	8	11	7	9	8	7	7	8	10	9	11	107
Hours of Bright Sunshine	54.9	67.0	107.7	152.7	190.9	188.1	202.6	195.1	139.0	104.5	68.3	48.4	1519.2
Mean Duration	1.8	2.4	3.5	5.1	6.2	6.3	6.5	6.3	4.6	3.4	2.3	1.6	4.2
Mean Duration possible at Latitude 51°	8.5	10.1	11.9	13.8	15.5	16.5	16.0	14.5	12.7	10.7	9.0	8.0	12.3
Number of Sunless Days	12	9	6	3	2	2	1	1	3	6	9	13	67
Mean Relative Humidity	88.5	88.2	83.3	76.3	70.5	73.1	73.1	75.6	80.6	87.1	89.2	89.9	81.0

## **Rules of the Reading and District Natural History Society**

1. The Society shall be called "The Reading and District Natural History Society", and shall have as its objectives:
  - i) the practical study of the natural history of the district
  - ii) the promotion of a general interest in natural history
  - iii) supporting conservation of the wildlife and habitats of the district

2. The Society shall consist of:
  - i) a President
  - ii) three Vice-Presidents
  - iii) one or more Honorary Secretaries
  - iv) an Honorary Treasurer
  - v) an Honorary Editor
  - vi) Honorary Recorders
  - vii) Members
  - viii) Honorary Members

The ordinary business of the Society shall be controlled by a Committee (see Rule 8).

3. The President shall, if present, take the Chair at all meetings.
4. The Honorary Secretaries shall attend to all the ordinary business of the Society, under the control of the Committee.
5. The Honorary Treasurer shall attend to all money matters concerning the Society, and shall present a statement of accounts at each Annual General Meeting of the Society.
6. The Honorary Editor shall be responsible for the annual production of The Reading Naturalist.
7. The Honorary Recorders shall collect and compile local records annually for the Society.
8. The Committee shall consist of the President, the immediate past President, Secretaries and Treasurer with up to nine other members. The Committee shall transact all business not referable to a General Meeting of the Society. Five shall form a quorum. Ordinary members of the Committee shall serve for three years and thereafter shall not be eligible for re-election for at least one year. The Committee shall have the power to co-opt not more than two persons.
9. Honorary Members may be elected at the Annual General Meeting of the Society. An Honorary Member pays no subscription and has all the privileges of an ordinary Member.
10. Officers of the Society and members of the Committee shall be elected at the Annual General Meeting of the Society. In the case of a vacancy arising in any office, the Committee shall have the power to fill the vacancy.
11. Members pay an Annual Subscription. The rate of Subscriptions shall be determined at the Annual General Meeting to apply to the current year. Payments are due on 1st. October.
12. The name of any Member whose subscription is more than one year in arrears, and who does not pay on a second application, may be removed from the list of Members.
13. If at any time it can be shown that a Member has acted in a way detrimental to the objectives and aims of the Society the Committee shall have the power to terminate that person's membership.
14. All meetings of the Society are open to Members and guests. Members are entitled to a copy of each edition of The Reading Naturalist, but Members paying a joint subscription share a copy.
15. The Society shall hold indoor meetings and field excursions. Arrangements shall be made by the Committee and the appropriate Secretary shall give due notice to the Members.
16. The Annual General Meeting shall be held in October of each year, and will be the first meeting of the Society's year.
17. A Special General Meeting may be called at any time by the Honorary Secretary, or on the written request of at least ten Members addressed to the Honorary Secretary. At least seven days' clear notice shall be given of any such meeting.
18. Alterations in the Society's Rules shall be made only at the Annual General Meeting, and by a two-thirds majority of those present. For this purpose 15 shall form a quorum.
19. The Society shall have the power to organize open meetings from time to time for the encouragement of interest in Natural History.