

The Reading Naturalist

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THE READING NATURALIST

No.12 for the Year 1958-59

The Journal of
The Reading & District Natural History Society

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WALTER CHARLES FISHLOCK

1875 - 1959

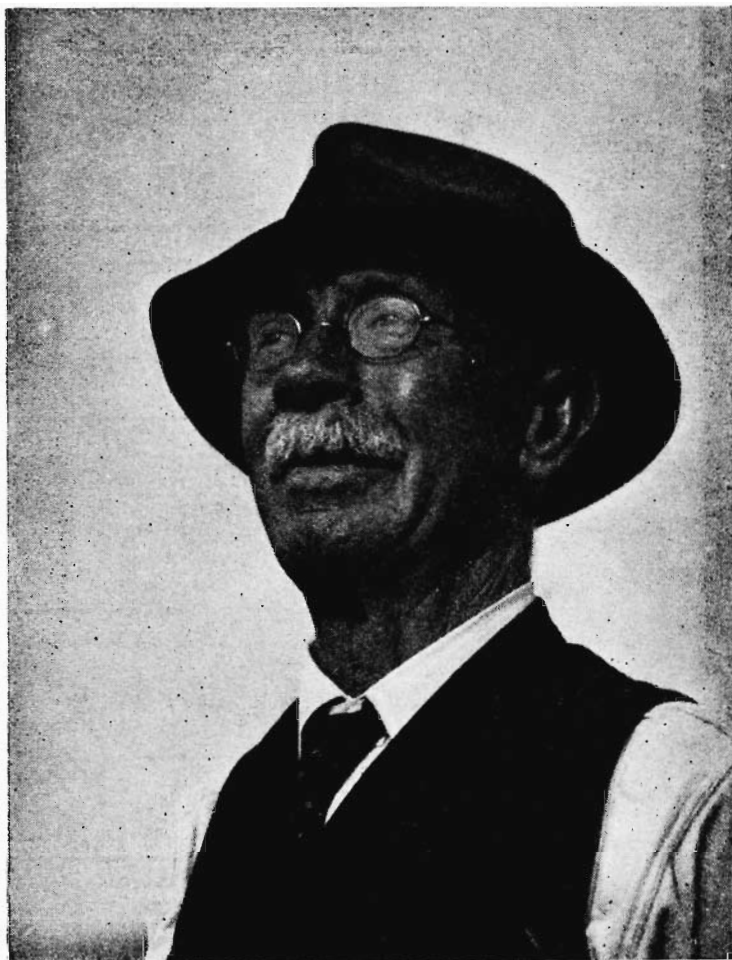
For more than a quarter of a century the Reading and District Natural History Society was privileged to have in Mr. Fishlock a benign and stimulating leader. Although for the past few years his health has prevented active participation in our activities, we were aware of his continued interest in, and affection for, our Society. His death shortly before Christmas took from us a personal friend as well as an outstanding figure in the cult of Natural History. His wide experience in scientific work and in administration brought to the Society qualities of very great value, and his memory will be a lasting inspiration for his successors.

Mr. Fishlock was born at Bathford in Somerset, and although most of his life was spent elsewhere, he delighted to revisit his home district and to introduce to parties of friends the town and country that he loved. His parents were in humble circumstances, and the village school provided almost all of his early education. He left school at the age of twelve, and after two years at home started his career as a gardener's boy at Bathampton at 15s. a week. At that time he attended classes at the newly opened Technical School in Bath, and it was there that he became fascinated by the scientific aspect of Botany.

In 1898, at the age of twenty-two, he decided to try his fortune in London, and after a year of jobbing-gardening he entered the Royal Botanic Gardens at Kew as a student-assistant in the Palm House. Here he profited greatly from classes in Economic Botany given by J.B. Jackson, and soon acquired an especial interest in tropical plants. His employment shifted to the Kensington Gardens in 1900, and in the following year the Director of Kew Gardens offered him a post as a botanist in the Gold Coast. This he was prepared to accept, but the medical examination overruled his desire. This was probably fortunate for him and for us, for at that time the Gold Coast was still the "White man's grave". He was to spend many years on the Coast later on, but by that time the study of malaria had reached the stage of at least partial control.

Early in 1902 he accepted a post with the Imperial Department of Agriculture for the West Indies, with the Virgin Islands as headquarters. He thus joined the band of pioneers who introduced scientific methods into tropical agriculture. On the journey out he visited many of the West Indian islands, and actually called at St. Pierre in Martinique just 23 days before the city was destroyed in the eruption of Mont Pelée on May 8th.

While in the West Indies, Mr. Fishlock took an active part in improving the cultivation of Sugar-cane, Bananas, Sea-island Cotton and many other tropical crops whose economic aspect was at that time precarious. His interests were by no means limited to his professional work, for he studied the history of the islands and the characteristics of their population. He



WALTER C. FISHLOCK

Photograph by T. R. Street

had a fund of amusing stories centred on the strange beliefs of the coloured folk. He also, without intention, experienced and survived a full-scale hurricane in 1916.

In 1920 he was appointed to a more important post in the Department of Tropical Agriculture in West Africa, and remained there until his retirement in 1932. In that same year he joined our Natural History Society and almost at once became its secretary. During his twenty-one years of service in that capacity he may be said to have "put us on the map" as an important member of the South-Eastern Union of Scientific Societies. This Union held two of its annual Congresses at Reading during his period office; unfortunately his failing health prevented his active participation in the 1958 meeting. He retired from the secretaryship in 1953, bequeathing that office to Mrs. Hasker, who, as Mrs. Fishlock, still holds it. His retirement as Secretary made it possible for the Society to show its recognition of his services by electing him as its President, and we had the advantage of his guidance in that capacity for four consecutive years.

Mr. Fishlock's energies were far from being restricted to his work for our Society, for he served in the Report Centre of the A.R.P. throughout the Second World War, in the Reading Food Office in 1943, and in the University Agricultural Advisory Service from 1944 to 1948. He was a local secretary for the Hospital Contributory Scheme for a considerable period.

Although primarily and by choice a botanist, he was an all-round naturalist, with a wide and remarkably detailed knowledge in other fields. He was never happier than when demonstrating natural phenomena to beginners, and it is fitting that, through the generosity of his widow, his memory will be perpetuated in the "Fishlock Prize" for primary school-children in Reading. While we lament his death, we can but rejoice that we were favoured by having him with us for so long.

H.L.H.

Editorial

Thanks to the willing co-operation of all concerned, and valiant last-minute efforts on the part of some, we have not only achieved our aim of advancing the date of publication of the "Reading Naturalist", but in doing so have managed to produce a larger and more varied number than we had dared to anticipate. We hope that everyone will find something of interest in it and that the availability of members' records a season earlier than formerly will prove useful to all.

We gratefully offer our thanks to all our contributors and advisors, to the Director of the Museum and Art Gallery, Mr.T.L. Gwatkin, for granting production facilities, and to those members who have given so generously of their time in helping with the work.

We are particularly pleased to be able to include the plate of Mr. Fishlock, which was prepared from a photograph taken by a former member at one of the Society's field meetings at Christmas Common, and has been presented by some of Mr. Fishlock's friends as a token of their affectionate esteem for him.

It is with pleasure that we record that the honour of winning the Laffan Prize for Natural History (Junior Section) this year has been shared by two well-known members of the Society, John Hodgson and Clive Johnson. John submitted an entry on Heathland Flora and Clive one entitled "Woodcraft (Clues to the Wild)". Last year, Clive was the winner with his work on Skull and Teeth Adaptations of the British Mammals and John came a very close second with a study of Chalk Flora.

Meetings and Excursions 1958-59

In addition to the Annual General Meeting (attended by 27 members), and three meetings devoted to the Presidential Address, for which Professor Hawkins chose as his subject "Water" (20), the Honorary Recorders' Reports (23) and Members' Exhibits (20), the winter programme included lectures by Mr. W. A. Smallcombe on "The Costa Brava" (49), Mr. R. Gillmor on "Bird Life in Spitzbergen", an account of the Reading University Expedition of 1957 (46), Dr. R.D. Williams on "Grass and the Plant Physiologist" (19 — a foggy evening), Professor C.H. O'Donoghue on "The Biology of Jasper National Park" (40), Mr. P. Hanney on "North of the Niger" (41), and Professor T.M. Harris on "Ghana" (42). An outstanding event was the visit of the Astronomer Royal, Dr. R.v.d. R. Wodley, on December 11th, when he lectured to a joint meeting of the Society with the Astronomers' Colloquium on "The Size of the Galaxy" (170)

The summer excursions were:- April 11th, Beenham, for plants and birds (8); April 22nd, Ufton Nervet, for birds, plants and archeology (11); May 2nd, "Green Trees", Greenham, by kind invitation of Martin Sutton Esq., for rare trees and shrubs (19); May 13th, Sheffield Bottom, for plants and geology (11); May 23rd, Mapledurham, for spring flowers (15); June 3rd, evening visit to Burghfield gravel pits for freshwater biology (30); June 13th, Ridgeway, for downland plants (8); June 24th, evening visit to Thames-side meadows for plants and freshwater biology (8); July 4th, Thatcham reed-beds, for insects and birds (10); July 15th, Sulham, an evening woodland walk (8); July 25th, Silchester and Pamber, for plants and insects (9); August 8th, Remenham, for chalk and river plants (8); August 15th, Highfield Park, Heckfield, by kind invitation of Major Stuart Black, for plants and archeology (14); August 26th, an evening visit to Finchampstead Ridges, for pinewoods and heather; September 5th, Hartslock Woods, for plants and birds (8); September 16th, Bearwood (2); September 26th, Highmoor, for autumn colours and fungi (8); October 3rd, Kingwood Common, Fungus Foray (28).

Any members with observations of general or topical interest that do not, by their subject or nature, fall within the scope of the Reports, are invited to submit accounts of them (typed, with double spacing, if anyhow possible, please) for consideration for the next part of the "Naturalist" before 1st January 1961. Offers of longer articles would also be welcomed.

The Berkshire, Buckinghamshire and Oxfordshire
Naturalists' Trust

On 14th November last 22 of our members travelled by coach to Oxford to attend the inaugural meeting of the above Trust. Over 200 people were present at this meeting and speakers included Air Marshal Sir Robert Saundby (Chairman), Dr. Bruce Campbell, Dr. Max Walters, Mr. R.S.R. Fitter and Mr. S.P.B. Mais. Among the many supporters for this venture are seven departments of the Universities of Oxford and Reading, and nine local natural history societies.

Since November the provisional Executive Committee has met twice and, though much of the business has necessarily been the formation of the "working machinery", reports of sites have already been received. In each of the 3 counties negotiations are going ahead to determine ways and means of preserving these sites which we hope will become our first Trust Areas.

Professor H.L. Hawkins and Mr. W.D. Campbell are serving on the Executive Committees as the representatives for Berkshire, Mr. D. Leatherdale and Mr. B.R. Baker are assisting the general secretary, Mr. R.S.R. Fitter, in the various clerical activities.

Although our Society is a subscribing member of the Trust, membership is also open to individuals. We would hope that many of you will follow the example of ten of our members who are individual subscribers.

It is hoped to include a new Trust brochure when summer excursion cards are sent to members - full details of the Trust are set out therein.

Finally, come along on the evening of Friday, April 29th to the Art Gallery - Berkshire will be holding its own public meeting and among other speakers we have been promised a visit from Professor H.R. Hewer of Imperial College who will illustrate his talk on "Badgers" by his own 16 mm. film.

Chiltern Research Committee

A meeting was held in Aylesbury Museum on 12th April 1959, at which it was decided to set up a Research Committee to study the problems of the Chilterns. The four meetings held in 1959 were of an exploratory nature, but it is hoped that serious work in the field will begin, on about six projects, in 1960. An expert on each subject will act as organiser, and each society will have its own recorder. The following subjects have been chosen, and two more are under consideration:-

<u>Project</u>	<u>Organiser</u>	<u>R.N.H.S. Recorder</u>
1. Distribution of the Juniper, how far it is regenerating itself, and what factors are responsible for its decline.	R.S.R. Fitter	Mrs. Simmonds
2. Status of the Woodlark and Wood Warbler.	Robert Gillmor	Robert Gillmor
3. Spread and distribution of the Muntjac.	T.J.Pickvance, M.A. B.Sc.	Mr. Leeke
4. Distribution of the Clifden Blue Butterfly, linked with its food plant, Horse-shoe vetch (Hippocrepis)	G. Taylor	Mr. B. Baker and Mrs. Simmonds
5. Drift Deposits	Professor Hawkins	Professor Hawkins

If any member is interested in these projects, please get in touch with the recorders, because the R.N.H.S. is the sole representative Natural History Society at the Southern end of the Chilterns.

The boundary of the Southern Region follows the Lower Icknield Way to Chinnor, then to Watlington, Benson and Goring. It follows the G.W.R. main line to Maidenhead from Goring. Our neighbours are the Middle Thames Natural History Society centred round Slough and Princes Risborough.

V. N. Paul

Weather Records in 1959

Data supplied by M. Parry

The data refer to Reading University Meteorological Station. A "rain day" is a day on which rainfall exceeds 0.01 in. The averages for temperature refer to the period 1921-50, those for amount of precipitation to 1916-50, and those for number of rain days to 1881-1915.

STATION - READING UNIVERSITY

HEIGHT ABOVE SEA LEVEL - 148 FT.

YEAR 1959

		JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	YEAR
MEAN DAILY TEMPERATURES °F	MAX.	41.8	45.1	53.4	57.3	65.9	71.3	75.5	74.5	72.8	63.7	50.6	48.4	60.0
	MIN. MEAN	30.7	34.4	39.4	43.2	46.5	51.1	55.1	56.0	50.3	46.8	38.4	37.4	44.1
EXTREME TEMPERATURES °F	E. MAX DATE	52 22	63 28	62 1,2	69 4	81 12	81 24	91 5	84 20	82 10,11	80 3	60 2	54 19	91 Jul,5
	E. MIN. DATE	22 17	27 19	33 26	36 29	36 5,6	42 2	45 14	46 30	37 28	35 29	23 12	27 2	22 Jan,17
	E. GRASS MIN. DATE	15 17	22 6	25 1,16,26	27 11,29	27 1,6	33 3,11	36 14	36 18	29 28	26 30	17 12	21 22	15 Jan,17
DAYS WITH FROST	GROUND FROST	22 25	10 13	0 15	0 6	0 5	0 0	0 0	0 0	0 2	0 3	9 13	5 15	46 97
SUNSHINE HOURS	SUM.	79.1	65.7	105.2	165.8	238.2	248.3	298.8	254.1	224.6	141.5	52.8	40.2	1914.3
	% POSS. DAILY MEAN	2.55	2.35	3.39	5.52	7.68	8.28	9.64	8.20	7.49	4.56	1.76	1.30	5.25
PRECIPITATION INS.	AMOUNT	2.82	0.25	2.50	2.24	0.29	1.51	2.12	1.16	0.03	2.66	2.25	4.08	21.91
	RAIN DAYS	17	6	17	16	7	11	8	8	1	16	17	25	149
	MAX. RAIN IN 1 DAY	0.47	0.18	0.40	0.36	0.13	1.00	1.02	0.30	0.03	0.58	0.43	0.48	1.02
	DATE	21	9	29	25	3	25	10	13	21	26	16	26	Jul,10
	LONGEST RUN OF CONSECUTIVE RAIN DAYS	7	3	6	7	3	4	3	6	1	6	7	11	
	LONGEST RUN OF CONSECUTIVE DRY DAYS	8	8	5	5	10	14	9	16	20	7	5	1	
	SNOW OR SLEET DAYS	5	0	0	0	0	0	0	0	0	0	0	0	5
	DAYS SNOW LYING	5	0	0	0	0	0	0	0	0	0	0	0	5
VISIBILITY	FOG AT 0900 G.M.T.	8	9	0	0	0	0	0	0	0	3	7	4	31
THUNDER-STORM ACTIVITY	DAYS OF THUNDER	0	0	1	2	2	5	6	2	1	0	0	2	21
	DAYS OF HAIL	0	0	2	4	0	1	1	0	0	0	0	0	8
AVERAGES MEAN DAILY TEMPERATURE OF	MAX.	45.2	46.3	51.8	56.9	63.7	69.2	72.3	71.5	66.8	58.8	50.2	45.7	58.2
	MIN.	34.3	34.5	36.1	40.1	44.8	50.5	54.1	53.4	49.9	43.8	38.3	36.3	42.9
	MEAN	39.8	40.4	41.0	48.5	54.3	59.9	63.2	62.5	58.3	51.3	44.3	40.5	50.6
PRECIPITATION	AMOUNT	2.41	1.78	1.69	1.90	1.86	1.61	2.53	2.20	2.10	2.60	2.74	2.30	25.72
	RAIN DAYS	15	13	13	12	10	10	12	13	11	15	15	15	153

The Recorder's Report for Botany, 1958-59

By K. I. Butler

The nomenclature followed for the flowering plants is that of Clapham, Tutin & Warburg in the "Flora of the British Isles" except for two species from Dandy's "Check List of British Vascular Plants". As the botanists tend to go further afield, the radius of the area covered is now extended from the usual ten to a rough twenty miles from Reading. The Recorder thanks all who have made this Report possible.

In spite of the phenomenal fine weather which broke so many records during 1959 and of the many observations carried out by botanists, from the first leaf buds of Arum maculatum L. found on January 1st to 23 species seen in bloom near Span Hill, Henley Road, at the end of the year, there were few botanical records of outstanding interest. Of the 596 plants, including grasses, that she actually noted in flower during the year, Mrs. A. M. Simmonds remarks that 559 were Berkshire species or could be found in the neighbouring counties (Hants, Oxon, Bucks) within ten miles of Reading, while 95 were observed within the Borough of Reading. Minor observations by Mrs. Simmonds were the absence of flowers on Fagus sylvatica L. (Beech) (a non-flowering year seems to occur very few years) and of fruits on Fraxinus excelsior L. (Ash) and Acer campestre L. (Maple), though many trees were examined. Professor Hawkins has commented on the extreme abundance of fruit on Taxus baccata L. (Yew) this autumn. After last year's success, 1959 proved rather disappointing for orchids.

To follow up the record of Miss E. Harris in 1958 of Crocus purpureus Weston (Purple Crocus) growing in the Inkpen district of Berkshire, Dr. Erith and the Recorder visited the pasture and saw the crocus growing in great profusion and with a wide range of colour from dark purple to white. The form alluded to by Druce (1894) was also noted, "the inner perianth segments beautifully veined with darker lines, the dark primary veins and a large number of secondary ones crossing one another obliquely from the margin".

Professor T. Harris (Reading University) has sent the following observations on Potamogeton nodosus Poir. (= P. drucei Fryer). "I have searched the Loddon from Basingstoke to Stratfield Saye Park without finding a trace. Then a few hundred yards below Stanford End Mill (just below Stratfield Saye Park) it begins as a dense mass, so dense that it is hard to get a boat through it. Below that it occurs all the way to Wargrave, but only in abundance in water less than about 3 ft. deep and flowing fairly quickly. This perhaps suggests that the species reached the Loddon somewhere below Stanford End at some time and has been very slowly creeping upwards, but that it spreads downwards with ease from broken-off bits of rhizome."

Last year Mr. A. Price introduced some members to Chara vulgaris (Common Stonewort) growing in a Burghfield gravel pit. This year he has found, after a lapse of nearly two years, Nitella translucens, another

member of the family Characeae. It was growing in the pond near the "Three Firs", Burghfield, probably the same pond where Druce in 1887 saw it "filling it to the exclusion of other aquatic vegetation."

Further Members' Records

Equisetum telmateia Ehrh. (Great Horsetail). Beenham, on the Society's Field Excursion on April 11th.

Asplenium trichomanes L. (Maidenhair Spleenwort). On churchyard wall, Christchurch Road, Reading (Miss L.E. Cobb).

Helleborus foetidus L. (Stinking Hellebore). Woodland, Whitchurch, Oxon. (John Hodgson).

Rapistrum orientale (L.) Crantz. Rubbish tip, Theale (J. Hodgson).

Barbarea intermedia Bor. (Intermediate Yellow Rocket). Tip, Theale (Mrs. Hodgson).

Melandrium noctiflorum (L.) Fr. (Night-flowering Campion). Waste ground, Pangbourne (Mrs. Hodgson).

Chenopodium polyspermum L. (All-seed). Waste ground, Wargrave (Mrs. V. N. Paul); Ruscombe (Mrs. Simmonds).

Epilobium parviflorum Schreb. (Small-flowered Willow Herb). Henley, Oxon. (Mrs. Hodgson).

Hippuris vulgaris L. (Mare's Tail). Aldermaston (J. Hodgson).

Rumex maritimus L. (Golden Dock). Ruscombe Lake (Mrs. Simmonds, identification verified by Dr. Perrin of Cambridge).

Lathraea squamaria L. (Toothwort). Still growing on Elm at Dyson's Wood, April 26th (Miss Cobb); Ashampstead Woods (Mrs. Simmonds).

L. clandestina L. (Purple Toothwort). Naturalised in Prospect Park on the ground and on the trunk of Willow, April 24th (Miss Cobb).

Orobanche elatior Sutton (Tall Broomrape). Berkshire Downs, between White Horse Hill and Wayland's Smithy (Miss Cobb).

Primula veris L. x vulgaris Huds. = P. x variabilis Goupil (Common Oxlip). Chalk slope, Streatley (J. Hodgson).

Mentha x niliaca Jacq. (M. longifolia (L.) Huds. x M. rotundifolia (L.) Huds.) Highmoor, August 3rd (Miss Cobb).

M. x piperata L. (M. aquatica L. x spicata L. emend. Huds.) var. citrata (Ehrh.) Briq. Waste ground, Streatley (J. Hodgson).

Berberis vulgaris L. (Barberry). Lane leading off Lower Warren, Caversham (Mrs. Simmonds); Remenham (Miss Cobb).

Artemisia absinthium L. (Wormwood). Waste ground, Theale (Mrs. Hodgson).

Galanthus nivalis L. (Snowdrop). Mrs. Simmonds has sent the following observations. "In a copse below Avenue House, Sindlesham, two plants were seen on March 1st, each bearing a flower, and several plants without leaves. All these plants were very near the river's edge, and one speculates whether the bulbs have been brought down by flood-water from Moor Copse a few miles upstream. It will be interesting to see whether G. nivalis will establish itself in this wood if it remains unmolested."

Coeloglossum viride (L.) x Orchis fuchsii Druce. This hybrid, found last year on the Moulsoford Downs, was considered to be in danger from grazing cows, so was transplanted to a safer spot by Mr. D.E. Bradley.

Gymnadenia conopsea (L.) (Fragrant Orchid). Growing in quantity again on the Moulsoford Downs, but being grazed by cows (D.E. Bradley).

Orchis simia Lam. (Monkey Orchid). Although this orchid is still holding its own, it is apparently being interfered with in some way. A film of its nine fine blooms was taken by Mr. Boggart (Bournemouth), but Dr. Erith reported that a few days later only six flowers were found and there were obvious signs that the plants had been disturbed. When Mrs. Simmonds and Mrs. E. R. Blackwell visited the slope on May 20th, only two very poor specimens were seen, even after a careful search.

O. morio L. (Green-winged Orchid). Abundant in a paddock near Newbury; in a field at Russell's Water. Miss Cobb reports that both these localities were being grazed by horses, and wonders if there is any connection between the decrease in the orchid and the decrease in the horse population.

O. ustulata (Burnt-stick Orchid). The Downs near Ashton Upthorpe were visited again this year, and although buds were seen early by D. E. Bradley, Mrs. Simmonds and Mrs. Paul failed to find any flowers on June 10th.

Aceras anthropophorum (L.) S.F. Gray (Man Orchid). The slope on which it has been recorded since 1945 has now been completely ravaged by pigs, and no plants were seen there this year (Mrs. Simmonds).

Lemna trisulca L. (Ivy Duckweed) and L. minor (L) (Duckweed). Both abundant in a ditch in Cow Lane, Reading (A. Price).

L. polyrrhiza L. (Great Duckweed). Abundant in Sulham ponds, although they were nearly dry (A. Price).

Carex serotina Merat. Silchester (J. Hodgson).

C. elongata (Elongated Sedge). Wood, Aldermaston (J. Hodgson).

C. polyphylla Kar. & Kir. Whitchurch, Oxon. (J. Hodgson).

C. laevigata Sm. (Smooth Sedge). Burghfield (Mrs. Hodgson)

Bromus commutatus Schrad. (Meadow Brome). Wood, Aldermaston (J. Hodgson).

B. ferronii Mabile. Tilehurst Station (Mrs. Hodgson).

B. lepidus Holmberg. Tilehurst Station; Theale tip; arable land, Aldermaston (Mrs. and J. Hodgson).

Nardurus maritimus (L.) Murb. This grass, listed in Dandy's Plant List, but not yet in the majority of floras, was found near Christmas Common by Mrs. Paul. It is characteristic of ant hills.

Hordelymus europaeus (L.) (Hordeum sylvaticum Huds.) (Wood Barley). Bix Bottom Wood (Mrs. Paul).

Introduced Plants

Colutea arborescens L. Coste (Bladder Senna). A deciduous shrub which is naturalised on railway banks and in waste places, found by the railway, Reading (Mrs. Hodgson).

Galinsoga ciliata (Raf.) Blake. Henley Tip (Mrs. Hodgson).

Poterium polygumum Waldst. & Kit. This species, closely allied to P. sanguisorba L. and grown for fodder, has become naturalised in field borders. Arable land, Goring. (J. Hodgson).

Cornus stolonifera Michx. A shrub closely allied to C. sanguinea L. and frequently planted and naturalised. On building site (Mrs. Hodgson).

Omphalodes verna Moench Coste (Blue-eyed Mary). Whitchurch (Mrs. Hodgson).

Cannabis sativa L. (Hemp). Brought into Reading Museum from Peppard Common. The plant had grown to a height of 8 ft., and presumably originated from waste bird-seed (Mrs. Simmonds).

Amaranthus retroflexus L. (Green Pigwood). Another alien plant occurring as a casual. Sent to the Museum from Winnersh (Mrs. Simmonds); waste ground, Pangbourne (J. Hodgson).

Datura stramonium L. (Thorn-apple). Dr. Perrin, Director of the Maps scheme of the Botanical Society, has mentioned the widespread growth of D. stramonium, probably due to the long dry summer. Such is the power of the press, supported by the Ministry of Agriculture and the police, that this season it has become Public Enemy No.1, and Reading, where it has made several appearances, has not been immune from the scare.

The Recorder's Report for Entomology

1958 - 59

By B. R. Baker, B.Sc., A.M.A., F.R.E.S.

The Recorder wishes to thank the following members for submitting records for inclusion in this report:- H.L. Dolton, A. Price, Mrs. A. M. Simmonds and Dr. E. V. Watson. The Director of Reading Museum has again kindly made available the season's records kept at the Museum.

Early Appearances of Hibernators

- 28th February Reading. Seven Small Tortoiseshell butterflies, Aglaia (Vanessa) urticae (L.) were observed flying around a flowering shrub in Coley Avenue. A Brimstone butterfly, Gonepteryx rhamni (L.), was seen later on the same day.
- 24th March Pyestock, Hampshire. 4 specimens of the very local Dotted Chestnut moth, Dasycampa rubiginea (Schiff.), were taken at sallow bloom. These hibernators were kept alive for up to a month and a large number of fertile ova resulted.

Notes on Individual Insect Orders

Order Ephemeroptera (Mayflies)

- 11th January Caenis horaria (L.). Nymphs taken at Tilehurst Potteries.
- 1st February Ephemera danica Muell. Nymphs abundant at Tidmarsh Mill.
- 23rd May Caenis moesta Bengt. Nymphs taken from the Thames at Reading on 15th May, produced imagines on the 23rd.
- 2nd July Ecdyonurus insignis (Eaton). 2 male adults taken at Woolhampton.
- 14th July Caenis robusta Eaton. A small colony discovered in the lake at Caversham Park. In captivity sub-imagines first appeared on 18th July.

Order Odonata (Dragon-flies)

- 30th April Coenagrion puellum (L.). A nymph taken at Whiteknight's Lake earlier in the month emerged at this date.
- 17th May Anax imperator Leach. Many exuviae of this beautiful species noted at Wokefield Common Pond.
- 21st June Orthetrum cancellatum (L.). A newly emerged female taken at Queensmere Lake.
- 13th September Sympetrum scoticum (Leach). Couples in tandem seen ovipositing at Kingsmere Lake. (Most of the Zygoptera or Damselflies oviposit in tandem whereas in the Anisoptera - larger dragon-flies - the male releases the

female but often hovers near whilst oviposition is in progress. (Sympetrum therefore does not behave as most other Anisopterans.)

20th September Aeshna mixta Lat. Couples noted flying in tandem on the Thames near Littlejohns Farm.

Order Plecoptera (Stone-flies)

28th January Taeniopteryx nebulosa (L.) Nymphs were found to be numerous amongst Fontinalis at Caversham Weir. Adults emerged in the Museum from 2nd to 7th February.

Order Neuroptera (Lacewing-flies etc.)

31st May Osmylus fulvicephalus (Scop.). This beautiful lace-wing was plentiful on the stream in Pamber Forest.

Order Trichoptera (Caddis-flies)

22nd March Holocentropus dubius (Ramb.). A number of the carnivorous, web-spinning larvae were collected at this date from Wokefield Common Pond. The first adult emerged on 5th May.

Order Lepidoptera (Butter-flies and Moths)

Wood-boring larvae

Larvae of 3 species of clearwing moth were found during the season.

16th March Aegeria andreniformis (Lasp.). Infested trees of Viburnum lantana were found at Hardwick, Fawley Bottom and on Streatley Hill. Larval parasitization was heavy but a few adults emerged from the cut stems between 13th and 15th June.

5th April A. culiciformis (L.). Larvae abundant in cut birch stumps at Burghfield. Adults emerged in captivity from 4th to 14th May.

9th, 18th May A. spheciformis (Schiff.). The alders at Pamber Forest still harbour this clearwing and larvae and pupae were found on the dates mentioned. Adults emerged in captivity from 23rd to 30th May.

Migrant Species

In spite of the exceptionally fine summer migrant Lepidoptera were few in species.

26th September Vanessa atalanta (L.) (Red Admiral). Over a dozen were observed flying around ivy blossom at Calcot.

Macroglossa stellatarum (L.) (Humming-bird hawk-moth).

Several records have been received for this attractive species:

8th August, Highgrove Street; 24th September, Lorne Street, Morgan Road; 27th September, Chester Street; 30th September, Honey-end Lane; 10th October, a specimen was seen to fly into the Museum main door; 14th October, Chester Street; 15th October, Reading University; 1st November, Holybrook Crescent.

Lepidoptera in the Reading Area

Work has continued into the fifth consecutive year on the survey of Lepidoptera of the marsh at Woolhampton, and 273 species of Macrolepidoptera have now been recorded from this locality. Some of the interesting species noted in 1959 are as under:-

31st March and 4th April	<u>Orthosia advena</u> (Schiff.) (Northern Drab). Several specimens on both dates.
4th June	<u>Leucania obsoleta</u> (Hubn.) (Obscure Wainscot). Absence of fire in the reed-bed this year had a marked influence on this species which feeds on the leaves of <u>Phragmites</u> and pupates in reed stubble. <u>L. obsoleta</u> abounded from early June until early July.
4th and 11th June	<u>Apamea unanims</u> (Hubn.) (Small Clouded Brindle). A few specimens on each night.
2nd July	<u>Anticollix sparsata</u> Treitschke (Dentated Pug). A single example flushed from thick reed cover. Probably a new county record.
8th, 15th and 22nd August	<u>Hydraecia petasites</u> (Doubl.) (Butterbur moth). Several netted at dusk and others to mercury vapour light.
8th August	<u>Cerura hermeline</u> (Goeze) (Poplar Kitten). First second-brood specimen ever noted at Woolhampton.
8th August	<u>Plusia festucae</u> (L.) (Gold Spot).
8th August	<u>Tholomiges turfosalis</u> (Wocke) (Marsh Oblique-barred).
8th August	<u>Cosmia diffinis</u> (L.) (White-spotted Pinion).

Lepidoptera from other localities

23rd May	<u>Cepphis advenaria</u> (Hueb.) (Little Thorn). Pamber Forest, 2 examples.
28th June	<u>Dipsosphecia scopigera</u> (Scop.) (Six-belted Clearwing). Fawley Bottom, a single specimen swept from amongst chalk plants.

Order Coleoptera (Beetles)

(Hydradephaga)

25th January	<u>Gyrinus urinator</u> Ill. 2 males taken in a small stream near Burghfield Bridge.
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- 22nd March Hydroporus memnonius Nic. & H. nigrita (F.). 6 examples of each taken in Sphagnum pools at Wellington College.
- 4th May Hygrotus versicolor (Schal.). 4 from the Thames (warm water effluent, Earley Power Station).
- 17th May Hygrotus decoratus (Gyll.) & Hydroporus neglectus (Schaum.)
Acid pond on Wokefield Common.
- 4th June Ilybius ater (De G.), I. obscurus Marsh., I. fuliginosus (F.).
These 3 species were taken at mercury-vapour light at Woolhampton. All had soft elytra indicating very recent emergences.
- 5th June Ilybius subaeneus Er., 1 female, and Rentus grapii (Gyll.),
2 Coleman's Moor, Woodley.
- 21st June Ilybius guttiger (Gyll.), Upwards of a dozen in a Carex
swamp, Queensmere.
- 21st June Ilybius aenescens Thomson. In Sphagnum, Kingsmere.
- 11th July Gyrinus marinus Gyll. In an artificial lake, Caversham Park,
1 male.
- 18th July Agabus affinis (Payk.). Upwards of a dozen in a Carex
swamp at Heath Pond.
- 6th September Orectochilus villosus (Muell.). Sul Stream near Sulham
Church, 2 males.
- 4th October Dytiscus circumcinctus Ahrens. Cow Lane, Reading, 2 males,
3 females.

The Recorder's Report of Ornithology,
1958-59

By E. V. Watson, B.Sc., Ph.D.

Introduction

This Report covers the period from October 31st, 1958 until October 31st, 1959. It is subdivided into fewer parts than usual, namely (1) Winter bird life; (2) Arrival and departure of summer visitors; (3) Passage migrants, Spring and Autumn; (4) Rare visitors; (5) Miscellany. The response from members of the N.H.S. has been even more disappointing than in previous years; indeed contributions have been almost non-existent. This account owes something to the pages of the Reading Ornithological Club Report for 1958, which has been the source of several interesting records for the period November - December, 1958. This debt is gratefully acknowledged. I am also deeply indebted to Mr. Robert Gillmor who has most kindly put at my disposal a long series of his own observations for 1959. These, together with my own scattered records, are the main basis for the present Report.

1. Winter bird life

The prevailing duck reached the customary high numbers on local waters quite early in the winter, records submitted by R.O.C. members and included

in their 1958 Report revealing, for example, 150 - 160 Mallard on Whiteknights Lake on November 16th, 90 Wigeon at Bulmershe on December 28th, some 70 Tufted duck on each of the three waters, Burghfield, Bulmershe and Theale "New pit" during December, and about 100 Pochard at Burghfield and at Theale in this month. After midwinter even higher figures were attained and Mr. Gillmor reports a record high figure, of 120 Tufted duck and 250 Pochard on Theale "New pit" on January 25th 1959.

Among other winter birds gulls are always prominent in this district, chiefly of course the Black-headed gull. At Cleeve on the coldest days of February one could see a few Common gulls and an occasional Herring gull associating with the Black-heads. Of considerable interest is H. M. Dobinson's record (see R.O.C. Report) of 2 Greater black-backed gulls over Sonning Common on December 9th 1958.

From Mr. J.E.G. Sutton came the record of a Short-eared owl picked up dead near Aston Upthorpe on December 17th. This is a species to be expected over the Downs in hard weather.

Among the smaller birds, no outstanding finch records have come in from the habitual winter flocks of stackyards, stubble and beechwoods. In this last, one can look so often at the numerous Chaffinches without detecting a Brambling. Mr. D. G. Bradley's record of Hawfinches, 5 to 8 in number, at Aldermaston Court in December, is of interest, however, since this decidedly local species is all too infrequently seen. John Richards reported (to the R.O.C.) some 60 Pied Wagtails at Manor Farm on December 18th and Mr. H. T. Randolph recorded a Grey Wagtail on the lawn of St. Mary's Vicarage on December 27th. This species can often be seen about central Reading during the winter, especially where water is to be found. The Stonechat, none too common nowadays in the district, was seen by Mr. Sutton at Aston Upthorpe on December 17th and by me at South Stoke on January 25th. I was fortunate to see both Greater and Lesser Spotted Woodpeckers in the same wood at Cleeve on February 1st. On the following day there were about 50 Goldfinches feeding on alders beside Whiteknights Lake, and on February 10th a small flock of about 12 were on the birches at the back of St. David's Hall on the University Main Site. It is in my experience unusual to see them there. The Cirl Bunting sang in my garden at Cleeve throughout December.

2. Arrival and departure of summer visitors

On the whole, many species tended to come into the country early and there is little doubt that the fine warm weather over much of Southern England on April 4th was marked by a major influx of migrants. Down in Somerset over that weekend, I had noticed that Chiffchaffs had come in strength by April 5th and Willow Warblers too had arrived. Meanwhile on this date (April 5th) Robert Gillmor was recording the first Willow Warblers in several places, the first Sedge Warbler (Aldermaston), the arrivals of Redshank at Sonning Eye and at Manor Farm, Yellow Wagtail at Manor Farm and Swallow at Theale "New pit". I observed some of these same species when I visited Manor Farm on April 9th. Linnets had returned to my garden as a breeding species by April 11th and on

April 12th Mr. Gillmor noted Whitethroat singing at Aldermaston gravel pit. After this the influx tended to be slowed down and one had the impression that some of the later migrants were behind rather than ahead of time. I heard no Blackcap and saw no Whitethroat before April 22nd. The Turtle Dove had returned to Collins End woods on May 4th, and on May 5th a second brilliantly fine, still morning, Swifts had come in strength to the London Road - Watlington Street area. Mrs. Fishlock reported them from the former and I met with them in the latter street.

Departures are notoriously harder to observe than arrivals and notes under this head are few. Mr. Gillmor records what was presumably a post-breeding Lesser Whitethroat in Northcourt Avenue on July 3rd and I had a similar experience of a Blackcap persistently "ticking" in my garden at Cleeve on August 6th. Of some interest are Mr. Gillmor's records of a juvenile cuckoo which was seen about Manor Farm at various times from July 29th until August 17th. Mrs. Fishlock noted that Swifts left on August 5th, but Mr. Gillmor met with late examples at Manor Farm on the 17th of that month. My own last date for House Martin, Swallow and Chiffchaff was October 7th, but this will doubtless have been far surpassed by others, especially in view of the prolonged warm weather experienced throughout most of October.

Passage migrants, Spring and Autumn

Easily the most favoured spot for passage waders now is Theale "New" gravel pit, and many of the better records are from there. It has a spit of wet sand and gravel not unlike that which existed some years ago at Burghfield, but now exists there no more. The outstanding spring record at Theale was an Oyster Catcher recorded by Mr. Gillmor on April 23rd. The same observer also noted Common Sandpiper at Burghfield on April 5th and Green Sandpiper at Manor Farm on April 22nd. I saw the latter at Theale "New pit" on April 19th. Records on the whole were much more numerous and exciting on the return passage, from late July until early September. All these are Mr. Gillmor's records: 3 Wood Sandpipers at Manor Farm, August 11th-18th; records of up to four Curlew from Theale "Old pit", Theale "New pit" and Manor Farm, on dates from August 8th - 25th; Greenshank, up to three, at Theale "New pit" on August 23rd and other dates up till September 4th; one Oyster Catcher on August 12th at Theale "New pit"; finally, 2 to 3 Dunlin at Manor Farm, July 30th - August 2nd and up to 6 at different times at Theale "New pit" between August 3rd and 15th. This is an impressive series of records.

Turning to gulls and terns, one may say again that the return passage gave the better results, although 3 Lesser Black-backed gulls on April 9th at Sonning were of course Spring passage migrants. Nobody has reported any Spring terns to me but Mr. Gillmor has notes of 3 species, on return passage, all at Theale "New pit". They were Little Tern, 2, August 2nd., Common Tern, 2, August 9th and 1, August 14th: and Black Tern, 1 on August 25th. In general we are apt to see more of this last species on the upward journey during May.

As regards small passerine birds on passage through our area, Theale afforded Mr. Gillmor several Wheatear records, 4 on April 25th on the Spring

journey and 1, August 8th, 6, August 23rd, and 2, September 5th, on the return passage. Two were on Sonning Golf Course on August 6th. I noticed 2 Whin-chats along Gatehampton Road, Goring, on September 1st and a Redstart in bushes flanking one of the fairways on Streatley Golf Course on September 3rd.

A count of Coots on Burghfield gravel pit on September 5th resulted in a figure around 160, and it seems possible that this normal inhabitant of that water may have had its population "swollen" by individuals on passage.

All the above records add up to but a smattering of what might be detected if half a dozen keen observers set out to make a really thorough watch between late March and late May and again from late July until mid-September. There is very little doubt that a tremendous wealth of birds, some belonging to very uncommon species which breed nowhere locally, pass through our district in Spring and Autumn.

Rare Visitors

In truth one or two of the passage waders recorded in the last section could have been placed here, but it was convenient to treat them all together. This is particularly true of the Oyster Catcher [^] and to a lesser extent of the Wood Sandpiper.

The rare species which eclipsed all others for the year under review was the Ring-necked duck, which was seen by many observers, for a period in all of about a week, after it had first been detected by Mr. J.T.R. Sharrock on April 19th. It was seen at various times on both Theale "New" and Burghfield gravel pits, and was last observed by Mr. D. Bradley at Englefield on April 27th. A full account of this, the second British and third European record of a duck that is a native of North America has been published (Sharrock & Gillmor, British Birds, vol. 52, pp. 427-30, Dec. 1959). I owe to Miss R. Amphlett my view, on the afternoon of September 13th, of another exciting rarity in the Reading area, namely an Osprey which appears to have frequented Whiteknights Park Lake for several days. The bird was examined in some detail by Mr. Gillmor who writes that it was judged to be a juvenile on account of its very bright, clean appearance, "scaly" back and the fact that the breast-band was less clearly defined than the textbooks suggest it should be in an adult.

Two other unusual duck were a Common Scoter at Theale "New pit" on April 25th (R. A. F. Gillmor) and a Sheld Duck at Burghfield gravel pit on April 19th.

The summer was said to be a particularly good one for Hoopoes in Britain and I received a reliable report of 2 seen at close quarters on more than one

[^] Note. Only about 12 records for Berkshire up to time of publication of "An Annotated List of the Birds of Berkshire", by W. B. Alexander, 1952.

occasion in late May by Mrs. W. W. Skinner and her daughter, of Hayfields, Lower Basildon. The birds were studied on the lawn of the Skinners' home. My own early morning visit to that address, however, proved unrewarding but I have no reason to doubt the correctness of this identification. To end this list of rarer birds, one may refer to a Water Rail that was picked up dead on the permanent way near Goring on September 8th and was kindly passed to me by Mr. Arthur Green of Cleeve. It was in excellent condition and was duly presented to Reading Museum.

Miscellany

Under this head I would refer to an interesting document that I received through the kindness of Mrs. Fishlock. It was a list of 50 species of birds that had been seen by the gardener at Highfield Park, Heckfield in his own small garden of 30 x 25 yards. Whilst quite impressive, the list contained no outstanding rarity and unfortunately a letter to the author of the document, querying one or two points, elicited no reply.

Mrs. A. M. Simmonds reports having visited the Heronry near Coley Park on March 15th, and found 17 nests. Nine birds were seen taking off from the nests. When Mrs. Simmonds last examined this site (on an island in the Holy Brook) there were 11 nests, but in that Spring, 1956, 6 further nests had been built in Turkey oaks near by.

At dusk on July 2nd Mrs. Simmonds saw a Longeared Owl on the Fair Mile (Berkshire Downs). When it alighted she had a good view of its strongly marked face and erect ear tufts.

Pond Dipping in Winter

By A. Price

During the winter of 1957/8 and the winter period January-February 1959 I regularly visited ponds and ditches in and around Reading, Berks., and Kidwelly, Carm. Records were kept of the creatures observed (with a bias towards water beetles) and of some of the conditions under which they were taken.

A careful study of my records has made it clear that much more precise data must be recorded in future, e.g. air temperatures and water temperatures, especially under ice.

Our knowledge of how water creatures spend the winter is incomplete and it is hoped that these records and observations will add a little to that knowledge.

Six visits were made to ponds and ditches which were covered by ice and brief notes are included on these visits. Frequent visits were also made during cold weather when no ice was present, and a few visits were made on the occasional sunny days.

A list of the beetles, molluscs, and leeches seen on these visits in an active condition is given at the end of this paper.

Visits to Ice-covered Ponds

November 24th 1957. Sulham Ponds

The ponds were frozen but the thickness of ice was unspecified in my records. Under the ice two species of Dytiscus were taken, viz. D. semisulcatus Muell. and D. marginalis L. Other beetles seen were Agabus bipustulatus (L.), Hyphydrus ovatus (L.) and Laccophilus minutus (L.)

In addition to the beetles, bugs were active and Cyclops, water fleas, and Chironomus larvae were plentiful. Diatoms were found and some rotting leaves of Potamogeton natans.

December 1st 1957. Tilehurst Potteries

The water was covered by $\frac{1}{8}$ in. of ice. Most of the beetles were found in the grassy verges of the pond. In addition to one specimen of D. circumflexus F., eleven other species of beetle were recorded. Bugs generally were plentiful and Ranatra linearis (L.) was found in fair numbers. Corixids could be seen swimming actively under the ice.

There were good numbers of Copepods and Daphnia. The Desmid, Closterium, was seen on some algae. One frog, Rana temporaria, was fished up in a reasonably active condition from the mud at the bottom of the pond.

January 12th, 1958. Sulham Ponds

A quarter of an inch of ice covered these ponds; the day was cold following upon a sharp frost. The beetles seen were: L. minutus, Acilius sulcatus L., Colymbetes fuscus (L.), Agabus nebulosus Forster, A. bipustulatus, and Hygrobia hermanni F.

Notonecta obliqua Gall. and N. glauca L. were fairly abundant and very active.

The microscopic organisms taken were: Canthocampus, Cyclops, Vorticella, and a few diatoms.

January 26th 1958. Wokefield Common Pond.

The water was covered by two inches of ice following a week's severe weather; 26th January was a mild day with fine rain.

The main object of this visit was to establish in what condition the Stonewort, Nitella translucens, overwintered. This alga had been found there during the summer of 1957. It was found on 26th January to be flourishing under 3 ft. of water.

Three species of beetle were found, Acilius sulcatus, C. fuscus, and H. hermanni F. Dragon-fly and damselfly nymphs were active and abundant. The following larvae were also plentiful: caddis fly, Chaoborus and Sialis.

Microscopic life included the Desmid, Closterium, the diatom, Navicula, Cyclops, and Canthocampus, whilst water fleas were quite abundant.

January 18th 1959. Littlejohn's Farm, Reading

Two inches of ice was found on this ditch which in summer is covered with Frogbit (Hydrocharis morsus-ranae L.) and Bladderwort (Utricularia vulgaris L.). Turions of both these plants were dredged from the mud at the bottom of the ditch.

Two species of the water beetle Hydroporus, H. palustris (L.) and H. dorsalis (F.), and two species of Halipplus, H. ruficollis DG. and H. lineatocollis Marsham, were found.

Six species of water snail were found under the ice, viz. Planorbis corneus L., P. carinatus Muell., P. contortus L., Limnaea stagnalis L., L. pereger Muell. and Physa fontinalis L.

January 25th 1959. Wokefield Common Pond

This pond was covered by $1\frac{3}{4}$ in. of ice and the water level was three feet above the normal. Owing to this flooding the fauna taken was not very varied.

Only one species of beetle was taken, Noterus clavicornis DG. Water fleas were abundant and one female smooth newt, Triturus vulgaris, in a fairly active condition, was captured under the ice.

Hibernating Beetles

Beetles were found hibernating in two places.

1. Tidmarsh Mill tail race. November 24th 1957.

Many specimens of Platambus maculatus (L.) were found under flat stones in the stream. They were torpid and swam away very slowly when disturbed.

2. Tilehurst Potteries. February 9th 1958

Under some wet coconut matting just out of the water, on clay, two species of beetle, Rantus pulverosus (Stephens) and Agabus nebulosus, were found hibernating. They were not very active when disturbed.

Partial Hibernation

Sunny days in winter bring out the Gyrinus beetles.

1. Salt Rock Farm, Carms. On December 31st 1957, on a bright sunny day, I saw some forty specimens of Gyrinus gyrating on the surface of a slow flowing ditch. The few specimens I examined were all G. natator (L.)
2. Mynydd Y Garreg, Carms. On January 3rd 1959, on a quarry lake some 500 feet above sea level, I saw a large mixed swarm of G. minutus F. and G. natator actively gyrating. The day was fair with weak sunshine.

Frozen Frog Spawn

After earlier sunny weather had beguiled the frogs into emerging from hibernation, we had severe frosts about 8th-9th March 1958. The result was - dead frogs and frog spawn frozen into the surface of the ditches of Collier's Clay Pit, Reading. Some of this frozen frog spawn was taken to school and to my amazement tadpoles emerged to develop later into frogs.

A list of the Molluscs, Beetles, and Leeches found in an active

	<u>Condition</u>	
	<u>Molluscs</u>	
<u>Viviparus</u>	<u>viviparus</u> (L.)	7.12.58
<u>Bithynia</u>	<u>tentaculata</u> (L.)	25.2.59
<u>Ancylastrum</u>	<u>fluviatile</u> (Muell.)	12.2.59
<u>Ancylus</u>	<u>lacustris</u> (L.)	7.12.59
<u>Physa</u>	<u>fontinalis</u> (L.)	18.1.59
<u>Limnaea</u>	<u>stagnalis</u> (L.)	18.1.59
<u>L.</u>	<u>auricularia</u> (L.)	12.2.59
<u>L.</u>	<u>pereger</u> (Muell.)	18.1.59
<u>Planorbis</u>	<u>corneus</u> (L.)	18.1.59
<u>P.</u>	<u>contortus</u> (L.)	18.1.59
<u>P.</u>	<u>planorbis</u> (L.)	23.11.59
<u>P.</u>	<u>carinatus</u> (Muell.)	18.1.59
<u>P.</u>	<u>vortex</u> (L.)	23.11.59

13 Species

Water Beetles

<u>Haliphus</u>	<u>ruficollis</u> DG	23.11.58
<u>H.</u>	<u>lineatocollis</u> Marsham	18.1.59
<u>Hygrobia</u>	<u>hermanni</u> F.	many dates
<u>Noterus</u>	<u>clavicornis</u> DG	25.1.59
<u>Hyphydrus</u>	<u>ovatus</u> (L.)	24.11.57
<u>Deronectes</u>	<u>elegans</u> (Pz.)	1.2.59
<u>Hydroporus</u>	<u>dorsalis</u> (F.)	18.1.59
<u>H.</u>	<u>palustris</u> (L.)	many dates
<u>H.</u>	<u>erythrocephalus</u> L.	15.2.59
<u>H.</u>	<u>umbrosus</u> Gyl.	15.2.59
<u>H.</u>	<u>gyllenhalii</u> Schioedte	15.2.59
<u>H.</u>	<u>pubescens</u> Gyl.	15.2.59
<u>H.</u>	<u>planus</u> (F.)	24.12.57
<u>Laccophilus</u>	<u>minutus</u> (L.)	many dates
<u>L.</u>	<u>hyalinus</u> (DG.)	30.11.58

<u>Agabus</u>	<u>nebulosus</u> (Forster)	1.12.57
<u>A.</u>	<u>sturmi</u> (Gyl.)	1.12.57
<u>A.</u>	<u>chalconatus</u> (Pz.)	15.2.59
<u>A.</u>	<u>bipustulatus</u> (L.)	many dates
<u>A.</u>	<u>labiatus</u> (Brahm)	15.2.59
<u>Platambus</u>	<u>maculatus</u> (L.)	24.11.57 and 1.2.59
<u>Rantus</u>	<u>exsoletus</u> (Forster)	8.2.59
<u>R.</u>	<u>pulverosus</u> (Stephens)	1.12.57
<u>Colymbetes</u>	<u>fuscus</u> (L.)	1.12.57
<u>Dytiscus</u>	<u>semisulcatus</u> (Muell.)	24.12.57
<u>D.</u>	<u>marginalis</u> L.	24.11.57
<u>D.</u>	<u>circumflexus</u> F.	1.12.57
<u>Acilius</u>	<u>sulcatus</u> L.	24.11.57
<u>Gyrinus</u>	<u>minutus</u> F.	3.1.59
<u>G.</u>	<u>urinator</u> Ill.	25.1.59
<u>G.</u>	<u>natator</u> (L.)	3.1.59

31 species.

Leeches

<u>Piscicola</u>	<u>geometra</u> (L.)	12.2.59
<u>Theromyzon</u>	<u>tessulatum</u> (Muell.)	1.2.59
<u>Glossiphonia</u>	<u>complanata</u> (L.)	1.2.59
<u>Erpobdella</u>	<u>octoculata</u> (L.)	30.11.58
<u>E.</u>	<u>testacea</u> (Savigny)	23.11.58 and 25.2.59
<u>Dina</u>	<u>lineata</u> Muell.)	23.11.59
<u>Trocheta</u>	<u>subviridis</u> Dutrochet	17.2.59

7 species

One obvious fact may be deduced from the above lists: the species listed all overwinter as adults. Some are active, some are torpid. Much work remains to be done before our knowledge of hibernation allows us to sort out which are which. I hope to continue this work in the ensuing winters.

MORE OF WOL

By C. J. Leeke, B.Sc.

In retrospect, I suppose July 8th was a day of some moment in several lives: mine, my family's, and Wol's, for that was the day we met. I had, of course, met my family before.

It is with some misgiving that I hear of a bird coming into someone's hands because either it is a young bird which has been removed from its parents or it is a sick or injured bird. In the former case I insist on its return, in the latter case I carry out the dictums of common sense and limited knowledge, hoping for the best, expecting the worst.

Wol arrived via several hands, so that it was impossible to trace him to his home address. It appeared that Wol did not belong to the sick and injured and my half-formed decision was clinched by the steady gaze of those beautiful, brown eyes. There is nothing to compare with the appeal of young animals and Wol was particularly well equipped in this respect.

As I took stock of this fluffy little marvel with the direct gaze, a crush of thoughts jostled for attention - an occurrence of some rarity to be sure. Living space, house training, claws on furniture, feeding pellet formation, and my wife is allergic to birds, were some of those in the forefront.

Both Wol and I were lucky in that he was a tawny owl otherwise my first attempt at rearing a bird of this description might have turned out differently for Gilbert White wrote on the 9th September 1767: "The young of the barn owl are not easily raised as they want a constant supply of fresh mice; whereas the young of the brown owl will eat indiscriminately all that is brought: snails, rats, kittens, puppies, magpies and any kind of carrion or offal." Neither of us knew this at the time.

There have been many changes but the appeal continues. Wol has grown about three or four inches and now measures thirteen inches overall, as far as it is possible to measure a moving object. This points to the possibility that Wol is a male as the female is usually larger, some fifteen inches in length.

I am pleased to report that Wol is as tame as ever, probably due to a sort of non-aggression pact based on cupboard love. In seven months he has only injured me on three occasions and none of them with malice aforethought. The first of these I have already reported, when he grabbed my ear in the "iron maiden" that he calls a foot - a moment of remiss for him and remorse for me.

The second time was my fault; I was late with his breakfast. It was a habit of mine to stand outside near a perch and offer food, he would fly on to the perch and take it through the wire in his beak. This was always a thrill to see him flying straight at me from the gloom. This time, however, he was

over eager and came with a bang, one foot outstretched to grab. I think that the wire made him miss. There was a shock as one claw struck my eyebrow, the other three must have swung in the space beneath. It is amazing how quickly some habits can be broken.

The third injury was a pure accident; instead of waiting as usual for me to get properly through the door and flying on to my shoulder, he flew on to my head as I was ducking in. We were both surprised as he skidded off nearly taking my scalp. Well, let's face it, ten years ago he would have found a firm footing.

In spite of all this, or because of it, I get a secret kick out of the fact that his friendliness is reserved mainly for me. When strangers appear he watches them intently, draws himself up to his full height, then doubles it by drawing in his feathers tightly against his body, while loudly clicking his beak and blinking his disapproval. He hates hats.

If a stranger is introduced to him he will step on to the proffered hand, then as soon as he feels that duty has been fulfilled he flies on to my shoulder. Gratifying as this is, it is not without peril. He is a bird of fair size and the excitement of meeting people plus the exercise have drastic effects on his large intestine. I am thankful that this has only happened once - in public.

Wol is remarkably cat-like in many ways, particularly as he is very independent, taking a poor view of disturbances at inconvenient times. In the daytime he only shows real interest when his bath water is changed; everything else he treats with obvious disdain, but he never misses anything. Towards evening, however, he loves to sit on my shoulder and converse in monosyllabic whispers.

The keeping of wild animals in captivity affords immense interest and considerable knowledge. Much of this springs from one's own observations, but more comes from the pursuance of information from the literature. And what joy when one is supported by the writings of others. I had observed Wol storing food and suggested that it might be an important behaviour pattern if it were shown to be general. Gilbert White in that same letter wrote further: "When full, like a dog, it (the brown owl) hides what it cannot eat." And 178 years later Eric Hosking and Cyril Newberry wrote: "... and on several occasions we found that the (barn) owls anticipated the approach of rain by laying in a small store of rodents even if it meant hunting in broad daylight."

With many photographs and records, these writers show that the long-eared and short-eared owls as well as the barn and tawny owls will store carcasses in the nest. I wonder whether Wol's storing of food is an example of incipient sexual behaviour?

Sometimes when Wol is feeling frisky, he walks and hops around the floor of his enclosure pouncing on anything that catches his eye. At the same time he droops his wings and tail in a half circle which would prevent

the escape of his "prey". I have since found references to this wing drooping in some of the smaller species of heron when fishing.

At one time owls were regarded as nocturnal members of the Accipitres, an order that also included the diurnal birds of prey. Later these were separated into two orders, the Strigiformes and the Accipitriformes, but still considered to be related. Now I learn from J.L. Peters in his survey, "Birds of the World" that the Strigiformes (owls) are more nearly related to the Caprimulgiformes (nightjars). But of course you already know this.

Sooner or later the burning question arises about the release of an animal that has been reared in captivity. So much sentimentality is expended both on behalf of the animal which should be allowed its freedom, and on the part of the owner who cannot bear to part with it, that the proper issues become obscured. These issues are:-

1. Can it fend for itself?
2. Is it to be released in the territory of an aggressor?
3. Is it likely to be as healthy and live as long in the wild as in captivity?

Some Native Medicinal Plants

By K. I. Butler

The present century has seen a great decline in the use of vegetable drugs, chiefly owing to the development of synthetic substances of inorganic origin, which contain the "active principles" of drugs previously obtained from plants. Nevertheless there are still substances of vegetable origin which are used in medicine, and which the drug manufacturer needs. These substances are the alkaloids and the glycosides, complex organic compounds, comparatively restricted among plants of certain Families.

The source of supply of these substances to the Drug Manufacturer is not only from abroad, but also from this country, from Drug Farms, where the plants are cultivated. It should be of special interest to Reading Naturalists that, out of the five important medicinal plants described below, four are not only native to this country, but may be found growing wild within a short radius of Reading.

Atropa belladonna L. (Deadly Nightshade; Dwale)

Atropa belladonna is a much branched perennial plant, 2-5 ft high, with large egg-shaped leaves 3-9 inches long and 2-4 inches across. The solitary flowers are wine coloured and bell shaped. The fruits are shining jet-black berries, as large as cherries. It is indigenous to central and southern Europe and Asia Minor.

The leaves, flowering tops and roots are official in the British Pharmacopoeia, and are needed for the alkaloids which they contain - hyoscyamine, hyoscyne, and atropine. Internally, the drug, belladonna, serves to check secretion, and is a sedative to the respiratory nerves. Externally it acts as a local anaesthetic and anodyne to relieve pain, the extracts prepared from the plant being used in ointments, plasters and liniments. Atropine is used in eye surgery, and it was its power of dilating the pupil that gave the plant its specific name, "bella donna", the Italian ladies of the middle ages employing it to give increased brilliancy to their eyes.

Although the main source of supply is from the Continent, it is one of the more important drugs cultivated in this country, e.g. in Suffolk, Hertfordshire, Bedfordshire, Oxfordshire and Surrey.

A. belladonna is a native of England, preferring a lime-rich soil. During the last world war, when the drug manufacturers were cut off from their usual source of supply, the wild plants were collected and harvested in this country, and the calcareous slopes between Pangbourne and Streatley yielded a record crop.

It is no longer to be found growing along The Warren, Caversham, but is fairly widespread in the Hartslock Woods, Oxon, and on calcareous soil north of the Thames.

All parts of A. belladonna are highly poisonous and man is very susceptible to the poison. The berries are most attractive to children, and three are known to have caused death. Poisoning is chiefly characterised by dilation and insensitivity to light of the pupil. Deadly Nightshade is not so widely known as it should be, many people wrongly attributing the name to the Bittersweet or Woody Nightshade, Solanum dulcamara L., or even the Black Nightshade, Solanum nigrum L. Both these plants contain the alkaloid, solanine, which does not dilate the pupil, and poisoning by these plants is rarely severe.

Belladonna has certainly been used from earliest times, and is said to have been described by both Dioscorides and Pliny. The generic name, Atropa, is from Atropos, one of the three Greek Fates, whose duty it was to cut the thread of life, and alludes to the poisonous character of the drug. The name of Dwale is either connected with the Scots "dule", and signifies sorrow, or it may come from a Dutch word meaning "to be delirious". Shakespeare was probably referring to it in the passage in Macbeth: "Have we eaten of the insane root that takes the reason prisoner?"

Digitalis purpurea L. (Foxglove)

Digitalis purpurea must be familiar to all, with its rosettes of pointed ovate- to lance-shaped leaves in the first year and its flowering spike of purple flowers, 3-6 ft high, in the second year. The dried leaves, usually gathered from first-year plants, are official in the British Pharmacopoeia and are used in the treatment of diseases of the heart. Their action is due to several active glycosides, among which digitoxin is the most important.

It is indigenous to central and southern Europe, and a native of Britain. A considerable amount of leaf was collected during the last war, especially in the west and north, where the wild foxgloves are abundant. The plant is cultivated mainly in West Suffolk, where a specially selected strain particularly rich in glycosides is grown.

Digitalis is common locally, and is found growing in upland wooded tracts and on stony hillsides among scattered clumps of trees, usually on acid soils.

The medical history of the foxglove is somewhat varied. It appears to have been used by the old herbalists, and found a place in the London Pharmacopoeia in 1650 and in subsequent issues. It was however a medicine with a popular rather than a professional reputation until Dr. William Withering of Birmingham published "An account of the Fox-glove and some of its Medical Uses" in 1785. Now, in the 20th century, it is said to be the most valuable cardiac drug ever discovered, and perhaps one of the most important drugs in medicine.

The generic name Digitalis is from the Latin digitus, a finger, the tubular bell-shaped corolla bearing some resemblance to the finger of a glove. The digitabulum was a finger cap used in gathering olives, and may have suggested the name to Fuchs, the German botanist who named the genus. The specific name, purpurea, refers to the purple colour of the flower.

Valeriana officinalis L. (Valerian: All Heal)

Valeriana officinalis is a perennial plant with large pinnate leaves and a flower stem bearing small pinkish white flowers in loose heads.

The rhizomes and roots, which are collected and dried in the Autumn, are official in the British Pharmaceutical Codex, the oil and alkaloids which they contain acting upon the nervous system. The drug may be administered as an extract, a tincture or an infusion, often in association with bromide. Oil of Valerian is also used in perfumery.

Valerian is indigenous to Europe and Asia Minor, and a native of England in damp shady places. It is cultivated on a small scale in West Suffolk, Hertfordshire and Derbyshire. The old "Valerie growers" of Derbyshire are now much reduced in numbers, but the art of cultivation has been handed down through many generations. These growers collect their "sets" in early spring from wild plants in the dales where they grow abundantly.

Valerian may be found growing locally in wet meadows, on the banks of streams, by riversides, and in damp woods, often attaining a height of 4-5 ft. It must not be confused with the Red Valerian, Kentranthus ruber (L) DC., which has red, pink and white flowers, and which is so familiar on the walls in the west country.

The drug was well known to the Greeks and Romans, and it is thought that the name may derive from Valerianus, Emperor of Rome A.D. 260, who first used the plant in medicine. It was a domestic medicine of the Anglo-Saxons, hence one of its English names, All Heal.

Hyoscyamus niger L. (Henbane)

Hyoscyamus niger has a distinctive appearance. The leaves are grey-green, and coarsely toothed, with sticky hairs which are clammy to the touch. The flowers are pale yellow and funnel shaped, with a network of purple veins. The fruit, a two-celled capsule, is enclosed by the five-lipped calyx, and has a lid (pyxis), which falls off when the seeds ripen. The whole plant has a strong foetid smell. It is indigenous to Europe, Western Asia, and Northern America.

The dried leaves, or leaves and flowering tops, are official in the British Pharmacopoeia. Its medicinal action somewhat resembles that of belladonna, and depends on the alkaloids, hyoscyine and hyoscyamine, that it contains, which have narcotic and hypnotic properties.

Annual and biennial forms of the plant occur, the biennial form usually being cultivated in this country and cut when it flowers in its second season.

It is a native of Great Britain, on sandy places, especially near the sea, or on the waste ground of farmyards. Locally it has been found growing at the Reading Sewage Farm and on the Berkshire Downs.

Hyoscyamus has been employed in European domestic medicine from the remotest times. Anglo-Saxon works on medicine mention it in the 11th century. After the Middle Ages, the drug fell into disuse, but was re-introduced into regular medicine about 1760. The seeds were used by the Babylonians 3000 years ago to relieve toothache, and the old domestic remedy for toothache, of throwing the seeds upon hot coals and allowing the vapour to enter the mouth, has only recently fallen into disuse.

The name Hyoscyamus is derived from two Greek words, meaning pig and bean - the plant is said to be poisonous to swine. Niger - black - may refer to the dark purple veins on the corolla. The English name Henbane indicates the poisonous effect of the seed upon poultry.

Colchicum autumnale L. (Autumn Crocus: Meadow Saffron)

Colchicum autumnale is a perennial with a corm, producing in the spring numerous long, dark green, broad leaves, which die down before the pale mauve flowers open in the autumn. It is not a crocus, as its English name suggests, but belongs to the Natural Order Liliaceae, with six stamens and superior ovary. After fertilisation, the ovary remains dormant under the ground until the Spring, when it is raised to the surface by the elongation of its stalk, and by the time the leaves have withered in summer, the capsule splits into 3 compartments, shedding its numerous seeds.

All parts of the plant contain the alkaloid colchicine which is used in medicine to relieve the pain and inflammation of acute gout. Both the corm and seeds are official in the British Pharmacopoeia. The corm is collected in the spring or early summer before leaf development, deprived of its coats, sliced and dried. The seeds are collected in July and August.

C. autumnale is widely distributed over central and southern Europe and is found in moist meadows and pastures in many parts of England, particularly in the south-west and in South Wales. Formerly it was much more abundant in England and Wales than it is now, so common that some of the older Floras do not list localities for it. This is probably due to eradication by farmers, as all parts of the plant are poisonous, both in the green state and when mixed with hay.

Some ten years ago, Colchicum grew in Ashridge Wood, North Berkshire, but since the extensive felling of trees, it has not been seen. Our nearest locality is probably near Oxford where it was seen this year by some members of the Society.

The generic name, Colchicum, is from Colchis on the Black Sea where the plant flourishes. Autumnale refers to the season when the flowers bloom. Dioscorides mentions a Colchicum, and the Arabs recommended the use of the corm for gout in medieval times. It came into usage in Europe about the middle of the 17th century and that of the seed about the 18th.

A more recent development in the use of Colchicine has arisen from its power of doubling the chromosomes, thus opening up a large field in plant genetics.

Mesolithic Pine Cones

By A. M. Simmonds

Cones of Pinus sylvestris (Scots pine) were found at Thatcham, Berks, during the recent (1959) archaeological excavations. Their age is estimated to be about 8,000 years, and their preservation is due to their having been buried in peat and beneath lake and swamp deposits, and thus entirely protected from the air.

At this period (Middle Stone Age, about 6,000 B.C.), the climate of southern England was similar to that of North Britain at the present time. Analysis of tree pollen from samples of layers of peat from the site shews that P. sylvestris was the dominant tree in the forests which then covered much of the country. Associated trees at this period were willow (Salix spp.), birch (Betula sp.) and alder (Alnus glutinosa). The percentages were Scots pine 83.9 per cent., willow 21.2 per cent., birch 14.9 per cent., and alder 0.8 per cent.

Hazel, oak and elm (mixed oak-forest species) were entirely absent from the older layers. In addition to the cones, pieces of wood were found, and these have been identified as Scots pine and species of willow. The present-day stands of P. sylvestris on local commons are descendants of planted trees.

Fungi at Kingwood Common

The fungi here recorded were collected at the Society's Forays at Kingwood Common, Oxon, over the period 1945-57. The list has been checked by Dr. F. B. Hora, to whom we are very grateful for his help.

Amanita citrina
" var. alba
muscaria
pantherina
phalloides
rubescens
spissa

Amanitopsis fulva

Anellaria semi-ovata

Armillaria mellea
mucida

Boletus aurantiacus
badius
bovinus
chrysenteron
edulis
erythropus
luridus
luteus
piperatus
pruinatus
scaber
subtomentosus
versipellis

Bulgaria inquinans

Calocera viscosa

Cantharellus aurantiacus
cibarius
tubaeformis

Claudopus variabilis

Clavaria amethystina
cinerea
cristata
fusiformis
pistillaris
rugosa
tenuipes

Clitocybe clavipes
flaccida
nebularis
odora

Collybia acervata
butyracea
dryophila
fusipes
maculata
radicata
tuberosa

Coprinus atramentarius
comatus
micaceus
picaceus
plicatilis

Cortinarius amillatus
delibutus
elator
flexipes
hemitrichus
hinnuleus
multiformis
semisanguineus
torvus
violaceus

Craterellus cornucopioides

Crepidotus mollis

Crucibulum vulgare

Daedalea quercina

Galera hypnorum

Hebeloma crustuliniforme
longicaudata
sinapicans
versipelle

Helvella crispa
lacunosa

Hydnum repandum var. rufescens
" (pale form)

Hygrophorus cantharellus
chlorophanus
chrysa pis
coccineus
conicus
eburneus
niveus
pratensis
virgineus

Hypholoma cotonea
fasciculare
hydrophilum
sublateritium
velutinum

Hypoxyylon coccineum

Laccaria amethystina
laccata

Lactarius blennius
camphoratus
glyciosmus
quietus
rufus
subdulcis
tabidus
torminosus
turpis
vellereus
vietus

Lentinus cochleatus

Lenzites betulinus

Leotia lubrica

Lepiota cristata
procera
rachodes

Lycoperdon coelatum
echinatum
excipuliforme
perlatum
pyriforme

Marasmius androsaceus
peronatus
ramealis

Merulius tremellosus

Mutinus caninus

Mycena alcalina
epipterygia
galericulata
pura
sanguinolenta

Nyctalis asterophora
parasitica

Otidea aurantia

Omphalia fibula

Panaeolus papilionaceus

Paxillus involutus

Phallus impudicus

Pholiota adiposa
mutabilis
spectabilis
squarrosa

Pleurotus ostreatus

Pluteus cervinus

Polyporus adiposus
betulinus
mollis
schweinitzii

Polystictus versicolor

Psalliota campestris
sylvatica
sylvicola
xanthoderma

Psathyrella gracilis

Psilocybe semilanceata

Russula adusta
atropurpurea
cyanoxantha
delica
drimea
emetica
fallax
feflea
fragilis
lepida
nigricans
ochroleuca
rosea
vesca
xerampelina

Scleroderma aurantium

Stereum hirsutum

Strobilomyces strobilaceus

Stropharia aeruginosa

Trametes gibbosa
rubescens

Tricholoma aggregatum
flavobrunneum
melaleucum
nudum
personatum
rutilans
saponaceum
sordidum
terreum
virgatum

Tubaria furfuracea

Xylaria hypoxylon
polymorpha