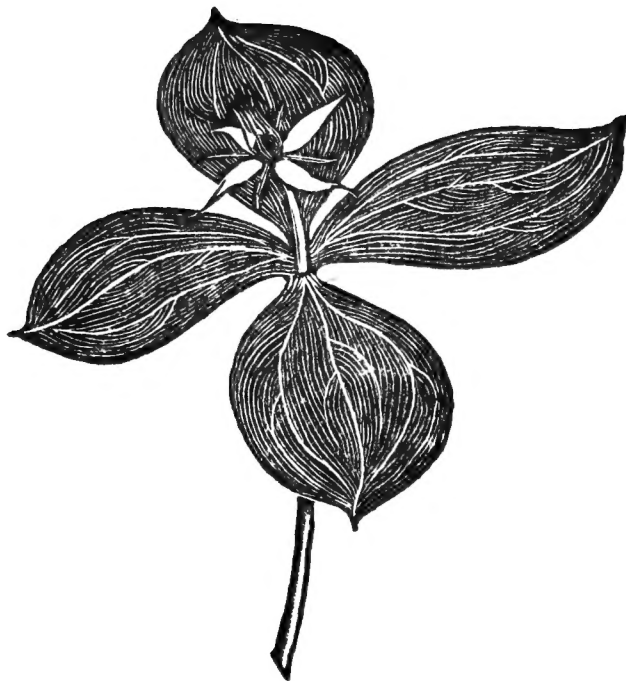




# The Reading Naturalist

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THE READING NATURALIST

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The Journal of  
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Meetings and Excursions 1974-75

The first of the winter evening meetings was the Annual General Meeting on October 17th, at which the President delivered his Presidential Address on Flies (attendance 43). Other lectures given during the winter were 'Primroses, Cowslips and Oxlips', by Dr. M. Keith-Lucas (42); 'Insect Flight related to Weather', by Mr. P. A. Davey (37); 'Toadstools, Lime and Fire', by Dr. F. B. Hora (45); 'Rabies', by Professor C. Kaplan (30); 'Birds of the Reading Area', by Mr. C. B. Cole (51); and 'Agriculture in the Himalayan Kingdom of Nepal', by Mr. A. B. Shrestha (34). The BBC Horizon film 'The Wood' was shown by Dr. J. Philips at another meeting (64) and there were two Members' Evenings of Films, Talks and Exhibits (53 and 55). There were also a joint meeting with the Berkshire, Buckinghamshire and Oxfordshire Naturalists' Trust (56) and a Berkshire, Buckinghamshire and Oxfordshire meeting at Pangbourne.

Winter walks were taken in the Pangbourne area on November 16th (17); in Englefield Park, for trees and birds, on December 14th; at Reading gravel pits, for birds, on February 8th (20); and in the Mortimer and Aldermaston area for mosses on March 8th (23). A microscopical afternoon was held at 6 Mansfield Road, Reading, on January 11th (11).

The summer field excursions were to Mongewell Heath for Helleborus viridis on April 19th (31+); Stratfield Saye, an evening excursion for fritillaries and bats, on April 30th (28); Wargrave Marsh Reserve on May 3rd (47); Wytham Wood, Oxon., on May 10th (23); Sulham Woods, an evening excursion, on May 21st (c. 20); Aston Upthorpe Reserve, for Orchis ustulata, on May 31st (28); Buttlers Hangings Reserve, West Wycombe, for chalk flora and butterflies, on June 14th (20); Burghfield to Tile Mill, an evening excursion, on June 18th (c. 18); Snelsmore Common, a joint meeting with Newbury Field Club, on June 28th (39 + 9); Wicken Fen and Devils's Dyke, a coach Excursion, on July 5th (30); Wittenham Clumps, a joint meeting with Abingdon Natural History Society, on July 12th (16 + 28); Hungerford Meads, an ancient field system with a rich natural flora, on July 26th (20); Moor Copse Reserve, a late evening meeting for moths, on August 1st (18); Cock Marsh, Marlow, on August 9th (14); South Hill Park nature trail and woodland at Caesar's Camp, Bracknell, with Crowthorne Natural History Society, on August 23rd (7); Pangbourne Heath, an evening excursion on August 27th (16); Hook Common, on September 6th (21); Thatcham Marsh, on September 20th (c. 30); Windsor Forest, a fungus foray, on October 4th (18 members and 9 others); and Wasing Wood, a fungus foray, on October 18th (c. 40).

## Flies

The Presidential Address  
to the Reading and District Natural History Society

17th October 1974

by H. H. Carter

The Diptera are a group more highly specialised for flight than any other order of insects, so much so that whereas these other orders may contain dragonflies, mayflies, stoneflies, caddisflies, butterflies and the like, the simple name 'Flies' has been appropriated to the Diptera alone.

Reduction in weight, always a matter of the first importance for flight, has been achieved in two ways. The insect as a whole is frail and lightly sclerotised, not relying on its exoskeleton for protection, although the profuse development of spiny bristles in some higher Diptera may have a protective function. Secondly there has been reduction or loss of certain organs throughout the order. Most obviously, the hind wings have been converted into halteres, organs which detect any movement of the body in three dimensions. This sensitivity to movement has enabled the flies to develop great agility and precision in flight, including ability to hover, to a degree not found in other orders.

The antennae, thread-like and trailing in the primitive and relatively slow-flying Nematocera, have become compact, with short broad basal segments and a hair-like arista in the higher flies, without any loss of sensitivity to odours. The power of scent is acute and of prime importance for locating food (as can be seen from the rapidity with which flies come to an odoriferous bait), mates, and suitable sites for oviposition. Flies also have good sight, but no special organs of hearing.

The mouthparts are also reduced throughout the order. Biting jaws, necessarily massive in themselves and requiring equally massive musculature and points of attachment have given way to suctorial apparatus. Only in a few bloodsucking families with a partly aquatic life cycle are the mandibles retained, and here they are reduced to extremely slender piercing stylets. Generally the maxillae are also reduced, and all that remains of the original insect mouthparts are the labial palps, organs of touch and taste which remain indispensable because of the inability of an insect to see what it is eating by reason of the position and structure of the eyes.

Fly larvae are also highly specialised in structure although not always in feeding habits. All are without legs, and only the more primitive forms retain a head with sensory organs and biting mouthparts. The larvae of higher flies are headless maggots with hardly any obvious external structure apart from the possession of a front and back end. As in the adults, any mouthparts present are secondary developments.

The basic larval habitat, and the one to which the majority

of species have remained faithful, is wet decaying vegetation. From this, adaptive radiation has proceeded along several paths; through mud to a fully aquatic life; through living plants to leaf-mining and gall making; through rotting animal remains to animal dung, scavenging (from which probably brood parasitism has evolved), predation and internal parasitism. Fully free-living larvae are very uncommon, being found mainly among the aphid-eating members of the Syrphidae.

Brood parasitism and internal parasitism have been evolved independently by many different families of Diptera, and the host range is even wider than in the parasitic Hymenoptera. The hosts include mammals, birds, amphibians, all the larger orders of terrestrial insects, Arachnida, centipedes, crustaceans (only the terrestrial woodlice), worms and land Mollusca. The only major limitation is the inability of adult flies to penetrate the aquatic habitat in search of hosts on which to lay eggs. Probably only the nematodes, which are free from this limitation, have a wider host range.

Although small in size, the Diptera are often conspicuous by their brilliant colouring. Sometimes this serves an obvious function, as when it mimics aposematic bees and wasps, but in many families iridescent or metallic colouring is frequent and serves no obvious purpose, but nevertheless adds interest and pleasure to the study of the group.

Variation in a mixed population of banded snails (Cepaea spp.)  
on Swyncombe Down, near Reading

by R. H. Smith

Genetic polymorphisms are of great interest to evolutionary biologists as they represent situations where the forces of natural selection have reached a balance such that two or more distinct forms (morphs) are maintained together in a population. The banded snails Cepaea nemoralis (L.) and C. hortensis (Muller) are well-known for the variation they show in shell-colour (basically yellow, pink or brown, but with many intermediates) and the pattern of the dark brown or black longitudinal bands (up to five on each whorl which, if present, may sometimes be fused). Most populations consist of at least two colour and banding classes (Cain and Sheppard, 1954), although there are some localities such as parts of the Marlborough Downs where large areas contain only one form (Cain and Currey, 1963).

There are many reasons why a balanced polymorphism may be maintained (Maynard Smith, 1970) although it is still not clear which factors are responsible in the case of Cepaea. However, it is known that selection by visual predation modifies the proportions of different forms (Cain and Sheppard, 1950) and the impact of the thrush (Turdus philomelos (L.)) is relatively easy to assess because of the bird's habit of smashing the shells on a stone or some other suitable "anvil". Comparison of the broken shells with a representative sample of snails from the live population will reveal whether the birds find proportionally more of the morphs that are conspicuous in that particular habitat. Cain and Sheppard (1950, 1954) showed that, in general, pink, unbanded snails were at an advantage in beech-wood leaf litter whereas yellow, banded snails were least conspicuous to thrushes in downland grass and hedgerows.

The colony chosen for study was in an area of rough herbage flanked by a beech-wood on Swyncombe Down to the north of Reading (grid reference SU 670917), just off the Icknield Way. On 3/5/1974 the anvils (found mainly under bushes) were cleared of broken shells and a number of living snails were collected by second year Zoology students from Reading University. Because the broken shells could have accumulated over several years, a second collection was made on 25/4/1975 so that the second sample represented snails that had been killed during the year. No attempt was made to distinguish between the two species of Cepaea since identification without dissection is often doubtful (Quick, 1952). Several different banding patterns were present, but no brown shells. The data are summarised in the table; banding patterns have been classified as either effectively unbanded (top two bands on each whorl missing) or banded.

	Living				Dead				Total
	YB	PB	YU	PU	YB	PB	YU	PU	
1974	67	10	6	5	301	159	5	7	560
1975	101	23	4	6	267	123	2	1	527
Total	168	33	10	11	568	282	7	8	1087

Y - yellow, P - pink, B - banded, U - effectively unbanded



The data were sub-classified in various ways, and chi-squared tests were used to discover whether the observed frequencies differed significantly from those expected under different null hypotheses. The results of the analysis can be briefly summarised as follows:-

1. The data for the two years are significantly different because in 1975, there were more living YB and PB and less dead PU and PB than in 1974. Despite these differences, the rest of the conclusions are qualitatively the same for both years' data.
2. Snails with pink shells are more likely to be preyed upon than those with yellow (averaging over banding patterns).
3. Snails with unbanded shells are more likely to be preyed upon than those with banded (averaging over colour).
4. In addition to the separate effects of 2. and 3., there is selective predation against PB (PU may be maintained by migration from the adjacent beech-wood where it is probably less conspicuous).
5. In the "anvil population" of shells, there is no association between colour and banding whereas the living snails include more YB and PU than would be expected if colour and banding were independent. These results are in agreement with those of Cain and Sheppard for a similar area nearby (Christmas Common).

Yellow snails with bands are certainly less obvious than other forms on short turf, so it is not surprising that YB is the commonest morph. The continued maintenance of the other forms is not explained, however. The presence of pink, unbanded snails is probably a result of migration from the beech-wood but, since the genes controlling colour and banding are known to be closely linked (Cain et al, 1968), there are clearly unknown selective forces involved maintaining YU and PB in the population. There are many other predators besides thrushes, for instance rabbits, which are common in the area. I have observed slow-worms (Anguis fragilis L.) investigating a moving Cepaea nemoralis with their tongues and then retiring, even though a snail extended from its shell looks as inviting as the small slugs that slow-worms devour so voraciously, so some of the snails may exude a noxious substance which could be related to the visible polymorphism, possibly indirectly through their food-plant. Coloration will also have secondary effects on heat gain and loss through radiation, but whether or not this is a biologically significant factor still has to be assessed.

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A Study of the Vocalization of the Tawny Owl (Strix aluco L. )

by S. Martin Brown

One of our more common owls is the Tawny Owl, Strix aluco L., a nocturnal bird more often heard than seen, but how much do we really know about the vocabulary of this beautiful owl? It seems not very much. Even Shakespeare who was often thought to be a good naturalist mis-interpreted the song of the Tawny Owl as, "Tu-whit, tu whoo". In fact what he heard were probably two Tawny Owls calling, a male singing, "Hoooooo-hooo hooohooooo" and a female probably replying with a sharp, "Kewick". When combined this gives us a, "Hoooooo-kewick-hooohooohoooooo" which is very similar in auditory effect to, "Tu-whit, tu-who" if exaggerated by a not too careful listener.

Tawny Owls are drab in colour compared to other birds and because they are nocturnal they have no need for elaborate colourful plumage for territorial threats and displays. Obviously this is because they would not be visible clearly. However other faculties have been elaborated to make up for this lack of colour and to assist in communication. These include the broad development of the owl's vocabulary thus helping it to distinguish between the sexes, and a well developed sense of hearing. Not only has the Tawny Owl to make up for the lack of expression through a colourful plumage and to communicate physical expressions through the darkness of the night, they must also be able to penetrate the night with their calls, so that they may converse with other owls and hopefully find a suitable companion.

To enable the Tawny Owl to penetrate the night and communicate over long distances without the calls being absorbed by the trees and other obstacles, the owls have utilised calls and songs in the lower sound-frequency spectrum. Sounds of higher frequencies are more quickly absorbed by trees and other obstacles and therefore their audible range is much shorter.

Within a single year Tawny Owl vocalizations may be divided up into two subsequent periods, both of which correlate very well with the beginning and end of the breeding season. The first period of song builds up to a peak in mid-January when the owls are establishing territories and mating. This precedes the peak of the breeding season which is from the second week of March to the second week of April. Once the eggs are laid and the young are hatching there is a decline in the amount of calling. The second period builds up to a peak after the fledging of the young. This peak is about September when the young owls are very vocal and trying to establish themselves with their own territories against the other well established owls.

In the evening Tawny Owls generally begin calling just after sunset until it is dark. After dark they have begun hunting for their prey, and the amount of vocal activity it seems decreases somewhat. But quite frequently there are sudden outbursts when the owls in a large area all begin calling in chorus or you may have a pair of owls that begin calling furiously at each other as a scuffle breaks out.

When Tawny Owls do have reason to call during the day it is usually because they have been disturbed or are being mobbed by smaller birds, in which case there will be a lot of clatter from these smaller birds.

The weather has a very marked effect upon the vocal activity of Tawny Owls. Vocal activity is greatest, amounting to over sixty per cent, on clear nights with little or no cloud, and in these situations it is usually calm and sound carries very well and is audible over great distances. Over thirty per cent of the calls are made on overcast nights, and the remaining percentage accounts for bad weather including fog, mist, drizzle, rain and snow.

The Tawny Owl has as wide a vocabulary as any other bird, if not much wider. There are two very common calls which are known to most people. These are the sharp "kewicking" and the eerie "hooting" calls. Of these two calls the "hooting" has the greater number of variations. There are also many other calls which are far from well-known and the number of variations of these calls are mainly undocumented.

Describing calls on paper is a very difficult process but the "hooting" calls are fairly easy. The most common of these is the "Hooooooooooooo-Hooohooohooohooooo", and the "Hooooooooooooo". There is also a shorter version of "Hoooooo". These three calls form the basis for other "hooting" calls. These are just some of

the variations: "Hoooooooo-Hooohooohoooooooo", "Hooohooohoooooooo", "Hooooooooooooohooohooohoooooooo", "Hoooooooo-oo", "Hoooooooo-oo-o", and a "Hooohooohoooooooo", which sounds like the cat-call whistle of "Whit-wheoo". If you hear an owl calling this, you begin to wonder who taught it!

Some of the "hooting" calls end in a quiet warbling. However it is possible that all hoots end with this as it may depend on how near you are to the owl as to whether you can hear the terminal warbling. Calls of this description include: "Hooooooooo-Hoooooooooooooooo", "Hoooooooooooo-oo", "Hoooooooooooo", "Hoooooooo-oooo" and a "Hooooo-Hooohooohoooooooo", The underlining represents the warbling phrase. And finally there are the warbling "oooo's", whining "hoots", and a "milk bottle hoot", which sounds as if you were blowing over the lip of a milk bottle at a much lower frequency.

Of the "kewick" calls there are two common variations, a "kew", and a "wick" call. Other calls heard are whining-like calls and the following rarely heard calls of "twink", a barking "woick", a "weeoo", a "woorak", a "cuck-cuck-cuckoo", a "quorking" and some screeching noises. Bill snapping is hardly vocal but is, I think, relevant as it is used in communication by young owls at rest as a threat to possible intruders. It is also used by angry owls.

The most difficult part of studying bird vocalization is the interpretation of the calls and songs, and this part is still far from complete. However, I shall attempt to translate the meaning of these calls and songs based on that which I have learnt so far.

The well-known "Hooooooooooooo-Hooohooohooohoooooooo" occurs throughout the year and is, I think, the song of the territorial male. It is frequently heard as "Hooooooooooooo" which is also probably of territorial significance. The shorter "Hoooooooo" although not so frequently heard is also heard throughout the year, and its meaning is probably similar to the longer version. All the other "hoots" apart from the warbling hoot are not very common and I am unsure of their interpretation. This also applies to the warbling "hoots" and most versions are uncommon except "Hoooooooooooo" which occurs throughout the year.

Of these "hoots" one can soon deduce that there are several basic "hoots" which are common and many variations which are infrequently heard.

The "whining" calls and "hoots" occur primarily in the months of February, March and April and are associated with the breeding season. From this I would assume that they have definitely something to do with breeding and I have heard these calls made by two owls each getting closer to each other. As they get closer together there is more whining and some clattering in the branches, so possibly the calls are made prior to mating. The calls probably serve as some form of appeasement to each partner as both sexes are naturally aggressive towards each other.

The "woick" barking call, the "twink", the "woorak", the

"cuck-cuck-cuckoo", the "kew", the "wick" and the "screeching" calls are all fairly rare calls to be heard and their meaning is unknown to me. The "weeoo" call is also uncommon but has been recorded throughout the year and the common "kewick" call is also heard throughout the year. The "kewick" call could possibly be a contact call as it is short and sharp, whereas most song is of a long duration.

This paper, I hope, has given some idea of the types and meanings of the Tawny Owl songs and calls. I hope soon to carry out more extensive studies, when, firstly, I have obtained a better understanding of the Tawny Owl's behaviour from the other researchers, and secondly, when I have obtained some suitable playback equipment. With a better understanding of their behaviour and the ability to record the behavioural reactions due to playbacks, I should be able to decipher more easily the meanings of songs and calls. In addition, I would like to make spectrographs of each vocalization and use this method to identify each owl individually, and to use it for comparisons. Any help from those working in similar fields would be gratefully received.

I wish to acknowledge the help of the following persons: Mr. Ron Kettle of the British Library of Wildlife Sound, the late A. G. Field, R. W. Greener and Douglas Bower, all of whom supplied copies of their tapes on Tawny Owls.

I am also grateful for the assistance of Peter Holden and the Young Ornithologists' Club, who ran a survey on Tawny Owls, and all those who took part. I also wish to thank Ruth Murray, Graham Hirons and David Glue.

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#### Vocalization of the Tawny Owl - a note

My owl, WOL, frequently uttered a low warbling note without hooting and would sometimes reply when I imitated this. I took it to be conversational sounds between two birds close together.

C. J. Leeke

## A Visit to Malaysia 1975

by C. J. Leeke

It all began in the summer of 1974 when my friend and ex-colleague Ted Bicknell came home on leave from Malaysia, and stayed a while with us. He said, "Why don't you come out to us next summer?" We tossed this rather daring, hitherto unthinkable, notion about more in fun than resolution, until February when we consulted British Airways and bought tickets. Then a nail-biting wait for the reply to our query, "Did you really mean it?"

After a combined course of passive and active immunisation against a variety of tropical pathogens, some useful briefing from our friends on clothing and armed with difficult-to-come-by items as gifts, we boarded flight B.A. 930, four hours delayed by a strike of caterers, and were airborne at 23.30 on July 12th.

The flight was technically uneventful, but aesthetically sheer delight. Illuminated London fell away rapidly in an awe-inspiring climb; then the electric filigree of some European towns passed slowly by six miles below.

The dawn came towards us from Asia Minor. First, a light streak in the eastern sky rapidly extending in a long, shallow curve as the horizon marked the silhouette of a round Earth. Then this widened to an enormous crescent as far as the eye could see. Finally the huge blood red orb appeared - below the dark silhouette! It was cloud cover following the more solid curvature beneath. In minutes the fierce sun was above the clouds and the rarified atmosphere offered insufficient protection; so regretfully the blind was lowered and we slept until the only landfall at Bahrein.

An hour later we followed Concorde into a brilliant sky over the Persian Gulf with its toy ships and white-tipped waves. I slept as Bombay slid slowly by and awoke to see a large, brown river carrying monsoon water towards Madras. The broken clouds followed exactly the shape of the sub-continent, the golden strand forming a narrow border as India too was left behind. The sun was setting over the densely wooded Nicobars and it was dark when fourteen hours from London we touched down at Kuala Lumpur in the rain.

With the temperature and humidity both above 80, the hand baggage seemed twice as heavy as it had in London. A furlong and a lot of sweat later, we entered the immigration lounge, with a hundred others, to find we should have filled in forms on the plane. Soon the room was littered with perspiring travellers concentrating on questions like nationality?, from?, to?, why?, and many of a more personal nature. We sat on our baggage; only the first score had room at the tables, many sat on the floor.

Then the queueing to be interviewed by humourless young men, who had seen it all before. As I pushed our documents forward, the young man gave me a distinctly boot-faced look, which was depressing; had we forgotten something? As I mentally checked off the items, my eye caught a notice, on the wall, which stated clearly and simply that visitors without visas could stay for

seven days and this period was not extendable. Who had told us we did not need visas? Then the young man asked "How long do you intend to stay?" I felt rather foolish as I said that our return flight was booked for August 31st. He then stamped our passport and wrote August 31st on the certificate and actually smiled as he said "Enjoy your stay".

Knowing the worst was over we waited, with a feeling of elation, for our luggage to arrive at the carousel. The humidity and heat which had become so oppressive in the throng now meant nothing because, somewhere among the thousands of faces looking for relatives and friends, we knew two faces were looking for us.

I picked up our two heavy cases and said to an official by the door "I will come back for the hand luggage" and stepped through. Immediately, I was relieved of the load by our friends and went back for the rest; the man at the door politely said goodnight to us and we were whisked away. It was a marvellous feeling as we drove off in the night. "Of course", said my friend, "you know you just walked right past the customs?"

The house was full of surprises. The fish pool and fountain beneath the open stairway was put to practical use by Suki, the Malay dog that looked like a short-haired terrier that did not quite make Crufts. A three-inch tadpole swam with the goldfish.

A loud ticking from one of Muriel's tooled copper pictures heralded the appearance of one of the several "lounge lizards" in the house. These geckos were usually active from dusk onwards catching unsuspecting moths, sometimes laying their eggs down the backs of armchairs and one gecko was found by Suki in an advanced state of decomposition under the carpet.

Clive, the youngest of the boys, caught a large flying ant for me and put it on the side while we had tea. When we looked for it later it was being carried down the vertical edge of the cupboard by a multitude of minute black ants. It was like a light aircraft being manhandled by a crowd of people. We watched fascinated as it rounded the moulded overhang before proceeding more rapidly across the floor, out of the door, and down a crack between the flags of the patio.

There was a larger species of black ant which also scavenged crumbs from the dining area but the two species never met. I think they deliberately avoided each other. Pheromones must be quite important to their survival, not only guiding them safely home but also enabling them to avoid the disaster of being carried off.

In the garden there was another species of ant, even bigger, living in a nest made of leaves in a tree. These brown tree ants were quite arrogant, and with good reason; they had a most painful way with them but fortunately much of their travelling was along the overhead electricity cables.

On wet evenings the lawn, composed of a peculiar, coarse, creeping grass would be visited by many large spiral snails, up to four inches long, seeking the tender shoots of cherished plants

and retiring before dawn to the base of the hedge or the compost heap.

Dawn came about 6 a.m. and within a few minutes the 'scribbling' song of the yellow-vented bul-bul could be heard; this was an extremely common bird everywhere we went. Usually the first birds to call were the local fowls, not far removed in appearance from the red jungle fowl, some of which still exist on the outskirts of the city. It would not be long before the loud calls of common mynahs could be heard as they swaggered about in the brash fashion of the starling tribe. The pleasant whistling of the magpie robin soon followed and the day was properly launched. This bird is a thrush, as is our robin, but its nearest relative is the shy, melodious shama, several times heard but never seen.

Other birds seen in and around the garden were black-naped orioles, fairly common and a splendid sight whether in flight or feeding on some fruiting tree; but since all trees at all times have some yellow leaves, there being no marked seasons, they were remarkably inconspicuous when at rest. Common ioras regularly fed on insects in the willow trees. These sparrow-sized yellow and black birds were a delight to watch as they poked into cracks in the bark and searched behind leaves. Tree-sparrows thought they were house-sparrows as they squabbled over scraps thrown on the lawn, while a hen sunbird of unknown identity busily sucked from the blue flowers of the creeper in the hedge. House-swifts screamed about their nest under the eaves as they rushed about the business of feeding their two offspring.

Always where there were suitable thickets not too close to houses there were jungle crows and the smaller, sleeker house-crows, comparable to our carrion crows and jackdaws. Near lakes there was often to be seen the magnificent white-throated kingfisher, a large bird, eleven inches long with contrasting chocolate-coloured head and belly and dazzling white throat and with gleaming blue back, wings and tail. It seems its diet includes large insects and small reptiles as well as fish because it would often perch away from the water edge to cast an eye over the adjacent vegetation.

If we could get along the road to some secondary jungle before dawn it was possible to see many other birds; an old dead tree was of absorbing interest to a golden-backed woodpecker and the brilliant copper-smith barbet could be seen on a high perch giving out its monotonous tonking call. A harsh cry attracted attention to a racket-tailed drongo, a wonderful sight as it flew by, and a loud scolding chatter (which might have been made by a large magpie) came surprisingly from a small squirrel.

A little further down the road was a spot favoured by a troupe of long-tailed macaques. These belong to the crab-eating group but were a long way from the sea. The adults were light gingery-brown on the back shading to grey but the new babies were black.

Barely a mile from the house stands the National Museum, a pleasant building with a strongly eastern aura, which houses a fascinating collection of many interests. Under its wide eaves a



noisy colony of green glossy starlings had suspended their nests after the fashion of swifts.

For me the visit to Malaysia was full of high lights but perhaps the visit to Taman Negara, the National Park, must shine above the rest. Seventeen of us, led by a young Chinese called John, set off by minibus from the Majestic Hotel forecourt at 7 a.m. By about mid-day we had reached Kuala Lipis, very near the centre of the peninsular, for lunch at the rest house. On the way we had seen two siamangs climbing a straggling fig near the roadside and a smart-looking cinnamon bittern hunting in a paddy field. The most spectacular sight was a rhinoceros hornbill which flew low across the road just in front of us. This splendid bird is four feet long.

The minor road from Kuala Lipis soon became a dusty single-track and then petered out on the banks of the brown Pahang river. From here our movement was to be by boat or on foot; at one time the boats would have been paddled, now, powerful outboard motors drive the forty-foot craft along at fifteen knots. We unloaded the minibus and there, about fifty feet below, were the two boats, their tin roofs gleaming in the sun. We descended the irregular steps, cut in the slippery clay bank and held up by old logs and boards, with some difficulty. My impedimenta consisted of a grip, a leather hold-all containing camera, lenses and meter, a cine camera, a pair of 10 x 50 binoculars, a cassette recorder and a Chinese frying pan. It was this last item that caused a lot of amusement, to some because they recognised it and wondered what I was going to cook, to others because it was unfamiliar. When I told these people it was a parabolic reflector, there was a baffled silence on all sides.

After the jolting of the minibus over miles of less than desirable road surface, the smooth progress by river was a pleasure in spite of the roar of the engine echoing back from the primeval rain forest and the drizzle that had begun to slant into our faces. The thirty miles were full of interest. Bamboo fish-traps could be seen at each kampong and canoes of various sizes to suit children or adults, water buffalo grazed with the hump-backed dwarf cattle, and countless bee-eaters hawked insects from favoured perches. The white-throated kingfishers each had their beat and a huge stork-billed kingfisher eyed us warily from a fallen tree. Three southern pied hornbills flapped and glided across the river to a lofty perch and watched curiously as we roared by. A grey-headed fish eagle prepared for a nap in a big tree, ignoring the noise completely. Red-rumped swallows and the big fork-tailed swifts skimmed over the water at twice our speed.

After two and a half hours we disembarked at Kuala Tahan and carried our gear up a hundred-foot bank and were directed to self-contained chalets designed for two or four persons. This was unexpected luxury, electric light from a large diesel generator, showers, and a pleasant dining hall; but there was little time to admire the mod. cons. There was time only for a quick sortie, in the rain, which had become heavier, to view prospects for the next day. Then it was dinner time and soon became dark.

After dinner I (with Brian Leonard from Singapore) collected

insects. Large flying ants, ephemerids, cicadas, praying mantids, venomous night-flying bees were among the hordes that came to the verandah lights. The ubiquitous geckos were there too and so was a large spider that could hide in the joints between bricks or in the rebates between boards by stretching the first two pairs of legs forwards and the last two backwards, in a seemingly unnatural pose; but it did achieve the spider's narrowest shape this way.

At midnight the generator was switched off and having lit the insect-repellent coil I went to bed leaving the light switch on so that the generator would wake me at five. This worked well and I was able to get to a suitable place in time for the dawn activity at 6 a.m. After breakfast at 8 a.m. we walked along a jungle track to a suitable place for swimming and on the way, in a clearing around an Orang Asli Kampong, we saw a tiny rufous-backed kingfisher - which shone like burnished gold in the sunlight as it winged away.

The Orang Asli are nomadic aborigines but they had left this fairly new settlement a few days earlier because a tiger was hunting wild pig too near for comfort. These people lead a primitive existence and are the only ones allowed to hunt in the National Park. They collect fruits and other parts of plants for their various needs and hunt birds, monkeys, deer and other small animals for the pot with blowpipes. The shelters they erect are woven coconut leaves on bamboo frames which are then fixed to make triangular huts about four feet high. It was not surprising that they had moved on with such poor protection.

That evening the camp was visited by a pair of sambar which had learned of pickings to be had behind the cookhouse. They had become tame enough for children to stroke them but lived in the forest nearby where presumably the activity at the Park headquarters and the noise of people and machines would keep tigers away. Again after dinner some more insects were collected and three large ants seemed to be having a gossip on a light globe; for a long time they stroked each others' antennae. Again bedtime came with lights out and I awoke just before the lights came on at 5 a.m. This was a good morning for birds. A pair of southern pied hornbills watched with mild interest while I manoeuvred the camera, three black magpies noisily sorted out a domestic triangle and a delightful pair of blue-rumped parrots were biting the leaves from a tree to clear a way to the fruits which they tore open. The sticky pulp was dripping from their beaks, but they ate only the seeds. Several green pigeons were moving through the trees to a nearby fruiting tree and a shama filled the forest with its powerful melodious song, as the usual half hour of condensation dripped from the trees.

After breakfast we travelled by boat upstream to Kuala Kenyam, which was an exciting two hours as there were seven sets of rapids to negotiate. The sound of baling was often heard. It was prudent to have a plastic mac back to front across the knees so that it could be jerked right over one's head, when white water came splashing in, to protect the cameras and recorder. Just as we approached the tail of one set of rapids the engine cut out; the boatmen reacted quickly to paddle and pole us into the lee of some large boulders, where the fault was remedied.

At the top of the steps where we disembarked at Kuala Kenyam was a tulip tree covered in red flowers that were crinkled as if made of paper. There were about three dozen spider hunters feeding and squabbling about the tree. These birds are speckled, predominantly brown, about the size of a thrush and with a long curved, probing beak. For about an hour we watched them and suddenly they were gone. A young southern pied hornbill sat in a tree waiting for its mother but she was disturbed and did not come. Eventually she called from a tree about a hundred yards away and the young bird flew to join her.

The loud "chee-ong" call of a hill mynah echoed about the settlement but it was impossible to get the direction accurately enough for any hope of seeing the bird. It was an excitingly vigorous sound. On one of my excursions across a clearing, which some Malays had been fencing for their animals, a pair of quail exploded in my face as I nearly stepped on them. Later, when a party which had walked to see some caves returned, they fed the local fowls with the leeches which were adhering to their jungle boots and trousers. Only one person was bitten by a leech, which found its way inside her shirt and attached itself to her navel. Fortunately, these injuries bleed well and so clear out possible infection. It can take up to three or four hours to stop.

After a light evening meal a flock of about ten male fairy blue-birds appeared around the hut. They seemed to be catching some insects as they chased about uttering sharp calls for about five minutes. Then they too disappeared as quickly as they came. A pair of green broadbills were seeking a roost and just when it seemed all diurnal birds would have gone to bed a huge rhinoceros hornbill flew over at tree-top level. This must rank as my best bird-watching half-hour.

Four of us sat up for another hour or so and watched the tropical rain pelt down from a cloud that had obliterated the sunset. Then, as there were no lights here, we retired early. This was probably a mistake, as I was geared to about five hours' sleep. When I awoke I was sure that it was coming light so I climbed out of the mosquito net and dressed quietly, trying not to disturb anyone else. Then, stealthily, I crept out with my camera, recorder, Chinese frying-pan sound-reflector and binoculars; but John, the Chinese guide, was a light sleeper and quietly said "It is only quarter past two, you know". Then I made my second mistake by going back to bed, where the late nights and early mornings caught up with me and I had to be wakened to catch the boat back to the main camp for breakfast.

As though to provide a grand finale to this marvellous visit to Taman Negara, the "cherry" tree behind the dining room was visited, not only by the usual collection of birds, but also a group of fairy blue-birds which gleamed like porcelain figures in the bright sun. The cocks are like blackbirds, but with a stunning blue crown, nape, back and rump. Best of all was a family of rhinoceros hornbills, huge, black and white, with yellow and red casque above their large yellow bills. The cock flew off but the hen remained to feed the single young bird with the ridiculously small fruits.

The journey back to Kuala Lumpur seemed much shorter than the journey out and we soon joined the federal highway which carried us into the city centre where for several miles, the primeval forest had been replaced by secondary growth, largely composed of steel and concrete of great height and indeterminate culture.

Given the chance, the plants of Malaysia grow luxuriously, being favoured by near optimum conditions all the year. No part of the peninsula is more than about seventy miles from either the Indian or Pacific Ocean, so rainfall is always adequate and temperature does not vary much from 30°C. The climax vegetation is largely tropical rain forest, even on the highest hills, except in some coastal regions where coconut palms or mangroves flourish. Because high winds are rare, trees can grow tall, straight and fairly slender. Many forest trees have trunks which tower smoothly and elegantly above their buttresses for one hundred and fifty feet or more before producing any branches.

Everywhere there are epiphytes, ferns, pitcher plants, orchids and mosses. The lethal strangling figs may be seen in the cities as well as in the forests sending down their lianas from even the highest trees; eventually killing off the host, its rotting trunk replaced with a multiplicity of roots. A wealth of climbing plants, such as we struggle to keep alive as house plants, grow rampantly.

Forest clearings soon become populated with tall lalang grass and a variety of other herbs, as well as small shrubs and the inevitable tree seedlings that would take over if grazing and nibbling animals did not keep them down. Roadside verges are cut at irregular intervals and become a habitat for delightful creeping ferns, sensitive plants and a tangle of many others.

Malacca, a day trip from Kuala Lumpur, is an ancient town with a turbulent history, reflected in the variety of architecture that has accumulated over the centuries. A glance over the sea wall anywhere along the esplanade shows some other changes that have occurred. The yellowy-brown, muddy water and the thousands of mudskippers are probably remnants of a one-time mangrove swamp, long since drained and burned off. A hundred miles to the north at Kuala Selangor the mangrove swamps are being burned and drained today. It is called progress.

The east coast is famous for its turtles. Green turtles and the great Pacific leatherbacks may be seen burying their eggs on selected beaches, from April to September. Young men and boys keep a look-out for them, careful not to turn them back. As soon as a female has hauled up far enough and begun to dig, she reaches the point of no return; then it is safe to collect a small fee from tourists and to gather close to watch.

We arrived at such a beach at about 10.30 p.m. and prepared for a wait of unknown duration. The beach consisted of coarse sand and extended for a couple of miles in each direction, then outcrops of rocks separated it from the next beaches. I had been up and about since 5 a.m. and was glad that a small lad was doing the leg work for us. So we settled on the warm sand and watched the full moon rising high over the South China Sea and

listened to the sougning of the waves as the tide approached its peak. The warm breeze that ruffled the palms combined with everything else to make me feel very drowsy. I was vaguely aware that two of the Bicknell boys had asked for the car keys to get a drink and some time later there seemed to be a bit of bother. After some "to-ing and fro-ing", I became aware that they had locked the keys in the car and the spares were ten miles away in the chalet. Fortunately, a combination of a slightly open window and a piece of wire enabled the situation to be remedied just as news of a turtle arrived.

It was a green turtle a quarter of a mile wway. We walked along the narrow strip of wet sand as the tide receded; the dry sand was too mobile for comfort. When we came to the tracks, about three feet wide, as though a miniature tank had emerged from the sea, we followed them, marvelling at the effort these animals make to propagate their species.

The turtle was lying in a saucer-shaped hollow about five feet in diameter and eighteen inches deep, with a deeper trough in the centre in which the eggs lay, round, white and dented. She began filling in almost at once and was oblivious of several people quite close, one with a flash gun. With considerable power she made great sweeping motions with her flippers, shooting the dry sand backwards and sometimes, if she hit a root, high over our heads. Every two or three strokes, she would rest with a loud sigh; continuing she not only moved slowly round but also slowly forward. In this way she moved a vast amount of sand and left a disturbed area about twelve or more feet in diameter. This would normally have entailed a great deal of digging to find the eggs, but the wily lads had marked them with a stick, replaced several times as she knocked it down. They began digging them out as soon as she began to move back to the sea.

The whole process takes two or three hours and it must be very exhausting for an animal so adapted for locomotion in water. I felt relief and genuine pleasure as she regained her natural element. She must have felt much the same as the warm water buoyed her up and removed the sand from every scale and groove, especially to have the sand-plastered, gelatinous "tears" washed from her eyes.

Most of the eggs laid find their way at dawn to the food markets, but it is not all in vain. The Government has restricted beaches from which the eggs are collected only by officials who re-inter them in batches of fifty. Each batch is labelled on a stick with a record of the female, if tagged, and the date. In this way, one hundred thousand eggs are protected each year. If there are not enough collected, some are bought with the aid of the World Wildlife Fund. The eggs take fifty-four days to hatch and, two days before they are due, the batch is surrounded by a barrier of half-inch-mesh wire netting about one foot in diameter. The young usually emerge at night; collections are made at midnight and at dawn. Each collection is immediately taken out by boat and dispersed widely to make it more difficult for predators to catch them.

Swimming in Malaysia is superb for people as well as for

turtles. Every hotel of note and many houses have splendid outdoor pools. The rivers near their sources are clean enough for swimming and are especially good fun at waterfalls. That is, if you do not object to swimming in water the colour of freshly brewed tea. For me, the sea was in a special class, warm, buoyant, salty and with frequent patches of stagshorn coral among which brilliantly coloured wrasses, striped angel fish, yellow-tailed fish, abudedefdufs (portly and pompous looking) and small spotted groupers could be seen nervously inspecting one's feet. At any sudden movement they would all vanish into the sharp coral forest to appear again when their curiosity overcame their fear.

It was on the way home from Penang that we saw lotus "lilies" growing in a roadside drain. I was looking for these in a reachable position, having seen about half an acre of them in the lake gardens at Taiping. I hoped to obtain a fruit, like a squat ice-cream cornet with small holes in the top. These capsules were held on individual stems about two feet above the water and presumably disperse seeds by a censer mechanism. We stopped the car and I walked back to see whether I could get one. The plants were in a broad drain, but there was a narrow ditch and a small bank covered in dry, dusty grass on my side. So, choosing a place where I could step over the narrow ditch, I did that. What a surprise. The bank proved to be non-existent, the dry, dusty grass gave way and I was sprawling on a heaving mass of very wet vegetation. I could feel nothing solid at all and was in water up to my knees and elbows. Since every force has an equal and opposite one, I was unable to get out. Every time I tried to stand the vegetation sank deeper. However, by this time Ted had overcome his laughter enough to render me assistance, but I did not reach the lotus.

Arriving back in Kuala Lumpur, a city of interesting contrasts, we saw:- blocks of high rise flats and dingy rooms over small shops which themselves contrast with giant Emporia, dubious looking hotels and luxurious towers like the Kuala Lumpur Hilton or the ~~ultra modern eighteen~~ storey Federal Hotel topped by its revolving restaurant. The quaint old mosque which sits at the geographical centre of the city where the two rivers meet - the name Kuala Lumpur means muddy river mouth and they both are - has a timeless dignity in common with the magnificent new National Mosque of which the Muslims are justly proud.

The fine National Museum, like the new National Mosque, although modern has retained the Moorish influence and looks right in Malaysia. So too do the City Offices, the General Post Office, the Secretariat offices and the fine railway station, all built during the Victorian era by the British, and I felt a flicker of pride that we had done something well. But, in case we should become too carried away by our pride, I should like to leave you with this quote from the Guide to Malaysia, "Before construction of a new building could begin, the plans had to be submitted to the U.K. for approval. The plans for the Railway Station were rejected until another design of the roof was made, capable of holding three feet of snow".

Supplement to the list of the Lepidoptera  
of Moor Copse Nature Reserve

by B. R. Baker

Nomenclature as per Kloet and Hincks, Check List of British  
Insects, Second Edition (Revised), December, 1972.

<i>Eulithis prunata</i> (L.)	The Phoenix
<i>Perizoma bifaciata</i> (Haw.)	Barred Rivulet
<i>Eupithecia centaureata</i> (D. & S.)	Lime-speck Pug
<i>E. icterata</i> (Vill.)	Tawny Speckled Pug
<i>Aplocera efformata</i> (Guenée)	Lesser Treble-bar
<i>Ennomos quercinaria</i> (Hufn.)	August Thorn
<i>Lymantria monacha</i> (L.)	Black Arches
<i>Noctua interjecta</i> (Hübner)	Least Yellow Underwing
<i>Xestia sexstrigata</i> (Haw.)	Six-striped Rustic
<i>Hadena rivularis</i> (Fabr.)	The Champion
<i>Tholera cespitis</i> (D. & S.)	Hedge Rustic
<i>Gryphia domestica</i> (Hufn.)	Marbled Beauty
<i>Mormo maura</i> (L.)	Old Lady
<i>Ipimorpha subtusa</i> (D. & S.)	The Olive
<i>Apamea scolopacina</i> (Esp.)	Slender Brindle
<i>Mesoligia furuncula</i> (D. & S.)	Cloaked Minor
<i>Eremobia ochroleuca</i> (D. & S.)	Dusky Sallow
<i>Hoplodrina ambigua</i> (D. & S.)	Vine's Rustic
<i>Catocala nupta</i> (L.)	Red Underwing
<i>Schrankia costastrigalis</i> (Stephens)	Pinion-streaked Snout

This brings the species total for the Reserve to 306.

Butterflies in a Suburban Garden

Members who have seen the study of insects in a suburban garden by D. F. & J. Owen in Environmental Conservation 2 (1) or the notice of it in the part of Habitat for June 1975 will have noted that fifteen species of butterfly were recently caught in a suburban garden in Leicester and that this represents about two-fifths of the species recorded at Monks Wood since 1960 and about a quarter of the British list. Reading this prompted me to get out my notebooks and see how many species I have noted in my garden in south Reading over the years. I find that, including a queried but I think almost certainly correct record of a Painted Lady in 1949, the total is exactly fifteen. Even if that record is incorrect, a Painted Lady that I saw this summer a few gardens away may well have visited me while I was out. My visitors have included both the Orange Tip and the Comma, which the Owens were particularly encouraged to see as they associate them with the countryside, though I must say that I have always regarded the Comma as a garden butterfly. The other species I noted were the Large, Small and Green-veined Whites, Brimstone, Speckled Wood, Gatekeeper, Wall, Small Tortoiseshell, Red Admiral, Peacock, Small Copper and Holly Blue.

L. E. Cobb

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Rhynchodemus terrestris (A land planarian)

Rhynchodemus terrestris was found beneath a stone in an area of permanent pasture in Whiteknights Park, Reading, on 6th March, 1975. Records of land planarians are very few, probably because they are not even known to exist by most zoologists and when seen the superficial appearance is not unlike that of a slug. This may well be the first record for Berkshire.

D. C. F. Cotton

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Lepiota Igni-Volvata, a fungus new to Britain

I was delighted to realise that fungi would make a fascinating extension, by a month or so, of my hobby to photograph wild flowers and, accordingly, set out cycling on the 17th October 1975 to comb the area Peppard-Stoke Row-Cane End, seeking fungi.

Finding it quite beyond my limited botanical knowledge to sort them all out when I got home, I decided to risk being snubbed by Dr. F. B. Hora (whom I had never met) and to ask him to help. In the event I found him charming and extremely helpful. He immediately picked one fungus from my collection and put it to one side, reeling off all the others and writing the names down for me.

Three days later Dr. Hora phoned me to say that the one picked out was apparently so rare that it had never been recorded in Britain before, that he had communicated with Dr. D. Reid who confirmed that he had no record of it at Kew, as having been found in Britain and, accordingly, my name was put down as the finder, at Kew Herbarium.

It was first recorded in France in 1948 and is considered very rare. On the 24th October we both set out for the Wyfold area to find it again, as Dr. Hora wanted samples for drying in order to be able to send to other botanists, and we were successful. (Dried specimens tell botanists all they want to know, it seems.)

"igni-" indicates that the base of the stipe, shaped rather like a human foot, has faint reddish markings when DRY.

J. P. Warrick

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Fungi found on the Foray to Wasing Wood (O.S.583632)  
near Aldermaston on October 18th 1975  
by P. Andrews

Identifications are by Dr. F. B. Hora. Species names of Agarics and Boleti are taken from the current British Check List, except in the case of Cortinarius mucifluus sensu J. Lange, which represents an emendation of that list (see note below).

- |                    |                   |
|--------------------|-------------------|
| Agaricus bitorquis | Armillaria mellea |
| Amanita citrina    | Boletus badius    |
| citrina var. alba  | bovinus           |
| muscaria           | chrysenteron      |
| rubescens          | edulis            |

Boletus granulatus	Laccaria laccata
piperatus	Lactarius blennius
scaber	chrysorrheus
subtomentosus	hepaticus
variegatus	quietus
Calocera viscosa	rufus
Cantharellus cibarius	tabidus
tubaeformis	turpis
Clitocybe clavipes	vellerius
dicolor	Lycoperdon perlatum
Collybia cirrhata or cookei	Marasmius androsaceus
distorta	Mycena galericulata
maculata	galopus
peronata	sanguinolenta
Cortinarius alboviolaceus	Paxillus involutus
cinnabarinus	Piptoporus betulinus
elator	Pluteus salicinus
mucifluus <u>sensu</u> J. Lange	Psathyrella conopilea
torvus	gossypina
Fistulina hepatica	hydrophila
Gymnopilus penetrans	Russula caerulea
Hebeloma longicaudum	cyanoxantha
sinuosum	emetica
Heterobasidion (Fomes) annosum	fellea
Hygrophoropsis aurantiaca	knauthii
Hypholoma fasciculare	mairei
Inocybe fastigiata	ochroleuca
Kuehneromyces (Pholiota) mutabilis	sardonica
	Sparassis crispa
	Tricholoma nudum
	rutilans
	Xylaria hypoxylon

Dr. Hora adds the following note about Cortinarius mucifluus sensu J. Lange:

The Wasing Wood specimen matches exactly with J. Lange's description and coloured plate and there can be no doubt about the identification. What was originally meant in the literature by C. mucifluus has never been settled and interpretations are commonly referred to C. pseudo-salor, a species first described by J. Lange, who thus clearly considered the two species to be distinct. There is much to be said for abandoning the name C. mucifluus as being ambiguous and giving a new one to J. Lange's interpretation of it. Until this is done, the above citation can stand.

#### Reference

Dennis, R. W. G., Orton, P. D. & Hora, F. B. (1960) New Check List of British Agarics and Boleti. Trans. Br. Mycol. Soc., 43 suppl.

The Recorder's Report for Botany 1974-75

by B. M. Newman

This report has been made possible by the work of members who have kept records of the plants they have seen during the year, and once again their efforts are gratefully acknowledged. They are all regular contributors and their records are initialled.

Numbers of wild plants inevitably decrease as habitats disappear under roads and buildings, but there are still plenty to interest an enthusiastic observer. When the bull-dozers depart the road verges and gravel pits provide new habitats soon colonised by plants, and even rubbish tips have provided useful hunting grounds.

Among the rarer plants recorded this year are the Marsh Gentian, still flourishing at Hook Common and the Six-stamened Waterwort found at Sandhurst although thought to be extinct in the area.

The nomenclature and order are according to the "Flora of the British Isles" by Clapham, Tutin and Warburg, and an alien taxon is indicated by an asterisk (\*). The English names are from "English Names of Wild Flowers", the recommended list of the Botanical Society of the British Isles.

Records were sent by:- Mr. P. Andrews (PA); Dr. H. J. M. Bowen (HJMB); Miss L. E. Gobb (LEC); Mr. M. Sell (MS); Dr. J. Toothill (JT); Mrs. E. M. Trembath (EMT).

List of Members' Records

<u>Juniperus communis</u> L.	Juniper	
Seedlings along the old railway cutting at Chilton.		(HJMB)
<u>Helleborus viridis</u> L.	Green Hellebore	
Near Nuffield.		(JT)
<u>Aconitum napellus</u> agg.	Monk's-hood	
Roadside near Downe House, Cold Ash.		(HJMB)
<u>Ranunculus circinatus</u> Sibth.	Fan-leaved Water-crowfoot	
In old gravel pit, Sandhurst.		(HJMB)
<u>Ranunculus trichophyllus</u> Chaix	Threadleaved Water-crowfoot	
Cock Marsh, 9th August.		(LEC)
<u>Thalictrum flavum</u> L.	Common Meadow-rue	
A very fine display along both sides of a drainage ditch after lengthy flooding of Pang water meadow at Pangbourne.		(EMT)
<u>Ceratophyllum demersum</u> L.	Rigid Hornwort	
In old gravel pit, Sandhurst.		(HJMB)
<u>Brassica</u> <u>rapistrum</u> rugosum (L.) All.	Bastard Cabbage	
On rubbish at Norris Green Tip, Woodley.		(HJMB)
<u>Rorippa islandica</u> (Oeder) Borbás	Marsh Yellow-cress	
Cock Marsh; 29th June.		(LEC)

<u>Hypericum androsaemum</u> L.	Tutsan	
Railway bank near Pangbourne Station.		(HJMB)
<u>Elatine hexandra</u> (Lapierre) DC	Six-stamened Waterwort	
On mud and floating in old gravel pit, Sandhurst. Found by R. C. Palmer, though believed to be extinct in v.c.22.		(HJMB)
<u>Montia perfoliata</u> (Willd.) Howell	Springbeauty	
Reading; second week in April.		(LEC)
<u>Chenopodium ficifolium</u> Sm.	Fig-leaved Goosefoot	
On rubbish at Norris Green Tip, Woodley.		(HJMB)
<u>Malva neglecta</u> Wallr.	Dwarf Mallow	
Sonning, 7th September.		(LEC)
<u>Impatiens capensis</u> Meerburgh	Orange Balsam	
Sonning, 7th September.		(LEC)
<u>Impatiens glandulifera</u> Royle	Indian Balsam	
Sonning, 7th September.		(LEC)
<u>Trifolium fragiferum</u> L.	Strawberry Clover	
Cock Marsh, 9th August.		(LEC)
<u>Coronilla varia</u> L.	Crown Vetch	
Recently disturbed soil, Childe-Beale Trust, Basildon.		(EMT)
<u>Pyrus communis</u> L.	Wild Pear	
Windsor Forest. Found by E. E. Green.		(HJMB)
<u>Saxifraga granulata</u> L.	Meadow Saxifrage	
Below the Ridgeway, near Chilton.		(JT)
<u>Chrysosplenium oppositifolium</u> L.	Opposite-leaved Golden-saxifrage	
By streams in Hamstead Park, near Newbury.		(HJMB)
Mortimer, 8th March.		(LEC)
<u>Peplis portula</u> L.	Water-purslane	
On muddy shore of gravel pit, Sandhurst.		(HJMB)
<u>Callitriche intermedia</u> Hoffm.	Intermediate Water-starwort	
In old gravel pit, Sandhurst.		(HJMB)
<u>Viscum album</u> L.	Mistletoe	
On <u>Tilia</u> . South Hill Park, Bracknell.		(JT)
<u>Hydrocotyle vulgaris</u> L.	Marsh Pennywort	
Cock Marsh, 29th June.		(LEC)
<u>Smyrniolus olusatrum</u> L.	Alexanders	
On railway bank near Reading West. Found by Miss. E. Robson.		(HJMB)
<u>Oenanthe fistulosa</u> L.	Tubular Water-dropwort	
Cock Marsh, 29th June.		(LEC)
<u>Oenanthe aquatica</u> (L.) Poir.	Fine-leaved Water-dropwort	
Cock Marsh, 29th June.		(LEC)
<u>Mercurialis annua</u> L.	Annual Mercury	
On rubbish at Norris Green Tip, Woodley.		(HJMB)
<u>Polygonum mite</u> Schrank	Tasteless Water-pepper	
Shiplake, 28th September		(LEC)
<u>Fagopyrum esculentum</u> Moench	Buckwheat	
Shiplake, 30th August.		(LEC)

<u>Quercus petraea</u> (Mattuschka) Liebl. Fairly common with many saplings, on Snelsmore Common.	Sessile Oak (HJMB)
<u>Pyrola minor</u> L. Woodland near Ascot. Found by R. C. Palmer.	Common Wintergreen (HJMB)
<u>Hottonia palustris</u> L. Cock Marsh, 29th June	Water-violet (LEC)
<u>Gentiana pneumonanthe</u> L. Hook Common, 6th September, flourishing in large numbers at this old site.	Marsh Gentian (LEC)
<u>Nymphoides peltata</u> (S.G.Gmel.) O.Kuntze Well established in Whiteknights Lake.	Fringed-Water-Lily (PA)
<u>Antirrhinum orontium</u> L. Grassland, Hardwick estate.	Lesser Snapdragon (EMT)
<u>Veronica scutellata</u> L. Cock Marsh, 29th June.	Marsh Speedwell (LEC)
<u>Pedicularis sylvatica</u> L. Pangbourne. A fair spread this year.	Lousewort (EMT)
<u>Calamintha ascendens</u> Jord. Hardwick, 24th August.	Common Calamint (LEC)
<u>Betonica officinalis</u> L. Ashampstead. On felled woodland tracks.	Betony (EMT)
<u>Campanula trachelium</u> L. A fine colony on bank of railway cutting west of Tilehurst station.	Nettle-leaved Bellflower (EMT)
<u>Bidens cernua</u> L. Shiplake. 28th August.	Nodding Bur-marigold (LEC)
<u>Bidens tripartita</u> L. Shiplake, 30th August.	Trifid Bur-marigold (LEC)
<u>Galinsoga parviflora</u> Cav. Earley. Roadside near Shepherd's House Inn.	Gallant Soldier (HJMB)
<u>Galinsoga ciliata</u> (Raf.) Blake Roadside, Bramshill.	Shaggy Soldier (JT)
<u>Tussilago farfara</u> L. Burghfield, 8th February.	Colt's-foot (LEC)
<u>Erigeron glaucus</u> Ker-Gawl One clump by the railway near Tilehurst.	Beach Aster (HJMB)
<u>Chrysanthemum segetum</u> L. Sulham. In a barley field.	Corn Marigold (EMT)
<u>Chrysanthemum vulgare</u> (L.) Bernh.. Bridleway, Greathouse Woods.	Tansy (EMT)
<u>Onopordum acanthium</u> L. a casual in a grassy field near Tilehurst.	Cotton Thistle (HJMB)
<u>Centaurea diluta</u> Aiton Woodley. On rubbish at Norris Green tip.	 (HJMB)
<u>Potamogeton obtusifolius</u> Mert. & Koch In old gravel pit, Sandhurst.	Blunt-leaved Pondweed (HJMB)
<u>Zannichellia palustris</u> L. In old gravel pit, Sandhurst.	Horned Pondweed (HJMB)

- Asparagus officinalis L. Wild Asparagus  
On railway bank near Pangbourne Station. (HJMB)
- Allium ursinum L. Ramsons  
On Berks. and Hants. banks of the river Whitewater near  
Riseley. (PA)  
Unhill Wood. (JT)
- Dactylorhiza fuchsii (Druce) Vermeul. Common Spotted-orchid  
Lower Ba. ildon. Seventy-one good flowering spikes on embankment  
created during roadworks in 1965. (EMT)
- Calla palustris L.  
Near Ascot station. Found by R. C. Palmer. (HJMB)
- Eleocharis acicularis (L.) Roem & Schult. Needle Spike-rush  
Old gravel pit, Charvil.  
Forming a dense sward in old gravel pit, Sandhurst. (HJMB)
- Molinia caerulea (L.) Moench Purple Moor-grass  
Colonising one corner of a gravel pit at Charvil. (HJMB)
- Echinochloa crus-galli (L.) Beauv. Cockspur  
On rubbish at Norris Green tip, Woodley. (HJMB)



Botanical Records for 1973-74

omitted from the Reading Naturalist No. 27

- Ophioglossum vulgatum L. Adder's Tongue  
Wick's Copse, Oxford. N.H.S. walk. (MS)
- Ranunculus auricomus L. Goldilocks Buttercup  
In woods near Ashampstead. N.H.S. walk. (MS)
- Aquilegia vulgaris L. Columbine  
Wick's Copse, Oxford. N.H.S. walk. (MS)
- Thlaspi arvense L. Field Penny-cress  
Burghfield. Very large colony on newly formed bank to  
gravel pit. (MS)
- Cardamine amara L. Large Bitter-cress  
In ditches and on banks alongside river Thames, Streatley  
to Moulsoford. N.H.S. walk. (MS)
- Silene noctiflora L. Night-flowering  
Several large plants in a field of Catchfly  
Lucerne near Aston Upthorpe. (MS)
- Astragalus glycyphyllos L. Wild Liquorice  
A fair number of plants near Wick's Copse, Oxford.  
N.H.S. walk. (MS)
- Cotoneaster horizontalis Decaisne Wall Cotoneaster  
Several plants at Chinnor Hill, at a fair distance from  
gardens. N.H.S. walk. (MS)
- Cotoneaster microphyllus Wall. ex Lindl. Small-leaved Cotoneaster  
Well away from gardens at Chinnor Hill. N.H.S. walk. (MS)

- Chrysosplenium alternifolium L. Alternate-leaved Golden  
One plant in bloom, Greenham. Saxifrage  
Common, near Newbury. (MS)
- Carum carvi L. Caraway  
Two plants at Wick's Copse, near Oxford. (MS)
- Pyrola minor L. Common Wintergreen  
A colony of plants in a wood near Marlow. (MS)
- Primula veris L. x vulgaris Huds. Common Oxlip  
One plant in woods near Ashampstead. N.H.S. walk. (MS)
- Pentaglottis sempervirens (L.) Tausch Green Alkanet  
Some fine plants at Burghfield gravel pits. (MS)
- Cuscuta epithymum (L.) L. Dodder  
Very large patch parasitic on Urtica dioica (Common Nettle) on  
roadside at Bix Bottom. (MS)
- Atropa belladonna L. Deadly Nightshade  
Large colony along verges, Warren Bank. N.H.S. walk. (MS)
- Lathraea squamaria L. Toothwort  
A large colony growing on Corylus avellana (Hazel) in woods  
near Ashampstead. N.H.S. walk. (MS)
- Acinos arvensis (Lam.) Dandy Basil Thyme  
A large colony on disused railway line near Hermitage.  
N.H.S. walk. (MS)
- Campanula glomerata L. Clustered Bellflower  
In full bloom at Streatley on May 19th. (MS)
- Petasites japonicus (Sieb. & Zucc.) F. Schmidt Giant Butterbur  
A well established colony at a riverside site near Hungerford.
- Ornithogalum umbellatum L. Star-of-Bethlehem  
A small colony by a lock near Streatley, well established away  
from gardens. N.H.S. walk. (MS)
- Leucojum aestivum L. Summer Snowflake  
Large colonies on islands in the river Thames, Streatley to  
Moulsford. N.H.S. walk. (MS)
- Epipactis purpurata Sm. Violet Helleborine  
One plant in woods, Chinnor Hill. N.H.S. walk.  
Roadside colony at Stoke Row. One plant had at least sixty  
flowers on one stem.  
A fine plant at Lambridge Wood. (MS)
- Epipactis phyllanthes G. E. Sm. Green-flowered Helleborine  
A small colony in Lambridge Wood, near Marlow. (MS)
- Orchis apifera Huds. Bee Orchid  
Several plants in the Beechwoods at Chinnor. N.H.S. walk. (MS)
- Orchis morio L. Green-winged Orchid  
A large colony, with shades from white to deep purple, near  
Greenham Common. (MS)

The Recorder's Report for Entomology 1974-75

by B. R. Baker

Order Odonata (Dragonflies)

Agrion virgo (L.) Demoiselle Agrion  
River Enborne, near Woolhampton, 1st and 14th June.

Enallagma cyathigerum Charp. Common Blue Damsel-fly  
In the Water Garden, Moor Copse Nature Reserve, 15th and 29th  
June. (KIT)

Gomphus vulgatissimus (L.). Club-tail Dragon-fly  
Vastern Road, Reading, 23rd June. This specimen, noticed dead  
in the road, had presumably been hit by a passing vehicle but  
with little visible damage.

Aeshna grandis (L.) Brown Aeshna  
Many noticed on the river Kennet between Thatcham station and  
Bull's Lock on 25th August.

Order Ephemeroptera May-flies

Baetis scambus Eaton Moor Copse Nature Reserve, a male on  
2nd October. (HHC)

Order Hemiptera (Plant-bugs, Leaf-hoppers, Aphids, etc.)

Acanthosomatidae

Cypostethus tristriatus (Fabr.) Juniper Bug  
A single example from the Redlands area of Reading, November,  
1975. Found by Mr. C. Bell, 60 Blenheim Gardens, Reading (AP).  
We have had 'town' records reported in earlier issues of Reading  
Naturalist and presume this bug, normally resident on downland,  
is existing on some garden form of Juniper or other alternative.

Miridae

Polymerus nigrita (Fallén) Moor Copse Nature Reserve, 10th  
July. (HHC)

Teratocoris saundersi Douglas and Scott Moor Copse Nature Res  
erve, 22nd August. (MC)

Lygaeidae

Scolopostethus decoratus (Hahn) Wokefield Common, 8th October.  
(HHC).

Cercopidae

Neophilaenus campestris (Fallén) Aldermaston, 23rd September.  
(HHC)

Order Lepidoptera (Butterflies and Moths)

Early Appearance of Hibernators

Aglais urticae (L.). Small Tortoiseshell Butler's Lands,  
Mortimer, 28th February. (BTP)



Notes on Immigrants

Vanessa atalanta (L.) Red Admiral

No early records received this year. Bracknell, 27th August. (MJD). Manor Farm, Reading, 7th September. (DCFC). Earley, 22nd September. (BTP) Mapledurham, 22nd September. (KIT)

Cynthia cardui (L.). Painted Lady

This immigrant also appeared spasmodically and then, only when the season was well advanced. Northcourt Avenue, Reading, 14th August. (LEC) Earley, 25th August. (BTP) Hook Common, 6th September. (LEC) Manor Farm, Reading, 13th September. (DCFC) Grove Hill, Reading, 14th August. (PS)

Macroglossum stellatarum (L.) Humming-bird Hawk-moth

It is many years since we have had records of this species in the Reading area, 1975 has produced two:-

In the garden of 2 Welland Close, Tilehurst, 21st September; a specimen observed several times during afternoon feeding at buddleia. (MRWS)

In the garden of 20 Glebe Road, Purley at 5 p.m. on 2nd October. Hovering over and darting around buddleia. (KIT)

Notes on Resident Species (Butterflies)

Hesperia comma (L.) Silver-spotted Skipper

Fairmile, Berkshire Downs, 27th July. Watlington Hill, numerous on 30th July. (BTP)

Callophrys rubi (L.) Green Hairstreak

Aston Upthorpe Downs, 31st May. (BTP)

Strymonidea w-album (Knoch) White Letter Hairstreak

Bradfield, 3rd August. (KVP)

Lycaena phlaeas (L.) Small Copper

This species seems to have benefited from the hot summer and has been recorded from numerous localities, the records in October relate to a third brood:-

Purley, 20th, 21st September (KIT). Kidmore End, 9th October (KIT). Manor Farm, Reading, 7th September (DCFC). Theale, 20th October (DCFC). Crowthorne, 22nd August (MJD). Wokingham, 29th July. Gatehampton, 1st August. Earley, 3rd August. Silchester, 7th August (BTP). Padworth, 14th July. Tadley, 19th June. (PS)

Lysandra coridon (Poda) Chalkhill Blue

Watlington Hill, 30th July. Gatehampton, 1st August (BTP). Bozdown, 28th July. (PS)

Celastrina argiolus (L.) Holly Blue

Allcroft Road, Reading, 26th April. Silchester, 19th May, Earley, 27th July. (BTP)  
Purley, 19th August. (KIT)

Hamearis lucina (L.) Duke of Burgundy Fritillary

Aston Upthorpe Downs, 31st May. (LEC)

Apatura iris (L.) Purple Emperor

Pamber Forest, 25th July, a female seen flying over shallows. (BTP)

Argynnis aglaja (L.) Dark Green Fritillary  
Gatehampton, 24th June. Watlington Hill, 30th July. (BTP)  
Haughurst area, 26th July. Wolverton, 29th July, Padworth,  
4th, 15th July. (PS)

Melanargia galathea (L.) Marbled White  
Mapledurham, 16th, 18th, 23rd July. (KIT) Hartslock, 19th July.  
(KIT) Watlington Hill, 30th July. Hartslock, 1st August. (BTP)  
Wolverton, 29th July. (PS)

Hipparchia semele (L.) Grayling  
Silchester Common, 7th August. (BTP) Crowthorne, 22nd August.  
(MJD) Aldermaston, 7th July. (PS)

Notes on Resident Species (Moths)

Conopia myopaeformis (Borkh.) Red-belted Clearwing  
This little clearwing is probably resident as a colonist of apple  
trees in many gardens in Reading. Our records over the past  
decade relate to gardens in the east of the Town; these records  
are therefore also some measure of the distribution of our members  
who have remembered to scrutinise their apple trunks on sunny  
days at the end of June. 1975 sightings were:- 2 College Road,  
Reading, 30th June. (EB) 25 Matlock Road, Caversham, 13th July.

Chloroclysta citrata (L.) Dark Marbled Carpet  
Padworth, 8th, 29th August. (PC, PH, RW)

Perizoma bifaciata (Haw.) Barred Rivulet  
Moor Copse Nature Reserve, 1st August. (PC, PH, RW) Goring Heath,  
29th July.

Eilema deplana (Esp.) Buff Footman  
Padworth, 8th August. (PC, PH, RW)

Cucullia absinthii (L.) Wormwood Shark  
Thatcham Moor, July. (PD) A notable record, the second for  
the County.

Cosmia diffinis (L.) White Spot Pinion  
Padworth, 15th, 29th August. (PC, PH, RW)

Mesoligia literosa (Haw.) Rosy Minor  
Padworth, 8th August. (PC, PH, RW)

Archanara dissoluta (Treits.) Brown Veined Wainscot  
Woolhampton, 25th July. This wainscot was first recorded for  
Berkshire in 1974 from the Kennet reed beds at Thatcham. It is  
evidently a new-comer to the district and is presumably breeding  
as further specimens were recorded at Thatcham in 1975. (PD)

Hoplodrina ambigua (D. & S.) Vine's Rustic  
Moor Copse Nature Reserve, 17th August. Padworth, 5th September.  
(PD)

Chilodes maritimus (Tausch.) Silky Wainscot  
Until 1975 records of this species from the Kennet Valley reed  
beds were scant, but on each of the following dates several  
examples of this little wainscot were attracted to mercury vapour  
lights at Woolhampton:- 14th, 17th, 20th June; 19th, 25th July.

Diachrysia chryson (Esp.) Scarce Burnished Brass  
Woolhampton, 19th July.

Parascotia fuliginaria (L.) Waved Black Moth  
Woolhampton, 19th July.

Order Hymenoptera (Bees, Ants, Wasps, Saw-flies and  
Ichneumon-flies)

Siricidae

Sirex juvencus (L.) male, 3rd August, Curridge Corner,  
Hermitage. (SPC)

Tenthredinidae

Eutomostethus punctatus (Konow)  
Moor Copse Nature Reserve, 20th May. (HHC)

Tenthredo omissa (Foerster)  
Moor Copse Nature Reserve, 12th August. (HHC) This is a new  
county record.

Nematus bipartitus Lapeletier  
Moor Copse Nature Reserve, 28th August. (HHC)

Ichneumonidae

Cratichneumon rufifrons (Gravenhorst) Wokefield Common,  
24th June. (HHC)

Cynipidae

Synergus gallaepomiformis B. de Fons.  
Chalkhouse Green, 3rd June. (HHC)

Formicidae

Leptothorax acervorum (Fabr.)  
Moor Copse Nature Reserve, 10th July. (HHC)

Sphecidae

Diodontus luperus Shuckard  
Wokefield Common, 24th June. (HHC)

Nysson trimaculatus (Rossi)  
Reading, 25th July. (EB)

Prosopidae

Prosopis hyalinata (F. Smith)  
Reading, 24th June. (EB)

Halictidae

Halictus eurygnathus Bluethgen  
Nuney Green, 25th April. (HHC)

H. minutus (Schrank)  
Nuney Green, 30th April. (HHC)

Sphecodes crassus Thomson  
Nuney Green, 25th, 30th April. (HHC)

Andrenidae

Andrena parvuloides Perkins  
Chalkhouse Green, 6th June. (HHC)

Megachilidae

Heriades truncorum (L.)

Burghfield Common, 6th July, 1972. (EB) A flourishing colony of this uncommon and local bee. New county record.

Chelostoma campanularum (Kirby)

Burghfield Common, 14th June, 1973. (HHC) Sharing the nest site of the preceding species, together with C. florissomne under which name they had stood hitherto in the Reading Museum collection.

Order Diptera (True Flies)

Tipulidae

Tipula maxima Poda

Reading, 16th July, 1975. (BTP) Not new, but an unexpected locality.

Prionocera turcica (F.)

Woolhampton, September 1974. (HHC)

Erioptera trivialis Meigen

Wokefield Common, 12th April 1975. (HHC)

Dicranota pavidata (Haliday)

Wokefield Common, 16th April 1975. (HHC)

Molophilus obscurus (Meigen)

Aldermaston, 23rd September 1975. (HHC)

Culicidae

Aedes annulipes (Meigen)

Reading, 22nd May 1975 (EB)

Chironomidae

Metriocnemus picipes (Meigen)

Reading, 14th January 1975. (EB)

M. hygropetricus Kieffer

Reading, 30th January 1975. (EB)

Hydrobaenus pratorum (Goetghebuer)

Reading, 6th January 1975. (EB)

Micropsectra brunnipes Zetterstedt

Reading, 6th May 1975. (EB)

Mycetophilidae (det. P. J. Chandler)

Macrocera vittata Meigen

Reading, 13th June 1971. (EB)

M. angulata Meigen

Wokefield Common, 14th June 1973. (EB)

M. cingulata Meigen

Reading, 14th September 1974. (EB)

M. phalerata Meigen

Reading, 25th July 1974. (EB)

Brevicornu crassicornu Stann.

Goring Heath, 30th October 1968. (EB)

Rondaniella dimidiata (Meigen)  
Goring Heath, 10th November 1973. (EB)

Exechia fusca (Meigen)  
Reading, 16th November 1974. (EB)

Asindulum flavum (Winn)  
Wokefield Common, 20th July 1973. (HHC)

Tabanidae

Haematopota crassicornis Wahlberg  
Moor Copse, 10th June 1975. (HHC)

Chrysops pictus Meigen  
Wokefield Common, 24th June 1975. (HHC)

Asilidae

Asilus crabroniformis L.  
pair in cop., Gatehampton, 1st August 1975. (BTP) A noteworthy capture.

Platypezidae (det. P. J. Chandler)

Seri obscuripennis Old.  
Wokefield Common, 4th October 1970. (EB) A new British record.

Platypeza fasciata (Meigen)  
Reading, 20th September 1970. (EB)

Callomyia amoena Meigen  
Woolhampton, 3rd September 1975. (HHC)

Agromyzidae

Napomyza lateralis (Fallén)  
Reading, 11th January 1975. (EB)

Agromyza reptans Fallén  
Reading, 5th November 1974. (EB)

Phytomyza taraxacocecis Hering  
Reading, 11th May 1975. (EB)

Braulidae

Braula coeca Nitzsch  
Checkendon, 12th August 1975 on queen bee in hive. (W. Fairbairn)

Tachinidae

Meigenia bisignata (Meigen)  
Reading, 7th May 1975. (EB)

Degeeria luctuosa (Meigen)  
Moor Copse, 10th July 1975. (HHC)

Leskia inanis agg. (Fallén)  
Chalkhouse Green, 29th July 1975. (HHC)

L. tibialis (von Roser)  
Moor Copse, 30th July 1975. (HHC)

Brachichaeta strigata (Meigen)  
Woolhampton, 8th August 1975. (HHC)

Zenillea longicauda Wainwright  
Moor Copse, 22nd August 1975. (HHC)

Calliphoridae

Sarcophaga albiceps Meigen  
Moor Copse, 17th June 1975. (HHC)

S. rosellei Buttcher  
Moor Copse, 17th September 1975. (HHC)

Muscidae

Haematobia stimulans (Meigen)  
Aldermaston, 23rd September 1975 on cattle. (HHC)

Lyperosia irritans (L.)  
Sonning Common, 24th August 1975 on cattle. (HHC)

Lispocephala pallipalpis Zetterstedt  
Wokefield Common, 16th April 1975. (HHC) A new county record.

Fannia scalaris (F.)  
Reading, 14th September 1975. (EB)

Limnophora triangula (Fallén)  
Aldermaston, 23rd September 1975. (HHC)

The Society's Entomological Evening

This took place during the night of 1st/2nd August at Moor Copse Nature Reserve near Tidmarsh, Berkshire.

The weather conditions were ideal for insect flight and the good attendance of members were able to observe moths in abundance. Four mercury vapour lamps were in operation spread over the Reserve and a total of one hundred and one different species of Lepidoptera were recorded. The details of species additional to the Moor Copse list published in Reading Naturalist No. 27 1975, are given in a supplement in this present publication.

The Recorder acknowledges the help received from the following contributors:- Dr. E. Burt (EB); H. H. Carter (HHC); Mary Carter (MC); Peter Cuss (PC); Miss L. E. Cobb (LEC); Simon Corbett (SC); D. C. F. Cotton (DCFC); P. A. Davey (PAD); M. J. Dumbleton (MJD); Phillip Hooper (PH); A. Price (AP); B. T. Parsons (BTP); K. V. Pritchard (KVP); M.R.W. Sell (MRWS); P. Silver (PS); K. I. Thomas (KIT); and Robert Wood (RW).

We also acknowledge our indebtedness to the Director of Reading Museum & Art Gallery for allowing inclusion of the relevant records of specimens which are housed in the Museum's collections.

Recorder's Report for Vertebrates 1974-75

by H. H. Carter

PISCES

Esox lucius L. Pike.

Tinca tinca (L.) Tench.

Abramis brama (L.) Bream. All taken in Burghfield Gravel Pit during the year. (CW)

Leuciscus leuciscus (L.) Dace.

Alburnus alburnus (L.) Bleak. Both from Thames at Goring.

Salmo trutta L. Trout. Plentiful in the Pang at Moor Copse, Tidmarsh.

Gasterosteus aculeatus L. Three-spined Stickleback. Abundant in the Pang at Moor Copse in sheltered situations, though too small to maintain itself against the main current.

AMPHIBIA and REPTILIA

Triturus helveticus (Razoumowsky) Palmated Newt. Six at Wokefield Common Fish Pond, 22.4.75.

Rana temporaria L. Frog. Spawn found in a garden pond in Reading, 14.3.75. (DCFC) Many juveniles emerging from a pond at Bracknell, 9.7.75. (MJD)

Bufo bufo (L.) Toad. In evidence at an unusually early date. One dead on road, Sonning Common, 15.12.74. One dead on Barkham Road, Earley, 16.1.75. (BTP) One dead on Peppard Road, Chalkhouse Green, 30.1.75. One dead on Peppard Road near Emmer Green duckpond, 5.2.75. Single animals in or near Sonning Common on four dates from 8.3.75 to 18.9.75. One dead on road in Bracknell, 13.4.75 and three more, 17.4.75. (MJD) This observer also found eight together under a stone in his garden at Bracknell last year, 21.4.74. Several pairs were in amplexus at Pullen's Pond, Wokefield Common, 16.4.75. Abundant spawn was found there 22.4.75, and on the same date two dead toads were seen and a live male heard at the Fish Pond. It was not possible to check the Binfield Heath site as this has been fenced off and warning notices erected. Casualties among the breeding adults were very heavy in 1974, so this protection may prove beneficial.

Anguis fragilis L. Slow Worm. Three found at Mortimer, 22.1.75. Present at Bix in the summer of 1974. (NP)

Lacerta vivipara Jacquin Common Lizard. One at the old gravel pit near Three Firs, Wokefield Common, 22.4.75. Present at Bix in the summer of 1974. (NP)

Natrix natrix (L.) Grass Snake. Two at Wargrave Marsh, 3.5.75, one at Moor Copse, 4.5.75. (ERB) Two at Moor Copse, 22.8.75. One at Bearwood, 31.5.75; one, 900mm. long, killed by a gardener at Sindlesham, 2.8.75. (DCFC) Present at Bix Bottom. (N.P.).

Vipera berus (L.) Adder. Female, 500mm. long, basking at Arborfield, 18.3.75. (DCFC) Two near Five Oaken, Wokefield Common, 22.4.75. One about 600mm. long photographed at Bramshill, August 1975, by Mr. Yaxley.

MAMMALIA

INSECTIVORA

Talpa europaea L. Mole. Records rather few. One seen above ground and very active in wood near Frogmoor Farm, Stanford Dingley, at mid-day, 29.6.75. (KVP) One dead in garden at Bracknell, 30.6.75. (MJD) (Skulls in pellets from Swallowfield (KP) - see note at end).

Sorex araneus L. Common Shrew. One found dead at Bracknell last year, 22.4.74. (MJD) One at Wyfold and at Withy Copse, 1.12.74, one at Peppard, 19.12.74. One at Satwell, Rotherfield Greys, 12.4.75. One, Greys Lane, 19.4.75. Two, Unicorn Lane, Peppard Common, 23.4.75. One, Bishopsland Farm, 28.4.75, and again, 1.5.75, and other localities in and near Sonning Common on six dates up to 30.6.75. One at Lowfield Farm, Henley Road, 27.5.75. (AW) (Skulls in pellets from Swallowfield (KP) - see note at end.)

S. minutus L. Pygmy Shrew. One found dead at Crowthorne last year, 11.7.74. (MJD) (Skulls in pellets from Swallowfield (KP) - see note at end.)

Neomys fodiens Pallas Water Shrew. Two found dead by River Loddon at Swallowfield. (KP)

Erinaceus europaeus L. Hedgehog. Again a year of abundance; animals late going into hibernation. Seen in Sonning Common area on eleven dates from 19.10.74 to 21.12.74, and after hibernation on seventeen dates from 27.4.75 to 17.9.75. One crossing road at Bradfield, 29.8.75. (KVP)

CHIROPTERA

Nyctalus noctula (Schreber) Noctule. Seen at Whiteknights on many dates in 1974, and twenty counted at the roost there on 26.6.75. (DCFC)

Myotis daubentoni (Kuhl) Daubenton's Bat. Taken in a mist-net beside Millbarn Pond, Wokefield, last summer, 13.6.74. (DCFC) A welcome record.

Pipistrellus pipistrellus (Schreber) Pipistrelle. One - three bats together at localities in the Sonning Common area on nine dates from 23.4.75 to 25.8.75. Many seen during the year at Bracknell. (MJD) Seen last year at Wokefield, 13.6.74 and Virginia Water, 1.12.74, this year at Whiteknights, 11.4.75. (DCFC)

Plecotus auritus (L.) Long-eared Bat. One found dead at Broomfield Road, Tilehurst, 23.5.75. (Helen Gautier)

LAGOMORPHA

Lepus capensis Pallas Hare. Twenty-three records from Sonning Common area, 31.10.74 to 11.9.75, mostly single animals, maximum four at Bishopsland Farm, 14.4.75. One at Bearwood, 31.5.75 and one at Manor Farm, 18.7.75. (DCFC) Further evidence of the scarcity of Hares in a good Rabbit year.

Oryctolagus cuniculus (L.) Rabbit. One hundred and seventy-five sightings north and west of Reading throughout the year, maximum



twenty-seven at Bishopsland Farm, 22.4.75. Large numbers of juveniles in March and April, animals of all ages scarce from mid-July onwards. One case of myxomatosis observed. DCFC, observing mainly to the south and east of Reading, saw hundreds during the year. Present at Hamstead Park, October 1975. (HJMB)

#### RODENTIA

Rattus norvegicus Berkenhout Brown Rat. Four seen dead on road from Sonning Common to Emmer Green, 3.5.75, 16.6.75 (MJC), 17.6.75 and 12.10.75, one on Henley Road, Caversham, 11.10.75; no evidence of unusual abundance in Oxfordshire. DCFC however found rats in large numbers south and east of Reading, amounting almost to plague proportions on some farms. (Skulls in pellets from Swallowfield - see note at end.)

Apodemus flavicollis (Melchior) Yellow-necked Mouse. KVP trapped this species at Bradfield, where it frequently enters his house at Buscot Copse in the absence of House Mice. He observes that no A. sylvaticus have entered; this habit preference has been noted by other observers. Male trapped at the same locality by Mrs. Charley in mid-December 1974.

Apodemus spp. At Bradfield on 30.12.74 KVP found three field mice together under the metal floor of a bird-watching hide and three more in two nest boxes; a third nest box contained no mouse or nest material but was filled to the brim with acorns. Use of old birds' nests is recorded for sylvaticus but not for flavicollis.

Apodemus sylvaticus (Linnaeus) Wood Mouse. One found dead at Crosscroft Wood, Peppard, 23.3.75; one dead at Peppard post office, an adult male, 5.4.75. Present at Hamstead Park in October 1975, (HJMB), and in the same month EMT working with Longworth traps at Pangbourne caught this species regularly on every trap-night. (Skulls in pellets at Swallowfield - see note at end.)

Mus musculus Linnaeus House Mouse. One dead in Reading Market Place, 4.12.74. Numerous on Westleigh Drive estate, Sonning Common (built late 1960's) where attracted by pets' food.

Micromys minutus (Pallas) Harvest Mouse. Two nests in October 1973 under blackthorn hedge, Cutbush Lane, near Earley Sewage Farm. (B. T. Parsons)

Microtus agrestis (L.) Short-tailed Vole. Present at Burghfield, 1.2.75. (DCFC) One dead at Sonning Common, 25.4.75. One dead near Reading Station, 3.10.75. (Skulls in pellets from Swallowfield - see note at end.)

Clethrionomys glareolus Schreber Bank Vole. One at Arborfield, 22.4.75. (DCFC) One at Moor Copse, Tidmarsh, 15.7.75. (Skulls in pellets from Swallowfield - see note at end.)

Arvicola amphibius (L.) Water Vole. Present at Bradfield, 6.3.75 and 13.4.75. (DCFC) Two - three at Moor Copse, 22.8.75 and throughout the summer. (Skulls in pellets from Swallowfield - see note at end.)

Muscardinus avellanarius (L.) Dormouse. Present at Sawyers Wood, Tidmarsh. (Major Short)

Sciurus carolinensis Gmelin. Grey Squirrel. Hundreds present to the south and east of Reading. (DCFC) Eighty-two sightings in the Sonning Common area, in every month of the year. A male found dead at Hermitage, 26.10.74. (J. Gale) Three at Sawyers Wood, Tidmarsh, 20.12.74. Present at Hamstead Park, October 1975. (HJMB) Skull found at Swallowfield. (KP)

Meles meles (L.) Badger. Dead juvenile last year at Burchetts Green, Maidenhead, 7.2.74. (Mrs. Kemp) Footprint in New Copse, Gallowstree Common, 2.3.75. One at Bearwood, 24.4.75. (DCFC) Adult seen crossing road in late evening at Buscot Hill, Bradfield, 27.4.75. (KVP) One dead on Warfield Road, Bracknell, 30.4.75. (MJD) One found dead near sett at Tidmarsh, 6.8.75. (EMT) One found dead at Cold Ash, 6.9.75.

Mustela erminea L. Stoat. The only record this year comes from KVP who saw one hunting along the bank of the River Pang at Bradfield, 22.4.75.

M. nivalis L. Weasel. One seen by MJD in his garden at Bracknell, 18.2.75. Several seen during the year, including one at Theale, 5.7.75 and one at Whiteknights, 11.5.75, which emerged from a hole five metres up the trunk of a mature oak tree around which twenty - twenty-five excited starlings were gathered. The birds at once attacked the weasel which spiralled up the trunk to escape. (DCFC) One crossing Blounts Court Road, Sonning Common, 2.10.75.

M. vison Schreber Mink. One piebald animal on the bank of the Kennet near Theale, 1.11.74. Three seen along a mile (1.6 Km.) of the Kennet below Theale in mid-September 1975. (A. Munday per HJMB)

Lutra lutra (L.) Otter. One at Stanton Harcourt, 14.9.75 (HJMB)

Vulpes vulpes (L.) Fox. One in a Reading garden, 26.1.75, and six or more other sightings during the year. (DCFC) Bred at Sawyers Wood, Tidmarsh. (Major Short) One dead in Luckmore Drive, Earley, 11.1.75. Vixen calling at midnight, Buscot Copse, Bradfield, 21.6.75 and one seen near earth after dark, Fisher's Copse, Bradfield, 1.7.75. (KVP) One - three heard at night in the Sonning Common area on sixteen dates from 9.11.74 to 14.9.75 in every month except October. One seen carrying a dead cat in Mill Lane, Reading at 5 a.m. 6.10.75. (Mr. Knott)

Cervus dama L. Fallow Deer. Two parties of three and eight deer on Inkpen downs, 16.3.75 and slots seen near Silchester on the Englefield estate, 6.4.75. (KVP) A white fallow deer at Bramshill, 25.5.75 and two males at Silchester, 18.10.75. (DCFC) Slots, probably of this species, seen at Hamstead Park, October, 1975. (HJMB) Animals seen or heard, or fresh slots found in the Crowsley area on six dates from 1.3.75 to 25.8.75. (HHC and MJC)

Muntiacus reevesi Ogilby Muntjac. Slots found in Flowercroft Wood, Peppard, 2.3.75 and New Copse, Gallowstree Common, 2.3.65. KVP disturbed one from a bramble patch near Broomhill Copse, Bradfield at mid-afternoon, 17.8.75, but got only a fleeting glimpse of it. Reported from Bix Bottom.

Capreolus capreolus (L.) Roe Deer. Records continue to come in from the southern part of our area. Slots were found at

Ufton Court, 27.4.75. KVP saw one there, 8.5.75 and found slots with those of C. dama as reported above, 6.4.75. A female seen at Bearwood, 26.5.75. (BTP) As predicted last year, the areas occupied by the last two species now overlap.

Kathie Pickhaver, collecting pellets of raptors around Swallowfield, was able to accumulate a considerable quantity of small mammal and bird bones for identification. The predator responsible was unfortunately not known in most instances, but the majority of pellets were probably those of Strix aluco L. (Tawny Owl) and some were known to be from Tyto alba (Scopoli) (Barn Owl). The mammals were as follows:-

<u>Talpa europaea</u> L.	Mole	10 items
<u>Sorex araneus</u> L.	Common Shrew	103 "
<u>S. minutus</u> L.	Pygmy Shrew	7 "
<u>Neomys fodiens</u> Pallas	Water Shrew	2 " (not from pellets - found dead)
<u>Rattus norvegicus</u> Berkenhout	Brown Rat	68 " + 1 as above
<u>Apodemus sylvaticus</u> (L.)	Wood Mouse	92 "
<u>Microtus agrestis</u> (L.)	Short-tailed Vole	83 "
<u>Clethrionomys glareolus</u> Schreber	Bank Vole	4 "
<u>Arvicola amphibius</u> (L.)	Water Vole	23 "
<u>Sciurus carolinensis</u> Gmelin	Grey Squirrel	1 " (not from pellets - found dead)

The absence of Apodemus flavicollis (Melchior) (Yellow-necked Mouse) and Mus musculus L. (House Mouse) is noteworthy, as is the paucity of Sorex minutus and Clethrionomys compared with their near relatives.

When the numbers of items above are multiplied by the average body weight of the species represented, the results give a rough and ready index of their comparative importance as food for the predator. Shown as percentages of the total, they are:-

Talpa	2.7%
Sorex spp.	3.0%
Rattus	65.5%
Apodemus	5.1%
Microtus	6.4%
Clethrionomys	0.5%
Arvicola	16.8%
	100.0

(Virtually all the remains were those of adult animals, though a proportion of young ones may have been taken but not recovered because of their lesser durability. Bird remains were less than 1% of the total.)

In conclusion, I would like to thank the following contributors for records received:- BRB Brian Baker, HJMB Humphrey Bowen, MJC Mary Carter, DCFC Donald Cotton, MJD Michael Dumbleton, BTP Basil Parsons, NP Nigel Philips, KP Kathie Pickhaver, KVP Keith Pritchard, EMT Mary Trembath, CW Charlotte Wheeler AW Anne Whittle.

Weather Records in 1975

by A. E. Moon

The data refer to Reading University Meteorological Station. Since this is a new site, as mentioned in the summary for 1971, no comparison with an average is yet possible. All temperature readings are in Celsius degrees and rainfall measurements in millimetres which is now standard practice. A "rain day" is a day on which rainfall equals or exceeds 0.2 mm. For the designation of frost and ground frost days see Weather Records in 1961, but using all values below 0.0° Celsius.

STATION - READING UNIVERSITY. HEIGHT ABOVE MEAN SEA LEVEL - 215 ft.

		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	YEAR
MEAN DAILY TEMPERATURES	MAX.	9.8	8.5	7.7	12.6	14.1	21.1	23.2	24.5	18.5	13.7	9.6	7.3	14.2
	MIN.	4.3	1.4	2.5	4.6	6.3	9.2	12.6	13.2	9.3	6.3	2.8	1.6	6.2
	MEAN	7.1	4.9	5.1	8.6	10.2	15.1	17.9	18.9	13.9	10.0	6.2	4.5	10.2
	RANGE	5.5	7.1	5.2	8.0	7.8	11.9	10.6	11.3	9.2	7.4	6.8	5.7	8.0
	GRASS MIN.	1.1	-2.1	-0.7	1.1	2.8	3.2	7.9	8.2	4.0	1.3	-1.4	-1.8	2.0
EXTREME TEMPERATURES	E. MAX.	13.5	12.3	12.9	20.4	21.2	26.5	29.9	33.0	23.8	17.3	14.0	11.9	33.0
	DATE	15	28	1	24	20	12,26	30	4	7	30	15	1	Aug. 4
	E. MIN.	-1.3	-2.2	-2.1	-2.0	-0.1	3.0	8.0	7.1	3.5	0.0	-2.3	-6.2	-6.2
	DATE	19	22	29	5	31	1	3	23	16	14	14	16	Dec. 16
	E. GRASS MIN.	-5.6	-8.2	-9.3	-7.3	-7.3	-4.6	0.2	-0.1	-2.9	-5.7	-7.9	-9.9	-9.9
DAYS WITH FROST	DATE	19, 26	22	17	5	31	1, 4	3	23	16	14	21	16	Dec. 16
	" " GROUND FROST	2	6	6	6	1	0	0	0	0	0	8	10	39
	" " FROST	16	21	16	13	10	7	0	1	6	14	21	21	146
SUNSHINE HOURS	SUN.	44.6	73.8	71.6	145.5	154.0	305.6	247.2	225.6	148.4	121.8	81.3	39.8	1659.2
	% POSS.	17	27	20	35	32	62	50	50	39	37	30	16	37
	DAILY MEAN	1.44	2.63	2.31	4.85	4.97	10.19	7.97	7.28	4.95	3.93	2.71	1.28	4.55
PRECIPITATION m.m.	AMOUNT	96.8	28.5	68.3	42.2	48.1	7.9	63.6	25.7	98.6	20.9	54.5	26.4	581.5
	RAIN DAYS	23	9	20	18	9	5	9	12	18	7	15	7	152
	MAX. RAIN IN 1 DAY	14.3	7.4	15.3	12.3	21.3	3.7	27.2	6.1	43.0	4.6	18.4	17.6	43.0
	DATE	18	14	8	18	16	2	31	8	13	17	28	1	Sept. 13
LONGEST RUN OF CONSECUTIVE RAIN DAYS	20	9	8	6	3	2	2	4	7	2	6	2	-	
LONGEST RUN OF CONSECUTIVE DRY DAYS	4	10	4	7	7	13	7	6	4	13	8	10	-	
SNOW OR SLEET DAYS	2	0	7	7	0	0	0	0	0	0	0	0	16	
DAYS SNOW LYING	0	0	2	0	0	0	0	0	0	0	0	0	2	
VISIBILITY	FOG AT 0900 G.M.T.	0	11	1	0	0	0	0	0	0	3	4	3	22
THUNDERSTORM ACTIVITY	DAYS OF THUNDER	0	0	1	2	0	2	3	2	1	1	0	0	12
	DAYS OF HAIL	0	0	0	0	0	0	0	0	0	1	0	0	1

Monthly Weather Notes, 1975

January

Wettest since 1948 and the mildest since 1921. 2.5mm. of rain fell in nine minutes at 10h. on 20th and 1.2mm. in three minutes at 11h.12m. on 27th. First ice of the winter noted on evaporation tanks on 19th.

February

Fogs were more frequent than normal and at 0900h. the number was the highest since 1961 (11). The 15th was the coldest day of the winter to the end of the present month.

March

Coldest since 1970 and wettest since 1964. The sunshine total was the lowest since 1969; the total sunshine in the first fifteen days of the month was only 11.7 hours.

April

The cold weather of the first ten days produced the greatest number of days with snow in April since 1970. The number of days with air frosts was the same as that year, all occurring in the first ten days. The night of the 25th/26th was, however, the warmest in April since 14th/15th 1945. Day temperature reached 60°F (15.56°C) for the first time this year on 14th.

May

Coldest since 1941. The 17th was the coldest May day since 18th 1968. The sunshine total was the lowest since 1969.

June

Average temperature was only slightly lower than in 1973, but rainfall was the lowest since 1962, when the total was only 3mm. It was however, the sunniest June since sunshine records began in Reading in 1939, the previous highest being 282.4 hours in 1940, and is the first time a total of 300 hours has been reached in any month, the previous highest being 298.8 hours in July 1959. In the eight days 6th-13th, 113.2 hours of sunshine occurred.

July

Sunniest since 1971. Of four heavy falls of rain in short periods two are worthy of mention - 6.1mm. in six minutes at 03h.48m.(G.M.T.) on 8th and 18.8mm. in ten minutes 17h.50m.-18h.00m. on 31st, both during thunderstorms.

August

Warmest since 1955; it was the first time 32.2°C (90°F) has been exceeded in this month since 16th 1947. The night of the 4th/5th was the warmest in August since 17th/18th 1947. It was the driest August since 1964 and sunniest since 1959.

September

The wettest month so far this year; the 13th was the wettest September day since 15th 1968.

October

Driest since 1970 and sunniest since 1971.

November

Although a wetter month, temperature and sunshine values were similar to 1973. The first ice recorded on evaporation tank on 22nd compared with the very late date of 19th January 1975 last winter.

December

Coldest since 1970 and driest since 1963. The minimum temperature of -6.2°C on 16th was the lowest December figure since 9th 1967.

Atmospheric Pollution

1975

Measurements of smoke concentration and sulphur dioxide ( $\text{SO}_2$ ) are summarised in the following table. They constitute the results of daily measurements of smoke and  $\text{SO}_2$  pollution by air filter and volumetric method respectively from apparatus installed in the Geography Department, Reading University, at Whiteknights.

Month	Smoke Concentration Microgrammes per cu.m.			Sulphur Dioxide ( $\text{SO}_2$ ) Concentration Microgrammes per cu.m.		
	Mean	Highest	Lowest	Mean	Highest	Lowest
January	10	24 3rd, 18th	2 5th, 22nd	31	60 11th	13 13th
February	54	126 28th	13 12th, 16th	97	367 26th	27 18th
March	9	22 10th	0 2nd	47	82 14th	20 12th, 13th
April	9	22 25th	2 7th, 20th, 29th, 30th	47	62 5th, 6th, 22nd	27 23rd
May	9	27 22nd	2 1st, 26th	40	85 19th	21 5th, 6th, 15th, 16th
June	4	16 6th	0 15th, 27th, 28th, 29th	46	108 7th	15 29th
July	3	13 29th, 31st	0	36	89 2nd	15 13th
August	9	37 28th	0 15th, 16th, 19th	49	149 28th	13 16th
September	6	29 1st	0 13th, 27th	32	77 1st	13 11th, 24th, 28th
October	19	59 29th	1 2nd	58	103 20th	20 2nd
November	32	151 14th	3 15th	92	178 13th	47 1st, 15th
December	33	128 15th	1 1st, 27th	83	208 15th	27 30th
Year	16	151 14th Nov.	0 Various	55	367 26th Feb.	13 Vari- ous

\* 11th, 12th, 13th, 14th, 15th, 18th, 19th, 20th, 22nd, 23rd, 24th

Membership

The following changes in membership have occurred since the publication of the Reading Naturalist no. 27:-

Losses through death

Mr. A. Beesley, Mrs. O. Tofield.

Resignations and lapses

R. G. Bertera, Miss T. Davey, Mrs. Harrigan, Miss S. Highwood, Toby Johnson, Stephen Jones, Mrs. L. Minton, Mrs. K. Paterson, Mr., Mrs. and Miss J. Rose, Mr. and Mrs. Sandison, . . . . ., Miss R. Walker, Reading School, St. Joseph's Convent.

Changes of address

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