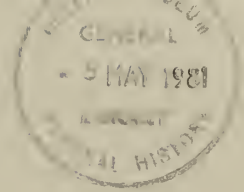


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The Reading Naturalist

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THE READING NATURALIST

No. 33 for the year 1979-80

The Journal of
The Reading and District Natural History
Society

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Reading

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BUCKINGHAM PALACE.

Every generation responds to the broad popular movements of its day. 100 years ago the members of the Reading and District Natural History Society were busy exploring, collecting and recording the natural history of their district. Today the emphasis is on the conservation of those natural riches of the countryside still left to us, for the benefit of future generations.

But in referring to broad popular movements it is easy to forget that they only represent the sum total of the work done by small dedicated groups working within their own areas.

I hope that the members of the Society will continue to make their distinctive contribution to the study and protection of nature through their interest in and concern for all matters in the natural history of 'Reading and District'.

From Captain Sir Thomas Barlow, D.S.C., R.N. (Retd.),
President of Berks., Bucks. & Oxfordshire
Naturalists' Trust

The conservation of wildlife in Britain owes much to the natural history societies which have grown up throughout the country during the last century and more. Their members laid the foundations of our knowledge of all that grows and flowers and nests in our countryside, a knowledge unequalled in its detail anywhere in the world, but still, as our experience sadly tells us every day, hardly enough to keep pace with the inroads of development, the buildings and the roads, the changing face of agriculture and modern forestry. The watchfulness of natural history societies is a key factor in our fight to save what is left of our countryside. Nowhere is change more sweeping than in this part of Berkshire and no body can be more aware of it than Reading and District Natural History Society.

In your hundred years of life you have grown from being an observer of nature in a changeless land to an invaluable contributor to the landscape's preservation. By their careful records, and simply by their excursions and visits, your members add considerably to the likelihood that future generations will still find haunts around Reading where there will be nature to enjoy.

For enjoyment is the essence of it: there can be no doubt that Reading and District Natural History Society enjoys its work and takes much pleasure in all its activities. A hundred years of useful work is no mean achievement in any walk of life, and the Society can justly feel proud of itself. BBONT, some eighty years younger, is well aware what it owes to the enthusiasm of longer established societies such as yours. We remember in particular that your president played no small part in founding the Trust, and seeing it through the early days. The Pasque flower site at Aston Upthorpe was one of the first Reserves established by BBONT - made possible with the pioneer assistance of Reading NHS members. More recently Moor Copse has become an outstanding example of a Nature Reserve for all sorts and conditions of people, young and old. We congratulate the centenarian on its achievements and its youthful vigour. We are grateful for the part you play in keeping the countryside alive, and we look forward to the next hundred years in confidence of continued co-operation and friendship.

Thomas Barlow

From the Parliamentary Under Secretary of State,
Department of the Environment

I am replying, as the Minister directly responsible for Nature Conservation policy, to your letter addressed to Michael Heseltine.

I am always impressed by the expertise and commitment of the large voluntary sector involved in nature conservation and I would like to wish the Reading and District Natural History Society every success in the future.

Hector Monro

From the President of Reading and District
Natural History Society

If I were asked to provide a message to our Society in recognition of its Centenary I would steer well away from the fields of conservation and recording. Not so because these subjects are unimportant, for they are indeed of supreme importance, but simply for the reason that you would already have read splendid tributes from the highest sources which embody our Society's achievements in these fields.

I would therefore prefer to put to you the question "Why has Reading and District Natural History Society survived without a break over this long period?"

Could it not be that we, in common with our predecessors, delight in comparing notes with our fellow naturalists and that these in-house discussions continue irrespective of rises or falls in membership? Haven't we all enjoyed participating in members' night and do not our interests flourish upon discussion? Add to this our time-honoured rituals - formal elections, committee work, minutes, even signing the attendance book in total darkness and you have a Society with real atmosphere.

As for fieldwork - who but naturalists could enthuse under almost any weather conditions - who but an entomologist would regard a muggy night with light drizzle as 'ideal conditions'?

My message for our future days would therefore be - "may our time-honoured ways long continue, may new members ever be welcomed, may knowledge be freely shared, may enthusiasm be imparted to all projects and may the friendly atmosphere which has maintained the Society this long be ever present".

B. R. B.



READING AND DISTRICT NATURAL HISTORY SOCIETY

Excursion to Pamber Forest, August 1880 prior to the formal foundation of the Society on 6th April, 1881

From left; Holland: Purnell: Wallis: Dr. Stevens: Hewett: Ward: Hawkins: Leslie: Wells: Pollard.

Walter Pollard: Phillbanks: A. N. Other



READING AND DISTRICT NATURAL HISTORY SOCIETY

Excursion to Pamber Forest, 20th July 1955

Standing: C. Runge: Miss S. Y. Townend: B. R. Baker: Miss J. Watson.

Seated: Mrs. Hodgson: Mrs. A. M. Simmonds: Miss L. E. Cobb: Miss C. Stone: Miss M. M. Swadling: Miss R. Brown.

Officers of the Reading and District
Natural History Society

The Society possesses a copy of Minutes of its meetings for 1881-91 and a full set of Minutes from November 1913 onwards. These Minutes, apart from recent ones still in use, are deposited in Reading University Library for safe keeping but remain the property of the Society and can be withdrawn for consultation at any time.

Below are given complete lists of officers of the Society for the years covered by the Minutes, supplemented by fragmentary information culled from the local press for the intervening twenty-two years.

Presidents

1881-82	Dr. J. Stevens	1941-44	W. A. Smallcombe
1882-92	A. Dowsett	1944-47	Prof. H. L. Hawkins
1900-05	Dr. F. W. Stansfield	1947-48	C. Runge
1905-06	Rev. Canon Fowler	1948-51	Mrs. A. M. Simmonds
1907-17	W. E. Butler	1951-53	Dr. H. E. Quick
1917-19	Dr. F. W. Stansfield	1953-57	W. C. Fishlock
1919-21	Rev. S. O. Ridley	1957-60	Prof. H. L. Hawkins
1921-23	Major J. de C. Laffan	1960-62	J. F. Newman
1923-25	H. F. D. Page	1962-64	Dr. E. V. Watson
1925-26	Miss M. E. Edmonds	1964-66	A. Price
1926-28	Major J. de C. Laffan	1966-68	B. R. Baker
1928-30	C. Runge	1968-70	C. J. Leeke
1930-32	H. F. D. Page	1970-72	Miss L. E. Cobb
1932-34	T. W. Marshall	1972-74	H. H. Carter
1934-36	Thos. Vear	1974-76	Dr. H. J. M. Bowen
1936-38	S. A. Reynolds	1976-78	Miss S. Y. Townend
1938-41	H. Hodge	1978-80	R. M. Gambles
		1980-	B. R. Baker

Hon. Secretaries

1881-82	H. M. Wallis
1882-92	F. W. Leslie
1900-	F. W. Leslie
1904-05	P. H. Turner
1905-	P. H. Turner &) F. W. Leslie)
1909	F. W. Leslie
1911-19	E. J. Likeman
1919-31	H. A. King &) H. W. Lamb)
1931-32	C. Runge &) R. E. G. Smith)
1932-35	W. C. Fishlock &) C. Runge)
1935-53	W. C. Fishlock
1953-58	Mrs. A. Hasker (later Mrs. Fishlock)
1958-64	Mrs. A. Fishlock

Hon. General Secretaries

1964-66	Mrs. B. M. Newman
1966-69	Mrs. V. A. Phillips
1969-71	Mrs. K. R. Rhodes
1971-76	Dr. Joyce Toothill
1976-	Mrs. S. J. Whitfield

Hon. Field Excursion
Secretaries

1954-65	Miss J. M. Watson
1965-72	M. V. Fletcher
1972-	M. R. W. Sell

Hon. Membership Secretaries

1964-69 Mrs. A. M. Simmonds
1969-73 Mrs. I. Fletcher
1973- Mrs. B. Kay

Hon. Winter Programme Secretaries

1965-74 Miss S. Y. Townend
1974-76 J. L. Ward
1976- Mrs. J. LeMare

Hon. Treasurers

1881-85 H. M. Wallis
1885-91 F. W. Leslie
-05 H. Vaughan
1905- J. Clark
1909- W. G. Newbery
1911-18 H. W. Lamb
1918-29 F. W. Cocks
1929-43 J. H. Markham
1943-47 Miss L. E. Cobb
1947-48 Mrs. A. M. Simmonds
1948-50 B. R. Baker
1950-70 Miss L. E. Cobb
1970- Miss J. M. V. Housden

Hon. Editors

1949-50 P. A. Betts,
Miss B. M. Jones &)
L. H. Williams)
1950-53 L. H. Williams
1953-65 Miss E. M. Nelmes
1965-69 D. Leatherdale
1969-78 Miss E. M. Nelmes
1978- Miss L. E. Cobb

Editorial

This number of the Reading Naturalist appears in the Society's centenary year. Readers will find in it the usual regular features. For the rest, your Committee felt it appropriate to mark the occasion by making the issue largely backward-looking, putting on record as much as space permits of the Society's long history for the interest of both present and future members and friends. However, we do not dwell in the past but conclude the survey with a clear indication of the direction in which we feel we should travel in the second hundred years on which we now embark.

The Society's History

L. E. Cobb

Reading and District Natural History Society was founded on 6th April 1881 at a meeting at the Lodge Hotel at which it was resolved that "This meeting do form itself into a Natural History Society and Field Club for Reading and District". The object of the Society was the practical study of the natural history of Reading and District in all its branches. By 1905, various sections were in operation and are described as being difficult to organise but the only means of doing real work. The Botanical Section was the most successful. There were also at that time Microscopical and Astronomical Sections and a project to form a Geological Section. I do not know what became of these sections.

From the first, the Society's programme included both indoor evening meetings and summer field excursions. The former generally featured the exhibition of collections, and contributors included many distinguished experts in their respective fields. A meeting for conversation and the exhibition of specimens was held in 1882, although the present series of Members' Evenings dates only from 1953. In 1890, there was a conversazione and exhibition at the Town Hall. The first meetings were held in a house near St. Mary's church through the generosity of Mr. Robert Hewett. Subsequent meeting-places were the Y.M.C.A. Hall, the Friends' Meeting House, the Abbey Gateway and the University, before the move to the China Room at the Museum, then soon, as attendance increased, to the Art Gallery.

Field excursions to the neighbouring countryside were at first, and until 1940, generally by train. By 1950, the train had been abandoned for the bus, and this eventually gave way to the greater reliability and flexibility of members' cars. Until the days of rationing in the 1940's, tea was booked at a pub. The enforced change to carrying one's picnic, though at first much disliked by some, greatly facilitated the serious pursuit of natural-history interests as it increased the range of places that could be visited and the time available. In 1936, keen members wishing to increase the scope of their activities still further formed a discussion group, as described below by Mr. Baker, and ranged around on bicycles pursuing many and varied interests under inspiring leadership. The group provided Dr. Watson with guineapigs to try out his tentative field key for identifying mosses, and its members collected and pored over toadstools with Dr. Hora as he started to develop an early interest in the subject on which he was to become an international authority. Fungi have always been a particular interest of the Society. There is an account of a foray as early as 1888, and the Kingwood Common series based on the home of the distinguished surgeon, politician, botanist and mycologist Dr. Somerville Hastings and his family spanned well over thirty years. Winter walks were added to the programme in 1959.

The Society remained active, albeit with a reduced programme, through both World Wars. In the 1940's, members co-operated in the collection of Atropa belladonna, Hycyamus niger and Digitalis for drugs. There was a drying station for Atropa on Streatley Hill.

The exhibition of wild flowers in the Museum began in 1916 and at that time was apparently largely the work of members.

From the first, members were urged to keep note-books, and some of the records they made achieved permanence in the Society's publications, as described by Mrs. Sandels, and in their contributions to national and county Floras and now to the County Biological Record Centre at Reading Museum as is explained by Mr. Carter.

When the Nature Reserves Investigation Committee (forerunner of the Society for the Promotion of Nature Reserves) set up a Regional Committee for Berkshire in the 1940's, the Society provided most of the members for this, including the Chairman, Prof. H. L. Hawkins, and the Hon. Secretary, Miss K. I. Butler.

In 1961, a series of junior meetings mainly for children of primary-school age was begun and this continued for some ten years. In 1960, Mrs. Fishlock founded the Fishlock Prize to encourage interest in natural history among children of this age group, in memory of her late husband Walter C. Fishlock, for twenty-one years Hon. Secretary and for four years President of the Society. Other special activities are described by Miss Townend, and finally and most importantly the Society's present orientation is set before us by Mr. Carter.

Mr. Smallcombe's Reminiscences

Mr. W. A. Smallcombe, formerly Director of Reading Museum and Art Gallery, who came to the town in 1926 and was an enthusiastic supporter of the Natural History Society from the outset and at one time its President spoke to Miss Townend of some of his recollections of fellow members.

"There was Mr. Fishlock, a very active member and sometime Secretary. He was an outstanding person in the affairs of the Society and worked in close liaison with the staff at the Museum. Almost every day he used to come in with flowers or insects or some record or other. Then there was Major Laffan, who left £50 to found a prize for

youngsters in Reading who would investigate some subject of Natural History importance and write about it; and Mr. Runge, a fine entomologist and naturalist and a great supporter of the Society. Professor H. L. Hawkins and his father J. L. Hawkins gave specialised information and help in geology and ornithology, respectively. We must not forget the Rev. S. O. Ridley, who was the Honorary Curator of Natural History at the Museum and his brother Henry Ridley, a rather famous gentleman from Kew, who were both very helpful to the Society, and Mr. Thomas Vear an expert on timber; and of course there was Vera Smith, now Mrs. Paul, who found the extremely rare orchid, Epipogium.

The Society often went to Peppard where members were entertained by Doctor Somerville Hastings. One summer's day, at a party there, our people were assembled near a tree and we heard a cuckoo in the distance. Some members said they had never seen a live cuckoo, so I called this bird and it came and settled in the tree under which we were sitting, and cuckooed while everyone listened.

These are just a few notes on the pleasure given me over the years by belonging to the Society, and I am sorry I have not been able to take a more active part in recent years."

A note from a former member who left Reading more than twenty years ago but still likes to keep in touch.

I joined the Society in 1944 at a time when meetings were held in the Abbey Gateway. The enthusiasm, knowledge and local experience of established members like Mr. Conrad Runge were an enormous source of stimulation to novices like myself. It was wartime so the membership was small and nearly all our field activities were restricted to places that were accessible by bicycle or bus.

I very much enjoyed the outings we used to have on our bicycles on Sundays with the Discussion Group when we learnt so much. Always travelling by car you miss a lot. I never see moths resting on tree trunks by the side of the road these days but in the '40's I collected many specimens that way. I suppose they are still there. I well remember a day's bird-watching with Dr. Watson on a frozen lake at Englefield Park one cold winter's day many years ago and how easily he could recognise from a distance different kinds of wildfowl that all seemed very similar to me even with binoculars. I suppose moths look that way to some people.

In spite of the enthusiastic activity of a few, the Society went through some bad times numerically and we even feared for its survival, so it seems wonderful that it should be celebrating its centenary in such a flourishing state.

When it was suggested in 1948 that a modest form of journal might be produced, an editorial sub-committee of three was formed of which I was one, and in 1949 the first issue of the Reading Naturalist was produced. I relinquished the office of Hon. Editor in 1953 when Miss Enid Nelmes took over. The continued production of the journal should be a source of satisfaction to all those who had faith in the project and the enthusiasm to overcome many production difficulties in the past thirty-two years. Since I moved away from the Reading area, I have largely relied on the Reading Naturalist to maintain contact with the Society which gave me so much pleasure in my youth.

L. H. Williams

The Discussion Group

B. R. Baker

Recently, when re-reading Miss Cobb's Presidential Address for 1971, I came across the words "found ourselves in a room with welcoming padded chairs and well warmed by a cheerful coal fire". At the mention of that fire I was transported back to an autumn evening in 1936 when, as a twelve-year-old, I too first felt its cheerful glow, a glow that continued to sustain me on many a Thursday evening when the business of the Society proved far above my head. On one particular evening I was treading water to no avail and was indeed in imminent danger of sinking without trace for ever when a lifebelt, thrown to me by Mr. Conrad Runge, was the means of my survival. "Come along to our next meeting of the Discussion Group - I think you would enjoy it." I held on tight and in doing so was slowly but surely drawn into the friendship of a small, lively and enthusiastic group of field naturalists.

The Group had held its preliminary meeting on 30th October 1935, at Mr. Runge's home to "discuss the forming of a research group within the Reading Natural History Society". Those present were Miss P. Monk (biology mistress at Kendrick School), Miss Mounsey Wood, Miss V. Smith (whom we all know as Vera Paul), Messrs. Grove, Gwatkin and Runge (all associated with Reading Museum) and Lewis Rudland, an expert local entomologist. At their second meeting, after considering the exhibits of the evening, (various species of fungi, a pair of Stylopised bees, and

a spangle gall from oak), they came to more formal business. We read that "Mr. Runge started the Discussion Group with a view to encouraging discussion and field work among those interested in the natural sciences". "Members should be expected to do field work and read papers now and then though these cannot always be expected". "Papers should be as short rather than as long as possible". With this proviso in mind one deduces that the readers of occasional papers in those early days must have possessed remarkable powers of concise expression; how otherwise could one deal briefly with such subjects as "A Summary of the Theories of Evolution" (Miss V. Smith); "Metamorphosis in Lepidoptera (Mr. C. Runge); "Virus Diseases (Miss P. Monk); "Parental Care" (Mr. B.T. Parsons), and a final example, "The Earth" (Mr. A.D. Hallam)?.

Meetings were usually held at members' homes, particularly so at the residence of Mr. and Mrs. Runge, 11, St. Andrews Road, Caversham, but on certain occasions we were permitted to meet at Reading Museum or in the Botany or Geology Departments of the University. These were the occasions of special talks by Mr. W.A. Smallcombe or members of his staff, or Professors T.M. Harris or H.L. Hawkins or members of their departments. There were obvious practical advantages in being able to meet in such places. For example on 24th February, 1938, I recall Robert Patterson demonstrating the preparation of a study skin using a Ptarmigan purchased from a local poulterers and on 14th January, 1948, Professor Harris spoke of "Wild Life in British Columbia" and Dr. Hora provided identifications for fungi found on a Group excursion to Burghfield.

Transport for these field excursions was usually the bicycle (Professor Harris and Drs. Hora and Watson were very proficient cyclists) though when visiting such places as Goring Heath or Hardwick Hill we would usually walk from our assembly point at 11, St. Andrews Road.

In the autumn of 1938 it was agreed that some definite piece of fieldwork should be undertaken and this emerged as the study of the effects of re-afforestation on Blackwell Copse near Mapledurham. The cover of beech had been felled in the winter of 1934 - 35 and after the land had remained fallow for two years the decision had been taken to restore the Copse to its original condition. As part of the study a square metre of ground was mapped in great detail and a coloured chart was prepared by Robert Patterson, Senior Assistant at Reading Museum. In 1939 with the advent of the War there was a discussion on the future activities of the Group and although it was decided to carry on, Blackwell Copse project seems to have lapsed. The coloured chart, however, still exists at the Museum.

Meetings and excursions continued until early 1941 when Miss Monk, who had been Hon. Secretary of the Group since late 1936, left the district. At a meeting held in December, 1941 at the home of Miss K.I. Butler, Mr. Runge appears to have acted as Hon. Secretary and minuted that

"the Group should endeavour to bring up-to-date the Natural History Society's List of Flowering Plants published in 1900." The year 1942 appears to have been spent entirely in the field and it is not indicated by whom the accounts of the excursions were prepared. There is mention of a Fungus Foray led by Dr. Somerville Hastings on 2nd October, 1942, and then a gap in the records until 16th November, 1945, when Mrs. A. M. Simmonds was elected Hon. Secretary. It is evident that the revision of the Local Flora was still a high priority activity for the Group, but Dr. Hora suggested that a study of one particular site should also be undertaken. Pearman's Copse off Shinfield Road seemed a possibility until it was discovered that the Copse was the preserve of a local shoot and would therefore not fulfil the Group's requirements! Field excursions, however, continued apace and there are intriguing accounts of visits to the Pasque Flower and Monkey Orchid sites with "twelve specimens of the latter in flower on the western side of the little wood and five on the eastern side" - this account is dated 5th June, 1946. The detailed plant recording in these post-war years by Misses Butler and Cobb and Mrs. Simmonds were embodied in the yearly Recorders' Reports though these were given no permanence. However, also during this period the Group was joined by Paul Betts and Leonard Williams, both of whom played major parts in the preparations necessary for an annual publication by the Society thereby assuring permanence of field observations.

At a meeting on 17th December, 1948, the Group heard a talk from Mr. Gwatkin, a founder member back in 1935, and who had recently returned to Reading. His theme was "The Relationship which could exist between a Natural History Society and the Local Museum", a relationship which was brought to full fruition a few years later when specimens from the Group's last field study, that of Colemans Moor, were added to the Museum's collections.

The last meeting of the Group was held on 3rd January, 1952, appropriately at the Museum, when it was minuted "that no formal programme of meetings is practicable at the present time.....the Colemans Moor survey is to be continued.....specimens of sufficient interest may be deposited at Reading Museum".

For seventeen years the Group had lived up to its manifesto and by so doing had immeasurably re-vitalised its parent - our own Society.

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Special Events

S. Y. Townend

For many years the South-Eastern Union of Scientific Societies linked together numerous natural history societies in the area and once a year brought members together at a congress. In all there were four congresses held in Reading. In conjunction with the first, in 1921, our Society helped in the preparation of a small handbook containing a list of the local flora and fauna. The last was held in April 1958 and was voted one of the best ever. It was hosted by the Reading and District Natural History Society and the Zoology Department of Reading University. The local organising committee comprised Mrs. A. Hasker, Mr. B. R. Baker, Miss J. M. Watson, Miss S. Y. Townend and Mr. C. J. Leeke. Professor H. L. Hawkins, D.Sc., F.R.S., F.G.S., was installed as President during the proceedings and he gave an address entitled "All the World's a Stage". There were talks and excursions arranged to suit the four sections of Botany, Archaeology, Geology and Zoology. The first speaker was Dr. F. B. Hora who spoke on "Toadstools" and led an excursion to Pamber Forest. The next one was Dr. M. Aylwin Cotton, O.B.E., F.S.A., on "Silchester Archaeology" with the excursion visiting Silchester. The Geology address was by Dr. Errol White on "Coelacanths" and the Geology excursion, led by Professor Hawkins, was to Kingsclere. Last came Dr. C. C. Balch on "The Birds of Reading", followed by him leading an excursion to Aldermaston Gravel Pits. Another regular feature of the S.E.U.S.S. Congress was the Young Naturalists' Evening. The one at Reading had Dr. W. E. Swinton, Maxwell Knight, K. E. L. Simmons and W. A. Smallcombe as panel members. It proved so successful that it prompted the institution of the series run, in conjunction with the Museum and Art Gallery, for the following twelve years.

During its history the Society has held several exhibitions. One, in 1933, was aimed at recruiting new members. It was opened by Alderman F. A. Cox, who gave a brief account of the history and aims of the Society. The exhibits included many fine collections of Lepidoptera. Another in September 1946 was mounted in conjunction with the Reading Microscopical Society. The most recent was the very successful 75th Anniversary Exhibition held in the Art Gallery in July 1956. It illustrated some of the activities of the Society and was opened by Professor H. L. Hawkins. Included among the many botanical exhibits were collections of flowering plants, medicinal plants, grasses and cones. There were also examples of habitats, some physiological experiments, and plants linked with fossil remains. Zoology was represented by exhibits including birds' nests, skulls, feathers and pellets, entomological pinned specimens and several aquaria. A nature quiz attracted many entries and a variety of films were screened daily.

The Reading Naturalist

A. M. Sandels (formerly Simmonds)

I became a member of the Reading and District Natural History Society early in 1945 and, although comparatively a newcomer to natural history, quickly became deeply involved. Having read some regular publications produced by similar societies, I felt it was a pity that the annual records collected by the Recorders of our Society could not be perpetuated in some permanent form. By this means, all members would have the opportunity of profiting from the information in them, not just those who attended the annual Recorders' Evening at which the reports were read. The year 1948, when I had the honour of becoming the second lady-president, seemed a suitable opportunity to put forward the idea of a regular publication.

In parenthesis, it should be mentioned that a small book entitled 'A List of the Flowering Plants, Ferns, etc. of the Country round Reading', compiled by members of the Society, had been published in 1900, and there were hopes that a revision covering a wider area might be produced, but that did not materialise. Also, a rather ambitious privately financed publication entitled Quaestiones Naturales, had appeared in 1933. This was intended to be the first number of a periodical but achieved only the one issue.

My suggestion was favourably received, and a small sub-committee appointed. It was decided that to supplement extracts from the Recorders' reports, contributions on various aspects of local natural history should be sought. No. 1 duly appeared in 1949, edited by P. A. Betts, B. M. Jones and L. H. Williams. It was privately printed at Reading University and was well received. No. 2 incorporated 'A Key to four hundred common mushrooms and toadstools' by Dr. F. B. Hora. This was printed commercially and owing to its considerable length caused some financial anxiety. However, it was decided to proceed with No. 3, but the method of production was changed to that which is still in use and the format to quarto. It was on the cover of this issue that the now familiar and attractive Herb Paris motif, designed and prepared by P. A. Betts, made its first appearance. Subsequent numbers, in addition to the usual contents, which seem to give general satisfaction, have incorporated keys to local land snails (Dr. H. A. Quick) and British fresh-water leeches (K. H. Mann); lists of Berkshire Microfungi (Dr. H. Owen) and Diptera of the Reading area (H. H. Carter) have appeared as supplements. Our Reading Naturalist has not only its local circulation among members who are entitled to a copy by their annual subscription. It is also distributed to a number of libraries and organisations, including the British Library, the National Lending Library of Science and Technology, the Radcliffe Science Library at Oxford and the Natural History Museum, South Kensington.

It is a matter of personal satisfaction that not only has the Reading Naturalist attained its 'majority' (old style) but is in its fourth decade with every sign of continuing its successful career despite the minor crises that seem inevitably to occur. Tribute should be paid to the editors, past and present, and to the members of the sub-committee who ensure its production on time.

The Society in 1981

H. H. Carter

Throughout the Society's hundred years of history its activities have centred on the relationship between people and their natural environment. I think it is fair to say that in its early days it was primarily concerned with the human end of the relationship and took the natural end very much as given. Our founder members, and I suspect their successors for the best part of half a century, would surely have agreed with Hardy

"Only a man harrowing clods in a slow silent walk
With an old horse
Only thin smoke without flame from the heaps of couch
grass,
Yet this will continue the same though dynasties pass."

and if they thought at all in terms of a threat to the country and country life, it would have been in terms of the drift of population from country to town and the growth of an urban populace ignorant and heedless of nature. As late as 1945 when I myself first began seriously to keep records of birds, the system I used assumed that their distribution and behaviour, though perhaps not yet fully known, was something constant and (with some exceptions) immutable. Witherby's monumental Handbook, published in 1940, did nothing to dispel this illusion.

Many bird books of the period solemnly classified their subjects as Beneficial or Harmful to Agriculture, Destructive of Song-birds, Harmless to Game Chicks, Consumers of Noxious Insects and the like, the basis of all these categories being the unspoken assumption that a bird's right to protection or liability to be shot depended on the way in which it affected human interests.

V. E. Murray, putting together in 1910 a collection of grasses which ultimately found its way into the Reading Museum Herbarium, labelled his specimens (in red ink) "Useful in agriculture (13 species) "Partly useful in agriculture" (5 species) and "Useless in agriculture" (36 species).

Now in 1981 the Society has experienced a change of polarity. Of what one might call its educational activities, only the winter programme of lectures still survives; the

discussion group, the junior section, the young naturalists' evenings have passed away, and entries for the Laffan Prize are almost unobtainable. Their place has been taken by an ever broadening and deepening direction of effort into the fields of biological recording and more recently of conservation. For the first time in 1963 the annual reports of the Society's recorders were printed in full in its journal, the culmination of a trend over a number of years to fuller and more detailed (though necessarily more concise and less discursive) recording of observations. In place of the reports on geology and birds, hived off to other, newly formed, societies, there was added in 1964 a report on mammals, extended in following years to include other non-avian vertebrate classes.

About the same period there began to appear, one after another, reviews of the status and distribution of various animal groups in the Society's area, some of which were organised under the aegis of the Chiltern Research Committee, others the work of specialists in the groups concerned. Members have contributed information for the Atlas of the British Flora published by the Botanical Society of the British Isles in 1962 and for the new county Floras of Berkshire (brought out in 1968 by Humphrey Bowen, himself a member, with a revision in prospect) and Oxfordshire (in preparation by a team at Oxford University) and for the book on Berkshire Lepidoptera now being written by our President. In 1978, Reading Museum became officially a County Biological Record Centre, staffed by members of the Society. The Museum's files and card indices now contain a vast mass of information, arranged both by sites and species and continually growing. A comparison of the amount relating to the Society's area with that for the rest of the county shows how much is owed to the industry of our members - and how much yet remains to be discovered! Valuable as all this recording work is for its own sake, it is of special importance as providing a base line from which to measure the extent and rapidity of future changes, both actual and potential. It is becoming possible to identify areas of special or unique importance as habitats for wild life, and to predict in a specific and detailed way what results might follow from any proposed development or change in land use. In any discussion of such proposals emotional outcries carry small weight compared with this sort of detailed presentation, involving intimate knowledge of the site combined with full information on the status of threatened species at their other localities. For this reason our excursions are taking on growing importance as recording sessions during which a body of experts in different groups monitor sites known to be biologically rich, and from time to time explore new ones.

The Society also works actively in the field of conservation through its close and interlocking relationships with BBONT, NCC and other amenity bodies. In particular, the periodical working parties at Aston Upthorpe Reserve provide an unbeatable combination of botanical expertise, local knowledge and industry.

Meetings and Excursions 1979-80

The Annual General Meeting on 11th October 1979 (attendance 40) was followed by Mr. R. M. Gambles' Presidential Address entitled 'An Endangered Species that will not be missed'. Other lectures during the winter were 'Soil Erosion in Lowland Britain - a cause for concern?', by Dr. S. Nortcliff (57); 'Trees in Britain To-day', by Dr. A. Mitchell (76); 'Hedgehogs', by Dr. P. Morris (47); 'Grass-trees, Gums and Galahs - Springtime in S. E. Australia', by Mr. J. A. Cole (39); 'Salmon and the River Thames', by Mr. M. Bulleid (44); 'The Sky from sunrise to sunset', by Dr. J. Milford (31); 'Flowers of the Newbury District', by Dr. G. D. Coley (62); and 'Work of the Nature Conservancy Council', by Mr. P. C. Tinning (40). Members' Evenings of Films, Talks and Exhibits, at which coffee and biscuits were served, were held on 6th December (51) and 13th March (54).

There were winter walks to study lichens at Finchampstead on 17th November (20), birds on local gravel pits on 9th February (23) and mosses in the Goring area on 8th March (14), and an excursion to south-coast estuaries and mudflats to watch waders and wildfowl on 12th January (17). A microscope afternoon was held on 15th December (10).

Summer field excursions were to Satwell to look for wild daffodils, on 19th April (28); the Checkendon area for spring flowers, on 3rd May; Woolhampton Marsh, on the evening of 6th May (17); Micheldever area for chalk flora, on Sunday 18th May (22); Kennet Canal and Burghfield gravel pits for bats and waterside flora and birds, on the evening of 20th May; Headley and Greenham for golden saxifrage and green-winged orchids, on 31st May (13); Hartslock (BBONT Reserve) for chalk flora and mammals, on the evening of 11th June (10); Frilford Heath and Cothill and Dry Sandford Nature Reserves for heath, fen and marsh flora and a barbecue, on 14th June (21); Fair Mile, Berkshire Downs, on the evening of 25th June (10); Avebury Longbarrows and Savernake Forest, by coach, on 28th June (40); Moor Copse (BBONT Reserve) for moths, on the evening of 11th July (16); Pamber Heath for butterflies and bog plants on 13th July (20); Purley Meadows for riverside flora on the evening of 23rd July (11); Bernwood Forest (Reserve warded by BBONT) for butterflies, on 26th July (12); South Stoke and Cholsey (Thames-side) for waterside flora, on 9th August; Dinton Pastures on 6th September (19); and the environs of Ashridge Wood on 20th September (14). There were Fungus Forays in Stonor Park on 23rd August (17) and on Heckfield Heath on 4th October (24).

An endangered species that will not be missed

The Presidential Address
to the Reading and District Natural History Society

11th October 1979

R. M. Gambles

We naturalists are apt to get hot under the collar when we hear that a species is faced with extinction, either world-wide, or in any country we know where it has previously flourished. However, in some cases it is inevitable - no-one really regrets the dinosaurs - and in others involving species that we classify as pests, we are probably justified in doing our best to rid our shores, if not the world, of them.

Be that as it may, the war against various insect pests continues. In some cases this is a very difficult matter, but in others the life-history of the pest offers various points of weakness that - in theory, at least - should make it easier for us.

I will take as an example the warble-fly of the ox, both because it is topical - last winter our own Ministry of Agriculture started a campaign to eradicate it from our islands in the course of the next five years, and they have allocated five million pounds for the purpose - and also because when I was a young man, I was privileged to play a small part in a similar, wholly successful campaign, in the Island of Cyprus. The Chief Veterinary Officer, Robin Roe, who conceived the plan and saw it through in its entirety, was a modest man and was content to let his notable exploit be briefly summarised in a short paragraph in the Departmental Annual Report and be put away to moulder on the shelf. After his death, these reports were dug out and a short paper was published in his memory, but even then there were a number of facets of the story that remained untold, and perhaps this might be an opportunity to pull them out and give them a final airing.

The life-history of the warble-fly is well-known, so can be dealt with very briefly. There are two species of ox-warble in this country, Hypoderma bovis and H. lineatum. The same two were found in Cyprus. They are hairy flies of the size and general appearance of small bumble-bees. The adult fly is on the wing during the summer months, and lays its eggs attached to the hairs on the legs of cattle. H. bovis terrifies the animal by its shrill buzz, and causes stampeding, or "gadding". Perhaps because of this, only a single egg is laid at a time. H. lineatum is said not to alarm the host but to approach more quietly. It is thus able to deposit a row of six to twelve eggs on the same hair.

The larvae hatch from the eggs, pierce the skin,

migrate round the body, and by the winter are under the skin over the back, where they form swellings (warbles). A hole forms in the skin over the swelling, through which the larva breathes. There are two moults during the 4-6 weeks spent in the back, and in the spring or early summer the third-stage larva wriggles out through the hole, falls to the ground, buries itself and pupates. When the adult fly emerges it does not feed; it has only rudimentary mouth-parts and no mouth opening. It has sufficient reserves stored during the larval stages. It merely lays eggs on the host.

The main economic loss caused is usually considered to be the damage done to the hides. There may be quite a number of warbles present in the back of a single ox, and each one will have a small round hole in the centre. These will all be concentrated in the centre of the finished hide, so that good quality leather will only be available in much smaller pieces than if the whole hide could be used. In Cyprus, however, we had another way of looking at it. Spoilage of the hide was a nuisance, but could be accepted fatalistically by the stock-owners. Far more important, in local opinion, was the effect of gadding cattle. Cattle were mainly draught animals, used for ploughing or pulling carts. During the season when the fly was on the wing, ploughing was usually impossible except for a couple of hours at sunrise and two more at sunset. And when cattle stampeded down the village street, especially when harnessed to a cart, the damage was enormous, particularly to wooden chairs outside coffee-shops, which were numerous as every customer required three, one to sit on, one to put his feet on, and one to park his coffee-cup. When the campaign had been brought to a successful conclusion, the tanning trade and leather-workers took it all without comment, but Robin Roe received numerous letters of thanks from farmers all over the Island who found that they could now use their oxen for ploughing all day long and no longer had their ploughs or carts kicked to pieces, and from coffee-shop owners who were now spared the necessity of renewing their chairs at frequent intervals.

The warble-fly is a particularly suitable subject for eradication programmes, for during the winter months the larvae are all in a vulnerable position in the backs of cattle. They can either be squeezed out or be attacked by scrubbing the back with a suitable insecticidal dressing. It should be possible, theoretically, to eradicate the pest in a single season, if all cattle are treated, and no warbles missed. But any that escaped would be able to reach the ground in spring or early summer and produce fresh infestations the following season. We have been vaguely trying to eradicate it in this country, at least since the 1930's, but it was left to individual owners to take the necessary action. Most did so, but the careless and unco-operative minority have kept the infestation going. Now a major campaign has been launched, with what results only time will tell. Figures recently released by

the Meat and Livestock Commission show that in May of last year 34.3% of the cattle in this country were affected. Following the winter's treatment, this had dropped to 8.6% by May of this year (1979).

Some have raised objections to the scheme on the grounds that other species of host might act as reservoirs of infection and escape treatment, pointing out that warbles are commonly seen in deer, and have occasionally been reported from horses, and even man. The warbles in deer, however, are caused by a different species, H. diana, and although larvae of lineatum and bovis have been found in horses etc., these have been in superficial wounds, and the larvae very young, and there is no evidence that they could have completed their life-cycle in these hosts. Nor is there any record of H. diana occurring in cattle. However, our experiences in Cyprus, to which I shall refer later, may throw more light on this question.

In Cyprus, the plan of campaign was for all cattle in the Island, of which there were some 40,000, to be examined by the Stock Inspector in charge of the District or Sub-district, monthly from December to May, and any swelling found treated with Derris Dressing. In this way, if any swelling were overlooked on one examination it would probably be found on the next, especially as it would be that much bigger. A single inspection would certainly have been insufficient, but with six there was little likelihood of any being missed. The majority of warbles had reached the vulnerable stage by February, with the numbers reported in January very close behind.

At the commencement of the campaign, taking the figures of the peak months, January and February, we started with 78-79% of the Island's cattle infested. This dropped after one year's treatment to about 30%; next year 5%, and the next 0.2%.

At this stage, the hard work involved in inspecting large numbers of animals with little chance of finding a warble was discouraging to the Stock Inspectors, and owners were becoming apathetic and less co-operative than before. So it was decided to offer a large reward for every warble reported by the owner, £1 per animal, at a time when the daily wage of a labourer was 15p a day. Naturally, careful precautions had to be taken against fraud. With new cases depending on the uncontrolled wanderings of a fly, there was no practical possibility of breeding warblers for profit, like the stories one hears of those who cut off squirrels' tails for the sake of a bounty, and then turn the mutilated animal loose to breed and keep up the supply of future tails; or those who farmed crocodiles for the sake of eggs to sell to the Governments who were buying and destroying eggs to keep the numbers down. But a complication was the presence in the Island of a separate species of warble in goats, originally described as H. aeratum and believed to be endemic to Cyprus, but later found to be the same as a species described from a single larva from a chamois in

Crete, H. aegagri. We did not expect this species to infest cattle, but with an abundant supply readily available, there might have been opportunities for palming off aegagri larvae as cattle warbles. Accordingly, the previous season I made a special study of the anatomy of the larvae from goats, so as to be able to recognise them for what they were. (The species could be distinguished by the arrangement of the spines on the ventral surface of the penultimate segment. H. aegagri had a row of spines on the anterior border, pointing backwards; lineatum had a row on the posterior border, pointing forwards; bovis had neither row.) Also a strict procedure was laid down and well publicised, for claiming the reward. The owner had to report the case to the Stock Inspector in charge of the district, who would visit and inspect the grub in situ, squeeze it out, and send it to the laboratory.

With the stimulus of a reward, infested animals were reported enthusiastically and early; and many warbles extracted and sent to the laboratory were too young. Larvae in the first stage were unidentifiable. But as the season progressed and the warbles in the backs of the cattle grew more mature, it was easy to tell the species. And then the surprising result transpired that over half of those examined were not cattle warbles at all, but H. aegagri of the goat. These were sent in from different parts of the island, by four different officers, all of them trustworthy men, so there was no question of fraudulent substitution. Larvae were received from fifty-six cattle, only nineteen of them old enough for identification, eight H. lineatum and eleven aegagri of the goat.

When all the results were in for the season, we started looking further into the matter, and certain interesting facts emerged. The eight cases of lineatum were all from a relatively small area, about fifteen miles long and five broad, in the Carpas peninsula at the easternmost end of the island, in Famagusta district. The majority of the aegagri and of the unidentifiable larvae sent in came from widely scattered localities, mostly in hilly areas of Paphos district at the west end of the island, and adjoining parts of Limassol and Nicosia districts. These were mainly goat-rearing areas, and it was the custom to turn out the young calves to be grazed with the herds of goats, so opportunity for cross-infestation was much greater there. Also, the natural resistance to foreign parasites is often not fully developed in young animals. As an example, children often pick up infestations with the common dog-tape-worm, which has never to my knowledge been found in a human adult. The majority of warbles recorded at this stage of the campaign were in young animals. Ages were not usually recorded, but in forty-two cases - spread over several years - where these are known, thirty-three were in animals of nine months to one year, six in animals between one and two years old, two in three-year-olds, and one in a six-year-old. This last was in an area where the cattle warble, H. lineatum was still occurring, although the larva in question was too small to be identifiable. The three-

year-olds, however, were both infested by aegagri. Before the campaign, cattle-warbles used to be most abundant in animals six years old. It should also be remembered that the actual infestations would have taken place six months before the swellings were found, so most of the affected animals would have been between three and six months old at the time of the attack.

The confinement of the last cases of lineatum to the Carpas peninsula was also of interest. We considered the Carpas to be the last stronghold of the true cattle species. It may well have been eradicated earlier in the rest of the island. I shall have more to say about this last stronghold later.

Finding these goat-warbles occurring in cattle came as rather a shock to us at first. We had always assumed that warbles were species-specific, and that we were unlikely to find any cross-infestations. It would have been quite impossible to have tried a similar eradication programme for goats, of which there were nearly half a million on the island, many in places difficult of access and more or less uncontrolled, even by their owners. However, when once the true cattle warbles were eradicated, infestation with aegagri settled down at a very low level, and we had no evidence of any of them completing their life-cycle, so they seemed to present no problem. No gadding was reported, and as for the most part only very young animals were attacked, there would have been plenty of time for the warble-holes to have healed completely before the beasts came to be slaughtered and skinned. So I do not think we need have any fear of the deer warble in this country ever becoming a problem.

The first season that rewards were paid was the last in which true cattle warbles were seen in Cyprus cattle. Afterwards all the identified specimens were aegagri, and the unidentifiable by their scattered distribution round the Paphos end of the island could be presumed to be the same. No further warbles were seen in Famagusta cattle, except for a single specimen which was definitely identified as aegagri. By 1947 we assumed that the cattle species were finally eradicated. The total amount paid out in rewards for warbles reported during the five years of this final phase of the campaign was £155 (which must be enough to drive our present Ministry of Agriculture green with envy!). Far more work was done during the preceding four years of monthly inspection and compulsory treatment, but this involved no extra expenditure, as it was all carried out as part of the routine field duties of the Stock Inspectors in charge of each district or sub-district.

I said that the Carpas was the last stronghold of the cattle warble, and that it took longer to eradicate here than in the rest of the island. This was because of the custom of the cattle owners around the village of Rhizocarpaso, the last village before the tip, and of the Monastery of Apostolos Andreas ten miles beyond the village,

to turn their cattle loose into the forest to fend for themselves, and round them up annually to brand the new calves, much as is done with ponies in the New Forest. Under these circumstances, it was not possible to round them up for the monthly inspection and treatment, and in any case a number had escaped the annual round up and established a small feral population. Thus warbles in the backs of cattle could complete their life-cycles and produce adults in the following summer.

We overcame this problem by declaring the whole tip of the peninsula a prohibited area for cattle, and giving owners a year to remove all animals which they claimed as their property. After this, any cattle found there would be forfeit, and liable to be disposed of as Government saw fit. This was duly done, but the remaining wild cattle proved elusive, and very adept at hiding themselves. Robin Roe arranged with the G.O.C. for the army to come in for a final grand drive and shoot the last few beasts. But just before the appointed day, the unit was suddenly transferred to the Western Desert to chase Rommel instead, so the cattle took a back place again.

There used to be a file in the Veterinary Headquarters on the Warble Eradication scheme that made fascinating reading. I do not know whether it still exists, but when I recently asked for a copy of some of the relevant pages, it could not be traced. The exchange of minutes between the CVO and the CO was conducted in a light-hearted vein, and was a welcome relief from the War raging all round, in which we were a precarious oasis, as the quasi-military operation was planned in meticulous detail. With their departure, it had to be left as an ad hoc operation carried out as best as could be, with such local departmental resources as were available. A Quarantine Guard was appointed to see that no cattle got out of the area, and none strayed in, and to look out for any evidence of the whereabouts of the wild cattle. He kept in touch with the Senior Stock Inspector i/c Famagusta District, Mr. Vorgas, and the Assistant Stock Inspector, Anaxagoras Heracleides. Operations had to be carried out in close diplomatic consultation with the Authorities of the Monastery, who were the owners of the land in question, and probably had heaven-knows-what ab antiquo rights of pasturage, verdurage, and what-not. This was carried out between them and Vorgas, and we kept out of it. It culminated in a wild night near a spring where cattle might be coming to water, and there was a vivid letter from Vorgas on the file, written in an English whose style swung from contemporary idiom to New Testament and back again, and from which I can only quote from memory. Vorgas, Anaxagoras, and the Quarantine Guard, armed, were lying under bushes, "...and shortly before midnight there was a shot, Anaxagoras gave a shout, and there was the noise as of a large animal charging through the bushes" . . . I forget whether it ended in a kill, or whether the animal was just wounded. It continues "...and when the morning was come, the Chief of the Priests were gathered together to take counsel" ... one wants to carry on "with

the Scribes and the Pharisees", but I do not think they were mentioned. Vorgas was the only outsider present.

Whatever the outcome was, no further wild cattle were ever seen. Rumours hung about that the tracks of a cow and a calf had been seen on several occasions round the watering place. I spent a long day with Christos the Quarantine Guard and Anaxagoras, searching the forest for traces, but the calf turned out to have been a pig, and the cow was probably a trespasser from outside (where watering facilities were less readily available). But more important still, no more warbles were seen in cattle - apart from the single case already referred to, which was a proven goat species.

There was an epilogue to this story. Warbles reappeared in the Carpas in the 1950's, and inquiry revealed that a Turkish cattle-boat had been forced by bad weather to take shelter in a bay between Rhizocarpaso and the Monastery. Dead and dying cattle were thrown overboard, or washed over by heavy seas. They were thrown up on the beach, dragged above high-water mark, and skinned by villagers who said later that they had noticed many warbles present. Prompt measures were taken to control the outbreak that resulted in the following year and it was quickly suppressed. The story found its way into one of the standard textbooks, whose author had grave doubts of the parasite's surviving the host's death, or a day or two's immersion in sea-water. He clearly had not heard full details, or realised how close to land the cattle had been thrown or washed overboard.

This episode was quickly over, and the original campaign considered wholly successful. It remains to be seen how well the British campaign works out, admittedly with a larger number of cattle, and over a wider area. Cyprus is not much larger than Wales. However, the preliminary phase of the Cyprus campaign (monthly inspection and treatment) was spread over four winters, starting in Autumn 1938; and the reward system was carried on for a further five winters and then wound up, as no cattle warbles had been seen for four years. The British Government has allocated £5 million spread over five years. We did it for £155!

"Hunter and Hunted"

On the afternoon of 4th November 1980 I was walking along a ride in a wood on the Wiltshire-Berkshire border. At one point, in the centre of the ride, I noticed a dead rabbit with a large hole (into which a golf ball would neatly recess) eaten into the back of the creature's skull. As I was examining the rabbit, a stoat appeared in the long grass a few feet away. The animal reared up on its back

legs and kept this posture for several seconds, presumably to investigate what was happening to its recently killed prey.

At this moment a second rabbit appeared from the grasses, shot round my feet and raced for its very life down the long straight ride. The stoat hesitated briefly, then turned and gave chase to the rabbit who was by now far down the ride but whose screams could be heard plainly.

Intrigued by these happenings I moved to the side of the ride and waited for developments.

Soon I could see the rabbit heading straight back towards me with the stoat just visible in hot pursuit. On reaching the point where I was standing, the rabbit stopped in its tracks and crouched low down with its ears down over its back. The stoat seemed hesitant but sensing no intrusion leaped on to the rabbit's back and began to bite viciously into the creature's skull.

I assumed that shortly all would be over, but the rabbit then gave a violent kick and, finding itself free, disappeared up the ride and out of sight.

I then walked in the opposite direction to explore this part of the wood but returned after about ten minutes to the area where I could again hear the rabbit screaming. The stoat, now sensing my approach, bounded across the path but stayed close by and I could plainly hear it rustling among the ferns.

Just round the bend of the ride I again met up with the rabbit, still alive and eyes wide open. I picked it up and carried it to where my car was parked, about half a mile distant. By the time I reached the car, the rabbit was beginning to show more signs of life. I placed it in the shelter of a tunnel that I made in the long grass but apparent lack of general co-ordination made me unhopeful for the creature's eventual survival.

B. R. Baker

Aston Upthorpe - the past six years

M. R. W. Sell

Since my last comprehensive report on the flora of Aston Upthorpe Reserve and the surrounding area in No. 27 of the Reading Naturalist (1975), I put on record, in a brief 'situation report' in No. 31 (1979), changes in ownership and management as a result of which the Berkshire, Buckinghamshire and Oxfordshire Naturalists' Trust now co-operates with the owner in the management of thirty-nine acres. Management tasks now include scrub clearance, with the various Conservation Corps and local parties of

volunteers, and ragwort pulling. The latter is an extended programme, which will probably last at least five years. (Two years' pulling has already been accomplished.) Rabbit control is another task falling to the Trust, but so far, apart from some gassing, little action has been needed as myxomatosis has been the main controlling factor, and populations were very low in the past year.

The flora in the valley has fluctuated from season to season in the past six summers, which included of course the two heat-waves of 1975 and 1976, when at one point hardly a flower or even a blade of grass survived! As a contrast, 1980, after the cold dry spring, produced by the end of July the best display of chalk grassland flora, I think, that I have ever seen. Sheep grazing in two years, 1975 and 1977, did not seem to affect the flora in any particular way, but some apparently alarming effects occurred in 1979, when the pasqueflower (Pulsatilla vulgaris) was not found at all, and in 1980, when burnt-tip orchids (Orchis ustulata) were not seen to bloom, probably because of the dry, cold spell at peak growing time.

The decline in the numbers of pasqueflower blooms is a matter for some concern, the reason for it being far from clear. In a paper that has been written on the subject with reference to the principal sites for the species in the United Kingdom, it is suggested among other things that the success of the Therfield Heath site, on the Hertfordshire border is largely due to trampling by picknickers and sightseers. If this is so, the small enclosure may not be the best way to conserve Pulsatilla stocks. On the other hand, flowering has also declined on the slope above, where there is heavy grazing and trampling by cattle. The rest of the valley's flora appears to be unaffected by changes in grazing. By far the greatest effect is that of changing weather patterns.

One particular feature in winter is that the decline in Bromus erectus resulting from the more general grazing has meant that short-eared owls are far less frequently seen in the valley, as there are few of the coarse, tussocky stretches often frequented by the owls in winter because they harbour field voles and mice.

An interesting occurrence has been the appearance, in an area near the top of the valley where large-scale scrub clearance was undertaken in 1979, of a quantity of large plants of catmint (Nepeta cataria), a distinctly local species but one which grows in some quantity on the approach road up from Aston Tirrold village to the Downs. In other bare areas, particularly where moles have been active, candytuft has appeared, and in 1979 there was a marvellous show of hawkbits on the Reserve, presumably seen for the first time because the Reserve was hardly grazed at all that summer.

Rabbit populations in the valley have varied enormously, from almost epidemic proportions to a few individuals

as myxomatosis has taken its toll. The main effect of rabbits on the flora, however, seems to have been the encouragement of 'seed-beds' for ragwort, where their burrows were excavated, so altogether they appear not to have been beneficial. Grazing by sheep or cattle seems to have the best effect on the flora of the valley, sheep being the better.

There have been other problems - musk thistles, although very attractive, spread across the valley last year to such an extent that they will have to be controlled. Dwarf thistles have been far too prolific in the original Reserve area, and have tended to choke the sites of the frog orchid (Coeloglossum viride). There is no apparent solution to this problem, apart from application of 'spot' weedkiller, which would create a hazard to livestock. There are signs, however, that the outbreak is now declining, thus improving the prospects for the frog orchid population.

Even in what appears to be a simple type of habitat, practical management is proving to be a complex task, with no easy solutions to most problems. We hope to be able to strike the correct balance in the interest of the flora we particularly wish to preserve, although demands made by different species often seem to be in direct conflict with one another. Time and patience, along with accumulated experience, should give us the answers we are seeking.

Fungi found in Reading area, 1980

A. Brickstock

A very varied season, slow to start, but eventually yielding 254 species, compared with 227 last year and 134 in 1978. Of particular note are the rare Rhodotus palmatus (two groups where there was one last year, on elm stumps between Purley and Pangbourne, and one seen by H. H. Carter on a stump on a footpath by the Abbey Football Ground, Chalkhouse Green) and Agaricus bernardii (recorded by Mr. & Mrs. Diserens, Redhatch Drive: this species is usually found in salt marshes). Also Amanita inaurata (strangulata), pantherina and porphyria; Hohenbuehelia geogenia (this year numerous at Sulham, where there have been a few in previous years); Geoglossum fallax; Coryne sarcoides; Peziza scutellata, and beautiful tufts of Oudemansiella mucida at Streatley. Sulham again yielded a good collection of Cortinarius, all in great numbers: amarescens, amoenolens (cyanopus), auroturbinatus (elegantissimus), calochrous, multiformis and sodagnitus. Some other species were unusually numerous, including Cantharellus cibarius, C. infundibuliformis, Strobilomyces floccopus, Helvella crispa and Tricholomopsis rutilans.

My thanks to Mr. and Mrs. Diserens for a number of excellent lists.

I. AGARICALES

LOCATIONS
(see key)

Agaricus arvensis	1									
" bernardii										P
" campestris	1			A						
" placomyces			6							
" silvaticus			6							
" silvicola			6							
Amanita citrina	1	5	6	7	A	F	G		N	Q
" " var. alba		5		7	A	F	J		N	
" inaurata				7						
" muscaria	1				A	F	G	J	N	
" pantherina	1		6							
" phalloides									N	
" porphyria						F				
" rubescens	1		6	7	A	F	J			
" vaginata				7	A	F				
Armillaria mellea	1	5	6		A	F	G			
Bolbitius vitellinus	1				A		G	J		
Boletus appendiculatus				7						
" aurantiacus						F				
" badius		5		7		F				
" chrysenteron			6	7	A	F	G	J	K	N
" edulis		5		7	A	F	J			U
" erythropus					A					
" piperatus					A	F				
" pulverulentus						F				
" reticulatus				7	A					
" subtomentosus	1		6		A					
Cantharellula cyathiformis					A					
Cantharellus cibarius			6	7	A	F				
" infundibuliformis				7	A				M	N
Clitocybe cerussata						F				
" clavipes			6			F				
" flaccida	1				A					
" infundibuliformis	1									
" nebularis	1		6				G		N	U
" odora			6		A	F				
" vibecina	1		6			F	J			
Clitopilus prunulus			6			F				
Collybia acervata		5	6			F				
" butyracea	1		6		A	F	G		N	U
" cirrhata				7						
" dryophila	1			7	A					
" erythropus				7					N	
" fusipes	1	5	6		A	F	J	K		
" maculata			6			F			N	Q
" peronata			6	7	A	F	J		N	Q
Coprinus atramentarius				7	A					Q
" comatus					A	F				
" micaceus			6				G	J	K	T
" niveus							G			V

Coprinus picaceus		6						
" plicatilis		6	7	A	D		J	
" radiatus								N
Cortinarius amarescens		6						
" amoenolens		6						
" anomalus			7	A		F	G	
" armillatus								N
" auroturbinatus		6						
" calochrous		6						
" caninus			7					
" cinnamomeus				A				
" decipiens			7	A		F	G	
" elatior			7					
" flexipes				A				
" glandicolor	5							
" multififormis		6						
" paleaceus			7					
" pseudosalor			7					
" saturninus						F		
" semisanguineus				A		F		
" sodagnitus		6						
Craterellus cornucopioides		6						Q S
Crepidotus autochthonus		6					K	
" variabilis				A				S
Cystoderma amianthinum				A				
Flammulina velutipes						F		
Galerina hypnorum				A				
" mutabilis				A				
" mycenopsis				A				
" paludosa						F		
Gomphidius roseus				A				
Gymnopilus junonius		6		A				
" penetrans	5		7	A		F		
Hebeloma crustuliniforme		6	7	A	D	F		U
" mesophaeum		6		A		F		U
Hohenbuehelia geogenia		6						
Hygrophoropsis aurantiaca	1		7			F	J	
Hygrophorus conicus	1		7	A				
" eburneus		6		A		F	G	
" hypothejus				A		F		
" niveus	1	6		A				
" olivaceo-albus				A				
" psittacinus				A			J	
" puniceus	1			A		F		
" vitellinus	1					F		
Hypholoma fasciculare		5	6	7	A	F	G	J N
Inocybe asterospora	1							N
" fastigiata			6	7	A	F	G	
" napipes					A			
" patouilliardi		6						

Laccaria amethystea	1	5	6	7	A	F	G	N	Q
" laccata	1	5	6		A	F		N	
" proxima					A				
Lacrymaria velutina	1				A				
Lactarius blennius		5	6	7	A	F	G		
" camphoratus		5		7					
" chrysorrheus					A				
" deterrimus				7					
" glyciosmus					A	F			
" helvus							G		
" hepaticus				7		F			
" piperatus					A				
" quietus	1	5			A	F			
" rufus		5			A	F			
" subdulcis	1		6		A	F			
" tabidus					A				
" torminosus		5		7	A	F		N	
" turpis			6	7	A	F	G	N	
" vellerius			6					N	
" vietus				7		F			
" volemus					A				
Leccinum scabrum		5	6	7	A	F			
" testaceoscabrum				7	A	F		N	
Lepiota cristata			6		A			N	
" mastoidea	1		6						
" procera	1				A				
" rhacodes									U
Lepista nuda	1		6		A				R
" sordida	1		6						
Leptonia lampropus					A		J		
Leucopaxillus giganteus			6						
Lyophyllum decastes			6	7	A	F			
Marasmius androsaceus							J		
" oreades	1		6		A				
" ramealis					A	F			
" rotula	1								
Melanoleuca melaleuca			6	7			G		
Mycena alcalina	1				A				
" crocata								L	
" fibula	1				A				
" flavo-alba	1								
" galericulata	1	5	6	7	A				
" galopus	1			7	A	D	F	N	
" leucogala									V
" polygramma	1		6						
" pura	1		6		A	F	G	N	
" vitilis	1				A		G		
" vulgaris					A				
Nolanea sericea					A				
Omphalina ericetorum					A				
Oudemansiella mucida							G		
" radicata	1		6		A	G	J	N	

<i>Panaeolina foenisecii</i>	1										
<i>Panaeolus rickenii</i>	1			A		J					
<i>Paxillus involutus</i>	5	7		A	F						
" <i>panuoides</i>									W		
<i>Pholiota aurivella</i>									T		
<i>Pleurotus dryinus</i>	6										
" <i>ostreatus</i>	6										
" <i>ulmarius</i>						J					
<i>Pluteus cervinus</i>	6	7				J					
" <i>salicinus</i>						J					
<i>Psathyrella candolleana</i>						J					
" <i>conopilea</i>	6										
" <i>gracilis</i> ^s				A							
" <i>hydrophila</i>								R			
<i>Rhodotus palmatus</i>			8						T		
<i>Russula aeruginea</i>				A	F						
" <i>alutacea</i>	6										
" <i>atropurpurea</i>	5	6	7	A	F						
" <i>cyanoxantha</i>	1	6	7	A	F	J					
" <i>decolorans</i>	5			A							
" <i>delica</i>	6										
" <i>emetica</i>	1	5	6	7	A	F		N			
" <i>fellea</i>	5	7				J		N	Q		
" <i>foetens</i>				A							
" <i>fragilis</i>		7		A							
" <i>grisea</i>					F						
" <i>lepida</i>	6										
" <i>mairei</i>	6	7		A	F						
" <i>nigricans</i>				A							
" <i>ochroleuca</i>	1	5	6	7	A	F	G	K	N	Q	
" <i>olivacea</i>	6										
" <i>puellaris</i>				A	F						
" <i>sardonias</i>		7		F							
" <i>vesca</i>				F							
<i>Strobilomyces floccopus</i>								M	Q	R	S
<i>Stropharia aeruginosa</i>				A		G					X
" <i>coronilla</i>						J					
<i>Suillus bovinus</i>		7		A							
" <i>elegans</i>	5					J					
" <i>granulatus</i>		7									
" <i>luteus</i>				A							
" <i>variegatus</i>	5	7		A							
<i>Tricholoma album</i>	6										
" <i>argyraceum</i>									Q		
" <i>saponaceum</i>		7		F							
" <i>sulphureum</i>	6	7		F				N	Q		
" <i>terreum</i>	6										
" <i>vaccinum</i>	6										
" <i>virgatum</i>	6										
<i>Tricholomopsis platyphylla</i>						G					
" <i>rutilans</i>				A	F						

Tubaria furfuracea	1	6	A	G		
Tylophilus felleus		5	A			
<u>II APHYLLOPHORALES</u>						
Clavaria argillacea	1	6	7	A		
Clavulina cristata				A		
" rugosa						N
Clavulinopsis helvola	1			A	F	
Coltrichia perennis					F	
Coriolus versicolor		5	6	A	F	J Q
Fomes annosus						J
Gloeoporus adustus			6			
Grifola frondosa					G	J
" gigantea				A		
" sulphurea		5				
Hydnum repandum						N Q S
Phaeolus schweinitzii					F	
Piptoporus betulinus		5	7	A	F G J	
Polyporus squamosus			6			J
" varius					D	
Poria vaillantii						R
Sparassis crispa			7		F	
Stereum hirsutum						J V
Thelephora terrestris					F	N
Trametes gibbosa			6			
" rubescens			6	7	A	
Ungulina marginata	1					
<u>III GASTEROMYCETALES</u>						
Lycoperdon caelatum				A		
" echinatum						M
" ericetorum			6	7	A	
" molle				A	F	
" perlatum	1		6	A	F G	
" pyriforme			6	A		
Mutinus caninus						Q S
Phallus impudicus		5	6		F G J	N Q
Scleroderma citrinum		5	7	A	F G	
<u>IV HETEROBASIDIOMYCETES</u>						
Calocera viscosa				A	F	J K N
Exidia albida					D	
<u>V ASCOMYCETES</u>						
Coryne sarcoides				A		

Daldinia concentrica	6		J	
Geoglossum fallax		A		Y
Helvella crispa	6	A		N Q
Hypoxylon fragiforme	6		J	
Leotia lubrica			D	
Nectria cinnabarina	6	A	J	
Peziza aurantia		A		
" badia			J	
" repanda			J	
" scutellata			J	
	7			
Xylaria hypoxylon	6	A		Q
" polymorpha	5 6		J	Q

VI MYXOMYCETES

Fuligo septica 1

Key to Locations

- 1 Churchend Copse SU 673727
- 2 Prospect Park
- 3 Whiteknights Park
- 4 Nettlebed
- 5 Five Oaken 650657
- 6 Sulham 645746
- 7 Wasing
- 8 Purley/Pangbourne
- 9 Garden, Westwood Road, Tilehurst
- A Restricted site
- B Ufton Nervet
- C Woodcote
- D Gardens, Cockney Hill, Tilehurst
- E Burghfield Gravel Pits
- F Heckfield Heath
- G Streatley Hill
- J Stonor Park
- K Ashampstead Common 587750
- L Northend 733931
- M Satwell 705835
- N Kingwood 695825
- P Redhatch Drive, Earley
- Q College Wood 655805
- R Lambridge Wood 740842
- S New Copse 690807
- T Footpath, Abbey Football Ground, Chalkhouse Green 719782
- U Bird Wood, Sonning Common
- V Clayfield Copse, Emmer Green
- W Dee Road Estate, Tilehurst
- X Reading Golf Course
- Y Northcourt Avenue

Locations 1-9 and A-E same as last year; not all used.
 " L-S and part of 7, Mr. and Mrs. Diserens.
 " T-X, Mr. Carter
 " Y, Miss Cobb.

The Recorder's Report for Botany 1979-80

B. M. Newman

A large number of records has been received this year and a selection covering a wide range of localities has been made for publication in this issue of the Reading Naturalist. It is hoped that record collecting during our centenary year, 1981, will be equally productive and that more members will contribute.

The nomenclature and order are according to the "Flora of the British Isles" by Clapham, Tutin and Warburg (1962). An alien taxon is indicated by an asterisk (*). Most of the English names are from "English Names of Wild Flowers", the recommended list of the Botanical Society of the British Isles, but if a different name is commonly used locally it has been added in brackets.

Records sent in by the following members are gratefully acknowledged:- Dr. H. J. M. Bowen (HJMB); Dr. A. Brickstock (AB); Mr. H. Carter (HC); Miss L. E. Cobb (LEC); Dr. R. J. Grayer (RJG) and Mrs. K. Rhodes (KR).

- Asplenium ruta-muraria L. Wall-rue
Hambleton, 6.4.80 (RJG); Millman Road, Reading (LEC)
- Dryopteris filix-mas (L.) Schott Male-fern
Ashampstead Common, 25.8.80 (AB)
- Dryopteris dilatata (Hoffm.) A. Gray Broad Buckler-fern
Ashampstead Common, 25.8.80; Church-end Copse (AB)
- Ophioglossum vulgatum L. Adder's-tongue
Cothill Fen, NHS walk (HJMB)
- Ranunculus auricomus L. Goldilocks Buttercup
Wood, Nuney Green (HJMB); Satwell, 17.4.80 (LEC)
- Ranunculus sceleratus L. Celery-leaved
Chapel Green, Wokingham, 25.5.80 (RJG); Buttercup
Purley meadows, 23.7.80 (LEC)
- Ranunculus fluitans Lam. River Water-crowfoot
Canal between Burghfield Bridge and Aldermaston Wharf,
4.8.80 (AB)
- Papaver argemone L. Prickly Poppy
Frilford Golf Course, NHS walk (HJMB)
- *Papaver somniferum L. Opium Poppy
By new roadside through Greendene Wood, Oxon. (HJMB);
Ashridge Wood area, persisting in this old site, 20.9.80
(LEC)
- Chelidonium majus L. Greater Celandine
Sulham, 15.6.80 (AB); Gipsy Lane, Wokingham, 25.5.80 (RJG)
- *Cardaria draba (L.) Desv. Hoary Cress
Canal, between Reading and Burghfield Bridge, 24.7.80 (AB)

- Rorippa islandica (Oeder) Borbas Marsh Yellow-cress
Canal between Burghfield Bridge and Aldermaston Wharf,
4.8.80 (AB)
- Erysimum cheiranthoides L. Treacle Mustard
Waste ground, Ascot (HJMB)
- Reseda luteola L. Weld
Canal between Reading and Burghfield Bridge, 10.8.80 (AB)
- Hypericum pulchrum L. Slender St. John's-
wort
Chobham Common, 25.7.80 (RJG)
- Hypericum montanum L. Pale St. John's-wort
Sulham, 13.9.80 (AB)
- Silene alba (Mill.) E. H. L. Krause x S. dioica (L.) Clairv.
Tubney Wood, clearing, NHS walk (HJMB)
- Silene conica L. Sand Catchfly
Frilford Golf Course, NHS walk (HJMB)
- Lychnis flos-cuculi L. Ragged-Robin
Whiteknights Park, 12.6.80 (RJG)
- Dianthus deltoides L. Maiden Pink
Frilford Golf Course, NHS walk (HJMB)
- Myosoton aquaticum (L.) Moench Water Chickweed
Along Emmbrook, Wokingham, 15.9.80 (RJG)
- *Atriplex hortensis L. Garden Orache
Whiteknights Park (HJMB)
- Erodium cicutarium (L.) L'Herit. Common Stork's-bill
Oaklands Drive, Wokingham, 16.4.80 (RJG)
- *Impatiens capensis Meerburgh Orange Balsam
Canal between Reading and Burghfield Bridge, 24.7.80 (AB);
along Emmbrook, Wokingham, 15.9.80 (RJG)
- *Impatiens parviflora DC. Small Balsam
Burghfield Common, 24.8.80 (AB)
- *Impatiens glandulifera Royle Indian Balsam
Canal between Burghfield Bridge and Aldermaston Wharf,
4.8.80 (AB); Dinton Pastures, Winnersh, 6.9.80 (LEC);
along Emmbrook, Wokingham, 15.9.80 (RJG)
- Genista tinctoria L. Dyer's Greenweed
Cothill Fen, NHS walk (HJMB)
- Ulex minor Roth Dwarf Gorse
Chobham Common, 25.7.80 (RJG)
- Ononis spinosa L. Spiny Restharrow
Streatley Hill, 14.9.80 (AB)
- *Melilotus alba Medic. White Melilot
Waste ground, King's Road, Reading (BMN)
- *Trifolium hybridum L. Alsike Clover
By new roadside through Greendene Wood, Oxon. (HJMB)
- Trifolium striatum L. Knotted Clover
Church-end Copse (AB); Frilford Golf Course practice
ground, NHS walk (HJMB)

- Anthyllis vulneraria L. Kidney Vetch
Watlington Hill, 27.8.80 (RJG)
- Lotus tenuis Waldst. & Kit. ex Willd. Narrow-leaved
Frequent, Sutton Courtenay (HJMB) Bird's-foot-trefoil
- Astragalus glycyphyllos L. Wild Liquorice
By fairly new roadside, Carmel College, Oxon. (HJMB)
- Lathyrus nissolia L. Grass Vetchling
Dry Sandford Pit, NHS walk (HJMB)
- Lathyrus sylvestris L. Narrow-leaved
By fairly new roadside, Everlasting-pea
Carmel College, Oxon. (HJMB)
- *Lathyrus tuberosus L. Tuberos Pea
Near Brasenose Wood, Shotover, Oxford, D. Steel; first
record for v.c. 23 for many years (HJMB)
- Sanguisorba officinalis L. Great Burnet
Canal between Reading and Burghfield Bridge, 24.7.80.
Canal between Burghfield and Aldermaston Wharf, 4.8.80 (AB)
- Sedum telephium L. Orpine
Wood, Nuney Green (HJMB)
- Drosera rotundifolia L. Round-leaved Sundew
Cothill Fen, NHS walk (HJMB). Chobham Common, 25.7.80 (RJG)
- Daphne laureola L. Spurge-laurel
Grounds of Basildon House, leaves only, 14.9.80 (RJG)
- *Epilobium adenocaulon Hausskn. American Willowherb
Burghfield Common, 24.8.80 (AB)
- Epilobium palustre L. Marsh Willowherb
Canal between Reading and Burghfield Bridge, 24.7.80 (AB)
- Viscum album L. Mistletoe
Hambleden, 6.4.80 (RJG)
- Anthriscus caucalis Bieb. Bur Chervil
Frliford Golf Course practice Ground, NHS walk (HJMB)
- Torilis arvensis (Huds.) Link Spreading Hedge-
Sutton Courtenay, one plant (HJMB) parsley
- Sison amomum L. Stone Parsley
Roundabout, Tittle Row, Maidenhead (HJMB)
- Pimpinella saxifraga L. Burnet-saxifrage
Stonor Park, 25.8.80 (HC)
- Oenanthe crocata L. Hemlock Water-
Whiteknights Park, 12.6.80 (RJG) dropwort
- Foeniculum vulgare Mill. Fennel
Whiteknights Park, (HJMB)
- Silaum silaus (L.) Schinz & Thell. Pepper-saxifrage
Dinton Pastures, Winnersh, 6.9.80 (LEC)
- Mercurialis annua L. Annual Mercury
Alma Road, Windsor (HJMB); Palmer School Road, Wokingham,
6.8.80 (RJG)
- *Polygonum cuspidatum Sieb. & Zucc. Japanese Knotweed
Whiteknights Park, 12.6.80 (RJG)

- Quercus petraea (Mattuschka) Liebl. Sessile Oak
Church End Copse (AB); young trees on wayleave in
College Wood, 2.12.79 (HC)
- Primula veris L. Cowslip
Hambleden, in bud, 6.4.80 (RJG)
- Lysimachia vulgaris L. Yellow Loosestrife
Canal, between Reading and Burghfield Bridge, 24.7.80 (AB);
along Emmbrook, Wokingham, 15.9.80 (RJG)
- *Lysimachia punctata L. Dotted Loosestrife
A clump by the road through College Wood, Oxon. (HJMB)
- Gentianella amarella (L.) Börner Autumn Gentian
Stonor Park, 25.8.80 (HC); top of Streatley Hill,
14.9.80 (AB)
- Cynoglossum officinale L. Hound's-tongue
Crowsley Forest (not at the same locality as in 1969, but
where young Ulmus glabra have been cleared) (HC); Stonor
Park (LEC)
- Pentaglottis sempervirens (L.) Tausch Green Alkanet
Whiteknights Park, 31.7.80; Ashampstead Common, 25.8.80
(AB); Fairview Road, Wokingham, 25.5.80 (RJG)
- Myosotis discolor Pers. Changing Forget-
me-not
Burghfield Common, 24.8.80 (AB)
- Echium vulgare L. Viper's-bugloss
Single plant in Whiteknights Park, (HJMB)
- Cuscuta epithymum (L.) L. Dodder
Chobham Common, 25.7.80 (RJG)
- Atropa belladonna L. Deadly Nightshade
Stonor Park, 25.8.80 (HC)
- Hyoscyamus niger L. Henbane
Stonor Park, 29.6.80 (LEC)
- Verbascum lychnitis L. White Mullein
Railway bank near Twyford (HJMB) (cf. Reading Naturalist
No. 16, p. 24)
- Antirrhinum orontium L. (Weasel's Lesser Snapdragon
Garden in Tilehurst (KR) Snout)
- Linaria repens (L.) Mill. Pale Toadflax
Top of Streatley Hill, 14.9.80 (AB); Watlington Hill,
27.8.80 (RJG)
- Chaenorhinum minus (L.) Lange Small Toadflax
Brook Close, Wokingham, 16.7.80 (RJG)
- Veronica montana L. Wood Speedwell
Lambridge Wood, Henley, 21.5.80; Whiteknights Park,
12.6.80; grounds of Basildon House, 14.9.80 (RJG)
- Veronica polita Fr. Grey Field-speedwell
Earley Gate, Whiteknights Park, 18.2.80; Clifton Road,
Wokingham, 6.8.80 (RJG)
- Veronica agrestis L. Green Field-speedwell
Harcourt Drive, Reading, 8.4.80; Clifton Road, Wokingham,
6.8.80 (RJG)

- *Veronica filiformis Sm. Slender Speedwell
Earley Gate, Whiteknights Park (RJG)
- Pinguicula vulgaris L. Common Butterwort
Cothill Fen, NHS walk (HJMB)
- Origanum vulgare L. Marjoram
Watlington Hill, 27.8.80 (RJG) Ashampstead Common, 25.8.80
Top of Streatley Hill, 14.9.80 (AB)
- Thymus drucei Ronn. Wild Thyme
Stonor Park, 25.8.80 (HC)
- Salvia verbenaca L. Guernsey Clary
Single plant in Whiteknights Park (HJMB)
- Stachys palustris L. Marsh Woundwort
Footpath, Clifton Road to Sewell Avenue, Wokingham (RJG)
- Plantago coronopus L. Buck's-horn Plantain
Churchyard, Bearwood Road, Sindlesham, 4.8.80 (RJG)
- Asperula cynanchica L. Squinancywort
Watlington Hill, 27.8.80 (RJG)
- Galium cruciata (L.) Scop. Crosswort
Near Baughurst, waste ground on rather acid soil (HJMB)
- Valerianella locusta (L.) Betcke Common Cornsalad
Roadside opposite Keymarket, (Lamb's Lettuce)
Tilehurst (KR)
- Dipsacus fullonum L. ssp fullonum Teasel
Canal between Reading and Burghfield Bridge, 10.8.80 (AB);
railway embankment, Winnersh-Earley, 8.7.80 (RJG)
- Scabiosa columbaria L. Small Scabious
Watlington Hill, 27.8.80 (RJG)
- Bidens tripartita L. Trifid Bur-marigold
Caversham Park Village pond, 3.9.80 (HC); Dinton Pastures,
Winnersh, 6.9.80 (LEC); along Emmbrook, Wokingham,
15.9.80 (RJG)
- Senecio erucifolius L. Hoary Ragwort
A nearly glabrous form, not in old grassland but on road-
sides and waste places; Kiln Road, Emmer Green; School
Lane, Caversham (HC)
- Senecio viscosus L. Sticky Groundsel
Ashampstead Common, 25.8.80 (AB)
- *Senecio cineraria DC x S. jacobaea L.
Roadside, Hungerford Newtown; new to v.c.22 (HJMB)
- *Doronicum pardalianches L. Leopard's-bane
Peppard Common, garden escape long known from this
locality (HC)
- *Doronicum plantagineum L. Plantain-leaved
Leopard's-bane
Crowsley Lane, past flowering,
28.5.80. Long established here
but not previously recorded (nearest garden 150 metres
distant) (HC)
- *Calendula officinalis L. Pot Marigold
By new roadside through Greendene Wood, Oxon. (HJMB)

- Chrysanthemum segetum L. Corn Marigold
By new roadside through Greendene Wood, Oxon. (HJMB);
abundant in cornfields by Crowsley Forest (HC)
- Chrysanthemum vulgare (L.) Bernh. Tansy
Canal between Burghfield and Aldermaston Wharf, 4.8.80,
canal between Reading and Burghfield Bridge, 10.8.80 (AB)
- *Echinops sphaerocephalus L. Globe Thistle
Well established, Sutton Courtenay (HJMB)
- Carlina vulgaris L. Carlina Thistle
Top of Streatley Hill, 14.9.80 (AB)
- Arctium lappa L. Greater Burdock
Top of Streatley Hill, 14.9.80 (AB)
- Carduus nutans L. Musk Thistle
By new roadside through Greendene Wood, Oxon. (HJMB)
- Cirsium acaulon (L.) Scop. Dwarf Thistle
Stonor Park, 25.8.80 (HC); Watlington Hill, 27.8.80 (RJG)
- *Silybum marianum (L.) Gaertn. Milk Thistle
Single plant in Whiteknights Park, (HJMB)
- Onopordum acanthium L. Cotton Thistle
Tubney Wood, clearing, NHS walk (HJMB)
- Cichorium intybus L. Chicory
Dinton Pastures, Winnersh, 6.9.80 (LEC); around Didcot,
2.9.80 (RJG)
- Picris echioides L. Bristly Oxtongue
Canal between Reading and Burghfield Bridge, 10.8.80 (AB)
- Tragopogon pratensis L. ssp. minor Goat's-beard
(Mill.) Wahlenb.
Woosehill, Wokingham; railway embankment, Wokingham-
Winnersh (RJG)
- Lactuca serriola L. Prickly Lettuce
St. George's Road, July 1980; School Lane, Caversham,
28.8.80. By A34 at Beedon, 20.9.80 (HC); Dinton
Pastures, Winnersh, 6.9.80 (LEC)
- *Cicerbita macrophylla (Willd.) Wallr. Blue Sow-thistle
Near Wallingford - Mr. Woodall (HC)
- Sagittaria sagittifolia L. Arrowhead
Canal between Reading and Burghfield Bridge, 10.8.80 (AB);
Loddon Bridge in stream, (HJMB)
- Butomus umbellatus L. Flowering-rush
Loddon Bridge, in stream (HJMB)
- Narthecium ossifragum (L.) Huds. Bog Asphodel
Chobham Common, 25.7.80 (RJG)
- Convallaria majalis L. Lily-of-the-valley
Flowering well near Englemere pond (HJMB)
- Polygonatum multiflorum (L.) All. Solomon's-seal
Ashampstead Common, 25.8.80 (AB)
- Ruscus aculeatus L. Butcher's-broom
Sulham, 13.9.80; Church-end (AB); Chestnut Avenue,
Wokingham, 23.3.80 (RJG)

<u>Ornithogalum umbellatum</u> L. Whiteknights Park, March, in bud (RJG)	Star-of-Bethlehem
<u>Ornithogalum pyrenaicum</u> L. Near Wallingford - Mr. Woodall (HC)	Spiked Star-of-Bethlehem
<u>Allium ursinum</u> L. Ashampstead Common, 25.8.80 (AB); Bear Wood, Witheridge Hill (HC)	Ramsons
<u>Juncus articulatus</u> L. Caversham Village pond, 3.9.80 (HC)	Jointed Rush
<u>Neottia nidus-avis</u> (L.) Rich. Cothill Fen, NHS walk (HJMB)	Bird's-nest Orchid
<u>Ophrys apifera</u> Huds. Near Wallingford - Mr. Woodall (HC)	Bee Orchid
<u>Anacamptis pyramidalis</u> (L.) Rich. Waste ground near Baughurst, on rather acid soil (HJMB); Church-end (AB)	Pyramidal Orchid
<u>Rhynchospora alba</u> (L.) Vahl. Chobham Common, 25.7.80 (RJG)	White Beak-sedge
<u>Carex hostiana</u> DC. Cothill Fen, NHS walk (HJMB)	Tawny Sedge
<u>Carex lepidocarpa</u> Tausch Cothill Fen, NHS walk (HJMB)	Long-stalked Yellow-sedge
<u>Carex serotina</u> Merat Dry Sandford Pit, NHS walk (HJMB)	Small-fruited Yellow-sedge
<u>Carex pseudocyperus</u> L. Old pits, Sutton Courtenay (HJMB)	Cyperus Sedge
<u>Carex pulicaris</u> L. Cothill Fen, NHS walk (HJMB)	Flea Sedge
<u>Nardurus maritimus</u> (L.) Murb. Hitch Copse Pit, Cothill, NHS walk (HJMB)	Mat-grass Fescue
<u>Briza media</u> L. Watlington Hill, 25.8.80 (RJG)	Quaking-grass
<u>Calamagrostis canescens</u> (Weber) Roth In carr near Bessels Leigh, Berks., confirming the locality found by Dr. E. W. Jones; the only site in v.c.22 (HJMB)	Purple Small-reed
<u>Apera interrupta</u> (L.) Beauv. Near Hitch Copse Pit, Cothill, NHS walk (HJMB)	Dense Silky-bent
* <u>Phalaris canariensis</u> L. Urban garden in Reading (HJMB)	Canary-grass

The Recorder's Report for Vertebrates, 1979-80

H. H. Carter

FISH

Distribution data for Salmonids are now almost meaningless, as fisheries are managed on a commercial basis whereby fish are reared in hatcheries to a weight of 0.75 to 1.5 kilos, released in preserved waters and immediately taken by anglers who are willing to pay upwards of £10 a day. So rapid is the turnover that stocks are replaced weekly or sometimes daily, and "coarse" fish - Grayling and non-Salmonid species - are removed annually by electro-fishing in the off season.

Salmo trutta L. Brown Trout
A "native" i.e. non-hatchery population is claimed to co-exist with hatchery fish of other species in the Kennet at Denford Park. The species has also been taken in the Kennet at Burghfield.

S. irideus Gibbons Rainbow Trout
Introduced at Denford Park, Farmoor and Datchet reservoirs.

Thymallus thymallus (L.) Grayling
Taken in the Kennet at Woolhampton.

Esox lucius L. Pike
Taken from the Kennet and Avon Canal at East Towner (near Beenham) and from a lake near Wokingham.

Cyprinus carpio L. Carp
Taken from Marley Tile Pits.

Barbus barbus (L.) Barbel
Taken from the Kennet at Lower Benyons (near Theale).

Gobio gobio (L.) Gudgeon
Taken from the Thames at Mapledurham.

Lenciscus cephalus (L.) Chub
Taken from the Thames at Mapledurham and Little Stoke.

Cottus gobio L. Bullhead
Taken from the Thames at Shiplake.

Only those localities are mentioned which have not previously been published in these reports. This year all information has been culled from the angling press, there being no members' records.

AMPHIBIANS

Rana temporaria L. Frog
Breeding in ponds at Greenmoor Hill, Woodcote (R.D.) Much spawn at "Springfield", Spencers Wood, though the pond here is much overgrown and almost filled in (S.J.W.) - your Recorder notes that many thriving frog ponds are in similar condition, the dense cover providing protection for the floating spawn, whereas toads, which attach trails of spawn to submerged vegetation, favour more open water.

Frogs heard croaking and spawn seen in the Horse Pond, Gallowstree Common, 30.3.80. Three clumps of spawn at Leighton Park, 1.4.80 (B.T.P.). Spawn beginning to hatch in the south pond at the Coach and Horses, Binfield Heath, 15.4.80. An adult seen in a garden pond at Hearn's Lane, Gallowstree Common, 25.3.80, another nearby, 19.5.80. S.J.W. had frogs in her garden at Spencers Wood all summer.

Despite a paucity of records, frogs would appear to have bred ten to fourteen days earlier than in 1979.

Bufo bufo (L.) Toad

Breeding in one of the ponds at Greenmoor Hill (R.D.). Pairs in amplexus and some spawn in the north pond at the Coach and Horses, 15.4.80. An estimated two thousand individuals visible from the bank of Jean's Pond, possibly more out of sight, Bracknell, 21.4.79 (M.J.D.). An adult still active in the last observer's garden at Warfield Road, 27.10.79. Three dead on road at Earley Gate, Whiteknights, 25.3.80 (B.T.P.) - the observer asks whether there is evidence of an autumnal movement of toads long after the departure from breeding waters as he saw a number dead on roads in the Henley area, 4.9.80, and my own past experience would suggest an increase in road deaths at this season; perhaps not all toads hibernate within their summer ranges. Hundreds of tadpoles from a small garden pond on Cockney Hill, Tilehurst, were deported to shallow gravel pits at Woolwich Green, 20.6.80. One dead on road at Emmer Green, 1.9.80 (cf. B.T.P.'s query above).

REPTILES

Anguis fragilis L. Slow Worm

Thirty disturbed from a compost heap at Pangbourne where they were hibernating, 27.2.80 (C.F.). One killed in mistake for a snake in grass at Redlands, 10.8.80.

Lacerta vivipara Jacquin Lizard

One at Bix, 4.3.80 (B.T.P.).

Natrix natrix (L.) Grass Snake

One, 500mm. long, at the Oval Pond, Ufton Nervet, 13.3.80 and one on the Hartslock reserve, 12.8.80 (B.T.P.). Twelve young of 1979 emerging from hibernation at 70 Chapel Hill, 16.4.80 (Mrs. Baker). One in long grass in a garden at Gallowstree Common, 11.6.80.

Vipera berus L. Adder

Two basking in sun at the Oval Pond, 13.3.80, allowed a close approach. One at Silchester Common, 23.8.80. One at Snelsmore Common, 19.9.80 (all B.T.P.).

MAMMALS

Talpa europaea L. Mole

Hills at New Copse, Gallowstree Common, 30.12.79, Dinton Pastures, Winnersh, 24.1.80, Twyford gravel pits, 1.3.80.

Sorex araneus L. Common Shrew

One at Swan Wood, Highmoor, 19.4.80. Up to three together in the Sonning Common area on various dates during

summer and autumn (M.J.C. and Recorder).

Erinaceus europaeus L.

Hedgehog

S.J.W. saw one at Spencer's Wood gathering leaves and carrying them into a hedge (where else?), 13.4.80, and one dead on the Basingstoke Road, in Reading, but comments that otherwise the species was scarce in her area. Elsewhere numbers seem to have been normal; one in Swainstone Road, 24.5.80 (B.C.), one dead at Burghfield Common, 12.8.80, six alive and fifteen dead (often two within a short distance) on various dates in South Oxfordshire.

Nyctalus noctula (Schreber)

Noctule

Earliest record Spencer's Wood, 4.4.80, four there, 31.10.79 (S.J.W.). Several at Crowsley Park, 5.6.80.

Plecotus auritus (L.)

Long-eared Bat

One at Speen Lane, Newbury, 1.4.80. Two at Upper Woolhampton, 13.6.80 (Molly Tucker per B.T.P.).

Pipistrellus pipistrellus (Schreber)

Pipistrelle

Summer roosts of nearly one hundred at Thatcham (Mr. Bull) and about fifty at Caversham Hill.

Lepus capensis Pall.

Hare

A sharp drop in numbers this year, only to be expected with the recovery in Rabbit numbers. Two on Warren Farm by the Berkshire Fairmile, 25.6.80, one on the Henley Fairmile, dead on road, 8.3.80. Six sightings of one or two together in the Sonning Common area.

Oryctolagus cuniculus (L.)

Rabbit

Total sightings between four and five hundred (S.J.W. and Recorder), the last comparable year being 1977. Maximum nineteen at Chalkhouse Green, 17.6.80. An unusual habitat was observed near Swan Wood, where rabbits made tunnels in a pile of compacted sawdust tipped into a pit. Two cases of myxomatosis noted near Sonning Common.

Rattus norvegicus Berk.

Brown Rat

A colony near her hen run was active in February and March, 1980, and was very bold, but finally destroyed by S.J.W. One by Caversham Mill Stream, 20.5.80, one dead nearby 2.6.80.

Arvicola amphibius (L.)

Water Vole

Signs at Dinton Pastures, 4.4.80.

Microtus agrestis (L.)

Short-tailed Vole

One dead at Moor Copse, 22.3.80 (Mrs. Charley). One dead at Shaw, Newbury, 30.7.80.

Clethrionomys glareolus Schreber

Bank Vole

One at Wyfold Copse, 8.6.80, active among fallen branches, One dead at Kennylands, 22.6.80.

Sciurus carolinensis Gmel.

Grey Squirrel

Maximum of four together at Spencer's Wood, 27.4.80, feeding on sycamore buds and corn put out for hens; two there throughout the year (S.J.W.). One in Christchurch Road, 13.1.80, one in Northcourt Avenue, 13.9.80 and 20.9.80 (L.E.C.). One dead in St. George's Road, 9.4.80. Forty sightings from South Oxfordshire (L.E.C. and Recorder), maximum three in New Copse, 8.6.80.

Meles meles (L.)

Badger

One dead on the M4 near Burghfield, 18.4.80 (S.J.W.). One dead on Horsepond Road, Gallowstree Common, 4.5.80, as usual a young female.

Mustela erminea L.

Stoat

One near Shinfield, September 1979, one near Stratfield Saye later that year (S.J.W.) bring the total for 1979 to five.

Mustela nivalis L.

Weasel

One dead at Spencer's Wood, 13.2.80, one killed and partly eaten by cat there, September 1980 (S.J.W.). One dead at Binfield Heath, 4.3.80, also at Whitchurch Hill, 25.7.80 (B.T.P.).

Vulpes vulpes (L.)

Fox

One at Calcot, second week of November 1979 and one with cubs at Swainstone Road, 24.5.80 (a rather late date) (B.C.). One at Riseley, December 1979, one by the newly opened Swallowfield by-pass at 6 a.m. apparently digging for invertebrates, three dead on the M4 between Theale and Pingewood in September 1980, one crossing the A4 at Twyford, 10.11.79 (S.J.W.). One with a duck in Kendrick Road, 18.12.79 (A. Postle). Single foxes at Padworth, 26.10.79, 8.2.80, 11.2.80, two there 27.5.80 (M.J.H.). Heard calling in the Sonning Common area on seven occasions. One at Moor Copse, 17.5.80, one dead at Calcot, 26.7.80 (B.R.B.)

Dama dama (L.)

Fallow Deer

Present at Coombe Wood, 12.7.80 (B.R.B.). Slots in Flowercroft Wood, Peppard, 8.3.80, two deer there, 29.5.80. A doe in Crowsley Forest, 16.7.80, three there 9.7.80.

Capreolus capreolus (L.)

Roe Deer

Two does and a fawn at Coombe Wood, 12.7.80 (B.R.B.).

Muntiacus reevesi Ogilby

Muntjac

One at Fence Wood, Hermitage, at Easter 1980 (P. Brough). Droppings found by the Henley Fairmile, 8.3.80. One or two heard on fifteen occasions in South Oxfordshire.

Contributors:

B. R. Baker (B.R.B.), Mrs. Baker P. Brough, Mr. Bull, Miss M. J. Carter (M.J.C.), Mrs. Charley, Miss L. E. Cobb (L.E.C.), B. Connell (B.C.), R. Deacon (R.D.), M. J. Dumbleton (M.J.D.), Mrs. C. Frank (C.F.), M. J. Hitchcock (M. J. H.), B. T. Parsons (B.T.P.), A. Postle, Mrs. M. Tucker, Mrs. S. J. Whitfield (S.J.W.).

The Recorder's Report for Entomology 1979-1980

B. R. Baker

Order Odonata (Dragon-flies)

Platycnemis pennipes (Pallas) White-legged damsel-fly
Strand Water, Cookham. First noted in 1978 and observed
again in 1980 (M.A.).

Order Psocoptera (Book-Lice)

Metylophorus nebulosus (Steph.)
Crowsley Forest, July 29th (H.H.C.).

Order Siphunculata (Sucking Lice)

Pthirus pubis (L.)
Reading, July 17th (H. H. C.).

Order Hemiptera (Plant Bugs, Aphids, Scale Insects, etc.)

Anthocoris nemoralis (F.)
Harpsden Golf Course, February 8th, under dead elm bark
(H. H. C.)

Aphrodes flavostriatus (Don.)
Crowsley Forest, September 2nd (H.H.C.).

Order Neuroptera (Alder-flies, Snake-flies, Lacewing-
flies)

Raphidia maculicollis (Steph.)
Pamber Forest, occasional specimens observed during May
(W.G.H.).

Osmylus fulvicephalus (Scop.) Giant Lacewing
Moor Copse Nature Reserve, May 18th, two specimens seen
by banks of River Pang.

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

Dolerus bimaculatus (Geoff.)
Cothill, June 14th, a local and uncommon species which
has been recorded from this locality in the past (H.H.C.).

Monosoma pulverata (Retz.)
Kintbury Wilderness, larvae taken in July 1979 produced
adults in July 1980 (A.J.H.).

Nematinus willigkiae Stein
Kintbury Wilderness, larvae taken in July 1979 produced
adults in July 1980 (A.J.H.).

Rhyssa persuasoria (L.)
Pamber Forest, June 1980, an estimated twenty examples,
males and females, of this large ichneumon-fly were
observed pairing and egg-laying on a fallen trunk of
Douglas Fir (W.G.H.). (The fallen trunk will also have
contained Rhyssa's host, the large saw-fly Urocerus

gigas (L.) the Giant Horntail.)

Gasteruption assectator (L.)

Crowsley Forest, July 16th, a single female (H.H.C.).

Rakosina deplanata Bouc.

Woolhampton, bred from material collected there in 1978; new to Britain (M.S.).

Andricus lignicola (Hartig)

Further records of this gall come from New Copse, March 9th, and Clayfield Copse later the same month. Galls collected in College Wood on Quercus petraea produced adults February 15th to 18th. The species was first recorded in the Reading area from Crowsley Forest in 1978 (H.H.C.)

Andricus quercus-calicis (Burgs.)

This species is now widespread in the Reading area and galls were found in Monkton Copse on February 11th (B.B.).

Sapyga quinquepunctata (F.)

A male of this species (usually parasitic on Osmia rufa (L.)) was caught hovering about a wooden fence by Abbey Wall, Reading, May 13th (H.H.C.).

Crossocerus binotatus Lep.

Crowsley Forest, July 22nd. Taken at a rotting birch Betula pendula in the Birches Wood part of Crowsley (H.H.C.).

Pemphredon morio Lind.

Birches Wood, Crowsley Forest, July 16th, from a dead sycamore Acer pseudoplatanus. This same tree, which is riddled with borings of the beetle Ptilinus pectinicornis (L.) has produced many other species of solitary Sphecid wasps and their parasitoids (H.H.C.)

Order Coleoptera

(Beetles)

Lucanus cervus (L.) Stag Beetle

It seems to have been a good year for these impressive-looking beetles, for the records received refer to casual finds in houses or on roads viz. Wensley Road, Reading, June 12th, specimen in a window recess (S.Y.T.), Welland Close, Tilehurst, July 2nd, a specimen indoors (M.R.W.S.), Allcroft Road, Reading, two or three examples noted during the summer (B.T.P.).

Odontaeus armiger (Scop.)

Aston Upthorpe Reserve, July 27th, two examples found in a moth trap following a night with thunder-storm activity (M.A.). (An interesting record of a species rarely recorded in our area.)

Plagioderma versicolora (Laich.)

Thatcham, record resulting from a N.C.C. survey (H.H.C.).

Darynotus obscurus (F.)

Baughurst, November, 1979 (H.H.C.).

Ceutorhynchus constrictus (Marsh)

Chalkhouse Green, May 15th (H.H.C.).

Order Lepidoptera

(Butterflies and Moths)

Hepialus fusconebulosa (Deg.) Map-winged Swift
Fence Wood, June 13th (T.J.G.H.).

Synanthedon flaviventris (Stgdr.) Sallow Clearwing
Near Knowl Hill, in galled stems of Salix caprea (M.R.B.).

S. myopaeformis (Dorkh.) Red-belted Clearwing
Caversham, June 25th, adult at rest on apple trunk.
Mansfield Road, Reading, June 25th, pair in cop. on
apple tree; June 26th, empty pupae in bark of mature
pear trees, one adult and empty pupa case on an old apple
tree. Kendrick Road, Reading, empty pupa cases noted
(A.P.). (Mr. Price's records of this clearwing are par-
ticularly interesting for their mention of pear as a
host plant, apple is the more frequent host.)

S. formicaeformis (Esp.) Red-tipped Clearwing
Near Knowl Hill, a galled stem of Salix caprea collected
in November produced an adult moth on June 13th (M.R.B.).
Woolhampton, March 29th, larval workings noted, and moths
bred during June and July.

Plodia interpunctella (Hb.) Indian Meal Moth
Reading, April 9th (M.V.F.). (This species, long known
as an accidental introduction, occurs in warehouses,
where the larvae feed on stored cereals, dried fruits or
other stored vegetable products. Specimens may occasion-
ally be noted in local shops - Mr. Fletcher's specimens
were detected in peanuts.)

Hesperia comma (L.) Silver-spotted Skipper
Watlington Hill, August 23rd, many seen (W.G.H.).

Lysandra coridon (Poda) Chalkhill Blue
Hartslock, August 11th and 12th, many freshly emerged
males noted (B.T.P.); Aston Upthorpe Downs, August
21st, many seen (W.G.H.); Watlington Hill, September
1st (B.T.P.).

Ladoga camilla (L.) White Admiral
Pamber Forest, numerous during July and early August.
Tidmarsh Lane, July 10th (E.M.T.). Sulham Lane, July
24th; Frilsham Common, August 1st; Sulham Woods,
August 4th (E.M.T.).

Apatura iris (L.) Purple Emperor
Upper Woolhampton, a pair observed over a period of
three weeks during which time they were photographed
(Mrs. M. Tucker). Bucklebury Common, July 22nd,
10.30 a.m. (information telephoned to Museum and sub-
sequent note but no name given). Aldermaston, July 25th,
a male specimen retrieved from within a building by Mr.
D. S. G. James (G.E.F.). Pamber Forest, July 26th, four
examples observed (W.G.H.). Near Daughurst, July 23rd
(P.S.).

Vanessa atalanta (L.) Red Admiral
Fence Wood, May 17th. Aston Upthorpe Reserve, July 26th
(M.A.). Wokingham, two specimens noted on buddleia
between mid August and September 3rd (R.J.G.). Earley,

two on buddleia during September (D.T.P.). Matlock Road, Caversham, two in September and a late example on October 7th.

Cynthia cardui (L.)

Painted Lady

This immigrant species appears to have had a good year over the whole country. Our local records are: Emmer Green June 8th (J.H.F.N.); Tadley Common, June 9th (P.S.); Pangbourne, June 13th, August 20th (E.M.T.); Aston Upthorpe Reserve, July 26th (M.A.); Whiteknights, August 15th (D.T.P.); Surley Row, August 17th (P.S.); Vastern Road, four, August 18th; Matlock Road, one, August 18th, September 3rd; Watlington, September 1st (D.T.P.); Dinton Pastures, September 6th (L.E.C.); Wokingham, two noted on buddleia between mid August and September 3rd (R.J.G.)

Polygonia c-album (L.)

The Comma

Caversham, 4th April. A pair in cop. found sitting on a line of washing. They were still paired when brought to the Recorder in the late afternoon and were then placed on a twig of ivy in the garden. Next morning they had separated but were still on the same twig. The male flew at 10.00 a.m. and the female at 10.10 a.m. (Judith Haine). Silchester, June 30th; Mortimer, July 10th; Hartslock, July 25th; Earley, August 10th to 12th (D.T.P.). Dalmore, May 11th (P.S.). Wokingham, two specimens noted between September 24th and 26th on buddleia and a pear tree (R.J.G.).

Boloria selene (D. & S.)

Small Pearl-bordered
Fritillary

Mortimer West, a new colony discovered (W.G.H.). Aldermaston, June 8th (G.E-F; K.H.P.; P.S.).

Argynnis paphia (L.)

Silver-washed Fritillary

Pamber Forest, July 3rd and subsequently but in smaller numbers than in recent years (W.G.H.).

Tethea or (D. & S.)

Poplar Lutestring

Fence Wood, June 2nd-3rd (M.R.D., N.M.H.).

Idaea emarginata (L.)

Small Scallop

Sandford Mill, July 28th-29th (N.M.H.).

Orthonama obstipata (F.)

The Gem

Caversham, September 3rd.

Catarhoe cuculata (Hufn.)

Royal Mantle

Moor Copse Nature Reserve, July 11th-12th (N.M.H.); Emmer Green, (J.H.F.N.).

Pelurga comitata (L.)

Dark Spinach

Aldermaston, August 19th (G.E-F; K.H.P.; P.S.).

Lampropteryx suffumata (D. & S.)

Water Carpet

Reading Golf Course, April 23rd (P.S.); Fence Wood, April 15th-16th, April 24th-25th, May 15th-16th, June 2nd-3rd, (M.R.D., N.M.H.); Basildon Park, June 3rd-4th (N.M.H.).

Eulithis prunata (L.)

The Phoenix

Moor Copse Nature Reserve, July 11th-12th (N.M.H.).

- Rheumaptera cervinalis (Scop.) Scarce Tissue
Moor Copse Nature Reserve, April 23rd.
- R. undulata (L.) Scallop Shell
Fence Wood, August 8th-9th (N.M.H.).
- Philereme vetulata (D. & S.) Brown Scallop
Moor Copse Nature Reserve, July 11th-12th (N.M.H.);
Maidenhead Thicket, July 19th-20th (T.J.G.H.).
- P. transversata (Hufn.)
 ssp. britannica Lempke Dark Umber
Maidenhead Thicket, July 19th-20th (T.J.G.H.); Aston
Upthorpe Nature Reserve, July 27th (M.A.).
- Perizoma bifaciata (Haw.) Barred Rivulet
Moulsford Downs, August 8th-9th (M.R.B.).
- P. flavofasciata (Thunb.) Sandy Carpet
Basildon Park, June 3rd-4th; Sandford Mill, June 11th-12th;
July 3rd-4th, 28th-29th (N.M.H.); Moulsford, July 12th
(P.S.); Maidenhead Thicket, July 19th-20th (T.J.G.H.);
Aston Upthorpe Nature Reserve, July 27th (M.A.).
- P. didymata (L.) Twin-spot Carpet
Moor Copse Nature Reserve, July 11th-12th (N.M.H.); near
Baughurst, July 29th (P.S.).
- Eupithecia insigniata (Hb.) Pinion-spotted Pug
Caversham, June 2nd.
- E. intricata (Zett.)
 ssp. arceuthata Freyer Freyer's Pug
Aldermaston, June 8th (G.E-F; K.H.P; P.S.); Sandford Mill,
June 11th-12th (N.M.H.).
- Chloroclystis chloerata (Mab.) Sloe Pug
Fence Wood, April 27th, larvae (M.R.B.).
- C. debiliata (Hb.) Bilberry Pug
Fence Wood, May 17th, larva (M.R.B.). New Vice County
Record.
- Cepphis advenaria (Hb.) Little Thorn
Tadley, June 4th; Pamber Forest, June 19th (P.S.).
- Plagodis pulveraria (L.) Barred Umber
Fence Wood, May 15th-16th (N.M.H.).
- Selenia lunularia (Hb.) Lunar Thorn
Basildon Park, June 4th-5th (N.M.H.); Aldermaston, June
12th (G.E-F; K.H.P; P.S.).
- Apocheima hispidaria (D. & S.) Small Brindled Beauty
Tilehurst, March 11th-12th (N.M.H.); Fence Wood, abundant
during February and March (M.R.B; N.M.H.).
- Cleora cinctaria (D. & S.) Ringed Carpet
Aldermaston, April 30th (G.E-F; K.H.P; P.S.).
- Boarmia roboraria (D. & S.) Great Oak Beauty
Fence Wood, June 27th-28th; July 23rd-24th (N.M.H.).
- Ectropis consonaria (Hb.) Square Spot
Fence Wood, April 24th-25th; May 15th-16th (M.R.B; N.M.H.);

- Basildon Park, June 3rd-4th (N.M.H.); Padworth, June 11th (P.S.); Aldermaston, May 23rd (G.E-F; K.H.P; P.S.).
- Macroglossum stellatarum (L.) Humming-bird Hawk-moth
Mapledurham, July 27th (J.H.F.N.). This uncommon immigrant was successfully photographed by the observer.
- Odontosia carmelita (Esp.) Scarce Prominent
Fence Wood, April 24th-25th (N.M.H.); May 15th-16th (M.R.B; N.M.H.).
- Leucoma salicis (L.) White Satin
Aldermaston, June 29th (G.E-F; K.H.P; P.S.).
- Eilema sororcula (Hufn.) Orange Footman
Caversham, May 19th.
- E. deplana (Esp.) Buff Footman
Fence Wood, March 9th, larvae (M.R.B.); adults July 25th-26th (M.R.B; N.M.H.).
- Meganola strigula (D. & S.) Small Black Arches
Fence Wood, July 23rd-24th (N.M.H.); 25th-26th (M.R.B; P.S.).
- Nola confusalis (H.-S.) Least Black Arches
Fence Wood, June 2nd-3rd (M.R.B; N.M.H.); Aldermaston, May 13th (G.E-F; K.H.P; P.S.).
- Rhyacia simulans (Hufn.) Dotted Rustic
Caversham, July 28th. Emmer Green, August 4th, 9th, September 7th (J.H.F.N.).
- Spaelotis ravidia (D. & S.) Stout Dart
Moulsford Downs, August 8th-9th (M.R.B.).
- Xestia rhomboidea (Esp.) Square-spotted Clay
Moulsford Downs, August 8th-9th (M.R.B.).
- Cerastis leucographa (D. & S.) White Marked
Fence Wood, April 15th-16th (M.R.B; N.M.H.). April 18th.
- Hadena compta (D. & S.) Varied Coronet
Aldermaston, June 19th (G.E-F; K.H.P; P.S.); Emmer Green, thirteen specimens during the season (J.H.F.N.); Caversham, June 27th, July 1st, 11th, 28th.
- Mythimna obsoleta (Hb.) Obscure Wainscot
Sandford Mill, July 3rd-4th (N.M.H.).
- Lithophane leautieri (Boisd.) Blair's Pinion
Emmer Green, October 10th (J.H.F.N.); Caversham, September 26th, October 26th, 27th, 31st.
- Acronicta alni (L.) The Alder
Basildon Park, June 3rd-4th (N.M.H.).
- Craniophora ligustri (D. & S.) The Coronet
Basildon Park, June 4th-5th (N.M.H.).
- Ipimorpha subtusa (D. & S.) The Olive
Aldermaston, first date July 28th and a total of five specimens subsequently recorded (G.E-F; K.H.P; P.S.); Sandford Mill, July 28th-29th (N.M.H.).
- Apamea ophiogramma (Esp.) Double Lobed
Moor Copse Nature Reserve, July 11th-12th; Fence Wood (N.M.H.).

- Oria musculosa (Hb.) Brighton Wainscot
Fence Wood, August 8th-9th (N.M.H.).
- Coenobia rufa (Haw.) Small Rufous
Sandford Mill, July 28th-29th (N.M.H.).
- Elaphria venustula (Hb.) Rosy Marbled
Caversham, June 16th.
- Heliothis peltigera (D. & S.) Bordered Straw
Emmer Green, June 7th, 10th (J.H.F.N.). An interesting
immigrant rarely recorded as far inland as Reading.
- Parascotia fuliginaria (L.) Waved Black
Sandford Mill, July 28th-29th (N.M.H.); Fence Wood, August
8th-9th (N.M.H.); Fence Wood, August 8th-9th; Caversham,
August 6th; Aldermaston, three records, the first on
August 9th (G.E-F; K.H.P; P.S.).
- Hypena rostralis (L.) Buttoned Snout
Moor Copse Nature Reserve, June 19th; Upton, one
specimen on ivy during October (M.R.D.).
- Schrankia costaestrigalis (Steph.) Pinion-streaked Snout
Fence Wood, July 25th-26th, August 8th-9th (M.R.B;
N.M.H.).

Order Diptera

(True Flies)

Ptychoptera lacustris Mg.

Dry Sandford Pit, June 14th, new to the Museum collections but recorded previously in the Reading area (H.H.C.).

Chorisops nagatomii

College Road, Reading, July 29th 1973 and August 8th 1975 (E.B.). Chalkhouse Green, July 23rd, 1979 (H.H.C.). Not uncommon in the Reading area but hitherto confused with C. tibialis.

Chorisops tibialis (Mg.)

College Road, Reading, September 5th and 15th, 1972, August 25th, 1974, and August 18th, 1975 (E.B.). Goring Heath, August 15th, 1976 (H.H.C.). All other local records of this species relate to specimens not available for re-examination and may therefore really have been nagatomii.

Tabanus sudeticus Zell.

Transport and Road Research Laboratory, Crowthorne, July 31st (M.J.D.). A very large, impressive species seldom seen outside the New Forest.

Platypalpus pictitarsis (Beck.)

Crowsley Forest, July 22nd (H.H.C.).

Dolichopus claviger Stann.

Dry Sandford Pit, June 14th (H.H.C.).

Hercostomus metallicus (Stann.)

Cothill, June 14th (H.H.C.).

Medetera dendrobaena Kow.

Crowsley Forest, August 5th, a male on the previously mentioned dead sycamore (H.H.C.).

Rhaphium crassipes (Mg.)
Cothill, June 14th (H.H.C.).

Psila nigricornis Mg.
Chalkhouse Green, May 29th (H.H.C.). Previous specimens of Dr. Durrant's had escaped notice among Psila rosae (F.).

Heteromyza rotundicornis (Zett.)
College Road, Reading, December 10th, 1971, a hibernating female (E.B.).

Themira lucida (Staeg.)
Caversham Mill Stream, August 1979 (H.H.C.).

Sepsis orthocnemis Frey
Crowsley Forest, August, 1976 (H.H.C.). Determination of these two species had to await publication of our member Adrian Pont's book on Sepsidae. (The record of S. violacea Mg. at Chalkhouse Green should be deleted).

Clusiodes verticalis (Coll.)
Crowsley Forest, July 29th (H.H.C.).

Agromyza anthracina Mg.
Chalkhouse Green, May 15th (H.H.C.).

Napomyza bellidis Griff.
Chalkhouse Green, June 2nd, 1978 (H.H.C.).

Lipara lucens Mg.
Woolhampton, April 13th, gall on Typha latifolia (H.H.C.).

Thaumatomyia glabra (Mg.)
College Road, Reading, July 5th, 1973 (E.B.).

Pegohylemyia lineatula Karl
Wokefield Common, June, 1973 (E.B.).

Egle rhinotmeta Pand.
Kennylands, April 3rd, a male at willow (H.H.C.).

Emmesomyia socia (Fall.)
All Reading material has now been re-determined as E. villica (Mg.).

Pegomyia calyptrata (Zett.)
College Road, Reading, September 2nd, 1971 (E.B.).

P. deprimata (Zett.)
College Road, Reading, May 20th, 1975 (E.B.).

P. genupuncta Stein
College Road, Reading, May 25th, 1973 (E.B.).

P. maculata Stein
Goring Heath, November 11th, 1972 (E.B.).

P. winthemi (Mg.)
College Road, Reading, August 30th, 1969 (E.B.).

Fannia coracina (Leow)
Crowsley Forest, June 24th (H.H.C.).

Lophosceles mutatus (Fall.)
Kennylands, May 22nd (H.H.C.).

Mydaea tinctoria (Zett.)
Cothill, June 14th (H.H.C.).

ARACHNIDA

A fine specimen of Marpissa muscosa (Clerck), a larger relative of the familiar jumping spider Salticus scenicus (Clerck), on a fence post at Chalkhouse Green on 23.5.80 was found to have taken an unusual prey, the hunting spider Lycosa tarsalis Thorell (H.H.C.)

The Society's Entomological Evening

For this annual event the Society revisited Moor Copse Nature Reserve near Tidmarsh on the evening and night of July 11th. We were very fortunate with the weather, having an out-of-character dry, warm night, at variance with conditions which had prevailed for much of early July. The Recorder operated a lamp on the banks of the river Pang, Norman Hall lit up the interior of Hogmoor Copse and also applied a treacle run and Dr. Lorimer ran his apparatus across the river in Park Wood. In excess of sixty species were recorded, and John Ward and other members were able to photograph many of the species which were attracted to light and sugar.

Five species were recorded for the first time at Moor Copse bringing the current total for the Reserve to three hundred and nineteen; the additions are:

<u>Idaea dimidiata</u> (Hufn.)	Single Dotted Wave
<u>Catarhoe cuculata</u> (Hufn.)	Royal Mantle
<u>Euphyia unangulata</u> (Haw.)	Sharp-angled Carpet
<u>Hecatera bicolorata</u> (Hufn.)	Broad-barred White
<u>Apamea epomidion</u> (Haw.)	Clouded Brindle

Contributors

The Recorder would like to thank the following members and friends for records received:

M. Albertini (M.A.); B. Bristow (B.B.); Mrs. H. G. Baker (H.G.B.); M.R. Britton (M.R.B.); H. H. Carter (H.H.C.); Miss L. E. Cobb (L.E.C.); Dr. M. J. Dumbleton (M.J.D.); Lt. Col. G. G. Eastwick-Field (G.E-F.); M. V. Fletcher (M.V.F.); Dr. R. J. Grayer (R.J.G.); N. M. Hall (N.M.H.); Dr. A. J. Halstead (A.J.H.); W. G. Helyar (W.G.H.); T. J. G. Homer (T.J.G.H.); J. H. F. Notton (J.H.F,N.); K. H. Pinnock (K.H.P.); B. T. Parsons (B.T.P.); A. Price (A.P.); P. Silver (P.S.); M. R. W. Sell (M.R.W.S.); Dr. M. Shaw (M.S.); Miss S. Y. Townend (S.Y.T.); Mrs. E. M. Trembath (E.M.T.); Mrs. M. Tucker.

In addition, several specimens captured by the late Dr. Eric Burt (E.B.) have recently been identified and appear here.

Our thanks are also due to the Director of Reading Museum and Art Gallery for allowing us to incorporate any relevant records from the Museum's collections.

WEATHER RECORDS : 1980

contributed by M. Parry

STATION: READING UNIVERSITY

		JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	YEAR
MEAN DAILY TEMPERATURES °C	MAX.	5.4	9.5	8.3	13.3	16.6	18.8	19.0	20.9	19.0	13.0	8.9	8.6	13.4
	MIN.	-0.7	2.7	1.7	4.5	6.2	9.8	10.6	12.2	11.1	5.1	4.0	2.3	5.8
	MEAN	2.4	6.1	5.0	8.9	11.4	14.3	14.8	16.6	15.1	9.1	6.5	5.5	9.6
	RANGE	6.1	6.8	6.6	8.8	10.4	9.0	8.4	8.7	7.9	7.9	4.9	6.3	7.7
EXTREME TEMPERATURES °C	E. MAX.	10.5	12.8	13.0	20.9	26.0	28.3	27.8	24.3	23.5	17.2	15.5	12.9	28.3
	DATE	3	15	28	14	12	4	25	2	3	1	15	14	June 4
	E. MIN.	-5.1	-2.0	-4.5	-1.6	-2.0	6.0	6.6	5.6	6.6	-1.5	-1.5	-5.2	-5.2
	DATE	14	1, 26	22	4	9	9, 23	22	24	26	13	3	8	Dec. 8
	E. GRASS MIN.	-11.8	-7.5	-13.1	-8.0	-9.1	-1.8	0.2	0.1	1.0	-6.5	-7.2	-11.2	-13.1
DATE	3	26	22	7	9	7	22	24	3	13	3	8	Mar. 22	
DAYS WITH FROST		17	5	7	2	1	0	0	0	0	3	5	9	49
DAYS WITH GROUND FROST		27	17	20	15	12	1	0	0	0	12	16	20	140
SUNSHINE HOURS	SUM.	72.1	50.1	80.1	161.2	219.2	182.6	172.1	177.2	144.8	124.4	63.3	65.2	1512.3
	% POSS.	27	17	22	39	46	37	35	39	38	37	24	26	34
	DAILY MEAN	2.3	1.7	2.6	5.4	7.1	6.1	5.6	5.7	4.8	4.0	2.1	2.1	4.1
PRECIPITATION m.m.	AMOUNT	38	48	62	19	32	72	56	88	80	75	35	37	641
	RAIN DAYS	11	16	18	6	7	15	16	9	10	19	13	18	158
	MAX. RAIN IN 1 DAY	10.9	8.2	8.0	14.4	7.7	17.5	15.0	50.8	50.9	25.2	8.6	12.0	50.9
	DATE	20	22	17	1	28	13	25	14	20	15	14	19	Sep. 20
LONGEST RUN OF CONSECUTIVE RAIN DAYS		5	8	7	2	2	4	4	5	4	8	5	8	8
LONGEST RUN OF CONSECUTIVE DRY DAYS		9	4	4	20	12	6	4	11	4	3	5	4	20
SNOW OR SLEET DAYS		3	0	4	0	0	0	0	0	0	0	2	0	9
DAYS SNOW LYING		1	0	0	0	0	0	0	0	0	0	0	0	1
VISIBILITY	FOG AT 0900 G.M.T.	2	4	0	0	0	0	0	1	0	0	0	0	7
THUNDERSTORM ACTIVITY	DAYS OF THUNDER	0	0	0	0	0	5	2	1	4	1	0	0	13
	DAYS OF HAIL	0	0	1	0	1	1	0	0	0	0	0	0	3

Monthly Weather Notes, 1980

M. Parry

- January Rather cold, sunny and dry. Some especially cold nights around mid-month. An unusually high barometric pressure (1042mb) was recorded on the 12th.
- February Very mild - mean temperature more than 2°C above average and the warmest February for fourteen years. This month completed a warmer than average winter three months December-January-February.
- March Cooler than February and with more snow days than January. Frequent depressions made it cloudier, duller and wetter than an average March.
- April Average temperatures but very dry; 75% of the total rain fell on the first day; an absolute drought prevailed from 2nd to 22nd.
- May Dry and a little cooler than average. The 9th was the coldest May night in the University's record (which began in 1921). Sunniest month of the year.
- June Coolish, dull, wet and thundery. Contained the warmest day of the year.
- July Decidedly cool (the coolest July since 1922), it warmed up only in the final week. Dull and with not quite average rain, which however fell throughout many days.
- August Near-normal temperatures and sunshine but also very wet (50% more than average). Just over 50mm (about 2 inches) fell on one day in a series of thundery downpours.
- September Quite warm and sunny, but nearly as wet as August. Again about 2 inches of rain fell in one day: previous to the August occurrence, 2 inches in a day had been recorded only three times since 1921.
- October Cold with three air frosts (more than any October since 1955). Rainfall a little above average, largely due to 1 inch occurring on one day. Some clear days and sunshine above average.
- November Average temperatures, its lowest night temperature being no lower than October's lowest. Very dry, with rainfall only half the average.
- December Mild on the whole, despite a few cold nights; on the dry side and sunny.

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