

## NATURAL HISTORY SECTION

*Chairman*—DR. ERNEST G. NEAL, M.SC., PH.D.

*Secretary*—C. A. COOKSON, O.B.E., M.A.

*Committee*—The Chairman with MISS C. ANDREWS, MRS. A. D. HALLAM, MRS. E. A. MARRIAGE, MISS W. ROBERTS, H. W. BOON, A. J. DODD, W. A. WILSON and I. I. JEFFRIES.

*Recorders*—

Botany—(Phanerogams) A. D. HALLAM, Taunton Castle.

(Cryptogams) A. J. DODD, 9 Fullands Avenue, Taunton.

Entomology—(Lepidoptera) Dr. H. M. CHAPPEL, White Lodge, Minehead.

(Coleoptera) W. A. WILSON, 16 Ballfield Road, Minehead.

(Other Orders) J. COWLEY, Holywell House, Edington, Bridgwater.

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### LECTURES AND INDOOR MEETINGS

1962

October 20th      “An Economic Entomologist in Somerset”  
By Mr. L. N. Staniland, Ministry of Agriculture,  
Fisheries and Food.

December 1st      “Deep Sea Animals”  
By Mr. P. M. David, The National Institute of  
Oceanography.

1963

February 23rd      “A Botanist in Australasia”  
By Professor Ronald Good.

March 9th          Annual General Meeting  
Followed by a film.

## FIELD MEETING, 1962

April 8th*	Braunton
April 28th*	Tealham Moor
May 5th	Staple Hill and Otterford
May 12th*	Buckland Wood
May 20th*	Leigh Woods
May 26th	Burlescombe Grand Western Canal
June 3rd*	Dunkery Beacon
June 11th*	Steep Holm
June 23rd	Shapwick Heath
July 7th*	Westhay Moor and Shapwick Heath
July 14th	Withypool Hill and Landacre, Exmoor
July 22nd*	Stearth
July 28th	Hartridge Hill, Luppitt
August 25th*	Woodspring Bay
September 8th*	Chew Valley Lake
September 15th	Haddeo Valley
September 23rd*	Portland
October 6th*	Brean Down

\*Arranged by the Ornithological Section

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 SOMERSET BOTANY

## NOTES ON SOME OF THE 1962 BOTANICAL RAMBLES

On 26th May, led by Col. and Mrs. Highway, we visited the Grand Western Canal at Burlescombe. On the canal bank the Green-winged Orchis (*Orchis morio*) was seen in flower. Later we scrambled through thickets in Westleigh Quarries and were surprised at the number of quite large cherry trees growing there.

Shapwick Heath and the Nature Reserve there were our objectives on 23rd June, the party being led by the late A. H. Turner. Plants seen included Marsh Cinquefoil (*Stellaria palustris*), Many-headed Woodrush (*Luzula multiflora*) and the sedges, *Carex nigra*,

*C. disticha*, *C. dimissa*, *C. pulicaris* and *C. panicea*. We were also shown an unusual hawthorn tree with downy leaves and large cream flowers.

Mrs. Hallam led us to some interesting points on Exmoor on 14th July. First, in the intervals between violent showers, we explored a blanket bog on the exposed summit of Withypool Common. Here several members had their first sight of the Crowberry (*Empetrum nigrum*). This plant, which is rare in the south-west of England, superficially resembles Cross-leaved Heath, but has reddish stems and bears black berries. The Deer-grass (*Trichophorum caespitosum*) was abundant here. Later, in fine weather, we went on to Landacre Bridge, where in the valley bog above the bridge we found Ivy-leaved Bellflower (*Wahlenbergia hederacea*) and Marsh St. John's Wort (*Hypericum elodes*) though neither of these was yet in flower. The lemon-scented Mountain Fern (*Thelypteris oreopteris*) and the Bog Pondweed (*Potamogeton polygonifolius*) were also seen. In the evening some members went on to the high moor north of Exford and above the 1,400 ft. contour, where a diligent search revealed the Cranberry (*Oxycoccus palustris*) with its red fruits and delicate leaves trailing over and through the wet beds of Sphagnum. This station is probably near the south-west limit of this species in Great Britain.

On 28th July, Mr. Jeffries introduced us to some very interesting country new to most members, over the Devon border on the Blackdown Hills. We first explored bogs on Hartridge Hill, where we found Marsh Helleborine (*Epipactis palustris*) and Flea Sedge (*Carex pulicaris*). The Bristle Scirpus (*Isolepis setacea*), a small plant allied to the Sedges, was seen on a damp wayside. Afterwards, in a very wet and interesting bog on Hense Moor, we noted White Beak-sedge (*Rhynchospora alba*), Pale Butterwort (*Pinguicula lusitanica*), Marsh St. John's Wort (*Hypericum elodes*) and Lesser Skullcap (*Scutellaria minor*). Here also we were particularly delighted to find the three British species of Sundew — *Drosera rotundifolia*, *D. anglica* and *D. intermedia* — all in flower and growing close together, so that the specific differences were easily observed. Another botanical thrill was afforded by several fine specimens of the Greater Broomrape (*Orobanche rapum-genistae*) growing under bushes of Gorse (presumably its host plant) on the drier part of this moor.

H. W. BOON.

## RECORDERS' NOTES, 1962

## VASCULAR PLANTS

The name of each species is preceded by its number in the *List of British Vascular Plants*, 1958, and the nomenclature used in this list has been adopted. Following the locality is the number of the ten-kilometre National Grid square as used in the Botanical Society of the British Isles Distribution Maps Scheme. The bracketed numbers refer to the ten districts into which Somerset was divided by R. P. Murray in *Flora of Somerset* (1896). District and vice-county records are marked with an asterisk (\*).

- Erigeron bonariensis** L. Rubbish dump, Minehead, (2\*).  
v.c.5\*. A native of South America; well-established and known for three years in this station. *Det.* Kew. J. I. Robbins.
- 625/4 **Epipactis leptochila** (Godfery) Godfery. Cheddar Gorge (9).  
Three plants flowering, 1957; fifteen in 1962. Dr. J. T. H. Knight.
- 628/2 **Listera cordata** (L.) R. Br. Three plants flowering, Winsford Hill (1), Mrs. S. Holland.
- 640/1 **Ophrys apifera** Huds. Rifle Range, Langport (5). L. Powell.

A. D. HALLAM,

*Recorder.*

## FUNGI

During 1962 observations were limited for the most part to the Blackdown Hills and repeated visits were paid to the conifer plantations and deciduous woods. The production of woodland fungi was again disappointing, in fact not since 1958 have we had a good autumnal outcrop. In the past year the usually common species of *Lactarius* were infrequent and the various *Russula* species which normally occur in such variety and abundance were remarkably absent.

There is doubtless a number of reasons for this decline in productivity — the weather, the spread of bracken, tree felling, planting and other work in woodlands. Tree stumps are sometimes treated with fungicides in order to kill *Fomes annosus* or other parasitic fungi and this treatment will have some inhibitory effect on the ground flora of a wood.

But in a poor season less common species are noted and there are usually a few outstanding finds. A list of some of these is appended.

**Cortinarius triumphans** Fr.

Brown Down. September 28, 1962.

A group of handsome specimens in rough pasture at foot of young birches. Not previously noted on the Blackdown Hills.

**Gymnopilus junonius** (Fr.) Orton.

Hartford, Haddeo valley. September 15, 1962. Mrs. Marriage.

**Hygrophorus cantharellus** (Schw.) Fr.

Hartford, Haddeo valley. September 15, 1962. Mrs. Marriage.

v.c.5\*

**H. chlorophanus** Fr.

Brown Down. September 28, 1962.

Occasional on Blackdowns and Quantocks.

**H. eburneus** (Bull. ex Fr.) Fr.

Adcombe Hill. November 7, 1962.

Under beech. Uncommon on the Blackdowns.

**Hypholoma radicosum** Lange.

North Down. December 11, 1962.

In conifer plantation, one only, near group of **H. capnoides**. v.c.5\*

**Inocybe flocculosa** (Berk.) Sacc.

Ringdown Common. September 27, 1962.

A small group in a ditch.

v.c.5\*

**Lactarius hepaticus** Plowright apud Boud.

Trickey Warren. October 6, 1962, and elsewhere on the Blackdowns under beech.

v.c.5\*

**Lactarius tabidus** Fr.

Brown Down. August 12, 1958. P. D. Orton.

v.c.5\*

**Mycena amicta** (Fr.) Quél.

Stoke St. Mary. November 11, 1962.

**Panaeolus rickenii** Hora.

Buckland Wood. August 18, 1962.

v.c.5\*

**Russula claroflava** Grove.

Ringdown Common. August 2, 1957.

v.c.5\*

**R. nitida** (Pers. ex Fr.) Fr.

Ringdown Common. September 27, 1962. Mrs. Marriage. v.c.5\*

**R. rosea** Quél.

Ringdown Common. October 4, 1962. Mrs. Marriage. v.c.5\*

A. J. DODD,

Recorder.

## SOMERSET LEPIDOPTERA IN 1962

After a cold March the summer remained rather cold and dry, and as a consequence results from "light traps" were disappointing. In addition, the loss of the North Curry trap has left its mark on the results.

The year was notable for the numbers of **Laphygma exigua** (Small Mottled Willow). Two were taken by Mr. C. S. H. Blathwayt at Weston-super-Mare in September and fifteen were seen at Minehead between July and October. Other migrant species of note were **Leucania vitellina** (Delicate Wainscoat) of which two were taken at Weston-super-Mare and two at Minehead; **Caradrina ambigua** (Vine's Rustic) one at Weston-super-Mare and one at Minehead; **Heliothis armigera** (Scarce Bordered Straw) and **Palpita unionalis** at Minehead; **Nycterosea obstipata** (Gem) by Mr. K. H. Poole at Milton. Three **Herse convolvuli** (Convolvulus Hawk) were seen at Minehead in September.

From Weston-super-Mare Mr. C. S. H. Blathwayt reports the following:

**Graphiophora augur** (Double Dart). Two in July.

**Amathes glareosa** (Autumnal Rustic).

**Heliophobus albicolon** (White Colon).

**Apamea sublustris** (Reddish Light Arches).

**Tiliacea citrago** (Orange Sallow). Several in September.

**Discoloxia blomeri** (Blomer's Rivulet). Several in June and July.

From Minehead results were as follows:

**Ectropis consonaria** (Square-Spot Beauty). Several taken in May in a Spruce wood.

**Panolis flammea** (Pine Beauty).

**Eupithecia tantillaria** (Dwarf Pug).

**Dasypolia templi** (Brindled Ochre). On May 12th. This is a very late date, although it is common in the autumn at Minehead.

**Eustrotia uncula** (Silver Hook). One taken at Withypool—usually common only on the turf moors.

**Selenia lunaria** (Lunar Thorn).

**Amathes depuncta** (Plain Clay).

**Drepana cultraria** (Barred Hook-tip).

**Venusia cambrica** (Welsh Wave). Two in a Spruce wood.

**Lithosia deplana** (Buff Footman). One at light and one in a Spruce wood.

**Citria lutea** (Pink-barred Sallow).

**Cosmia pyralina** (Lunar-spotted Pinion).

**Cosmia diffinis** (White-spotted Pinion).

**Synaphe angustalis**.

**Evetria pinicolana**.

Two species that were unusually common in 1962 were **Crambus pinellus** and **Drepana binaria** (Oak Hook-tip). **Xylomyges conspicularis** (Silver Cloud) appears to be extending its range from the Taunton area and has been much more common in the Minehead district during 1961 and 1962.

#### COLEOPTERA NOTES, 1962

For my report on Coleoptera I have selected some half a dozen species of beetles which have been brought to my notice during the past year. They have been chosen not entirely on account of their rarity (although the bulk of them are rare), but rather because of some point of interest in their ecological niche.

The rare and highly localised wood beetle **Helops caeruleus** has again turned up in my garden in Minehead, after a lapse of two years. A larva was found in the rotting wood of the step into my potting shed, an adult insect emerging from it last autumn. Apart from the immediate vicinity of Minehead, I know of no record of the beetle's occurrence elsewhere in Somerset. **Helops caeruleus** is not described or even listed as a timber pest either in this country or abroad and generally inhabits decayed willow, oak and chestnut trunks after these have been felled and when the wood is in the last stages of crumbling decay. No authentic cases have been quoted where the beetle has actually attacked sound timber and it seems highly probable it confines its attention to woodwork, which has been reduced previously by other agents such as fungi and the smaller wood-boring beetles. I rather suspect that the fungus mycelium in the decaying wood is the main attraction. This idea is strengthened by the fact that in the closely allied and common genus **Cylindronatus** which Canon Fowler included in his manual under the genus **Helops**, the gut contents have been examined and found to consist almost entirely of the green algae **Pleurococcus** sp. which grows on the bark of the trees where the insects live.

The classic example of where the extremely local habits of **Helops** are displayed, is in the Cathedral Close at Norwich where this beetle is known to have existed for 130 years and probably longer. A reference to its discovery in the Lower Close by Robert Wigham, the Norwich entomologist and botanist, was published in Chambers's *History of Norwich* in 1829. Subsequently, specimens were collected at intervals from rotten house timbers in the area by local entomologists throughout the Victorian era. During the present century, up to as recently as 1956, the beetle has again been recorded from time to time in the vicinity of the Close, but it is not known to occur in any other Norfolk locality. The fact that **Helops** is such a sluggish insect, rarely, if ever, taking to the wing, may account for it being so local.

A specimen of the longicorn beetle **Arhopalus rusticus** was brought to me for identification during last summer from my next door neighbour's garden. This is only the second time the insect has been recorded from Somerset, both specimens coming from the Minehead area. The genus consists only of two species, **Arhopalus rusticus** and **A. ferus**, and both were put on the British list early in the present century. Although **Arhopalus rusticus** was first discovered in Scotland, records of specimens taken during recent years seem to indicate the species is slowly spreading southwards, while **A. ferus** first recorded in the south, has always maintained a distribution mainly confined to that part of the country. Both species occur on Conifers, with a preference to Scots Pine and appear only to attack sickly and unhealthy trees. On that account they sometimes occur in numbers in districts where woodlands have been devastated by forest fires. Generally speaking, the species are not considered as pests in the timber industry, seldom attacking sound wood. In fact, they may prove beneficial to forestry through their speedily breaking down old stumps and logs.

A new record was added to the County list when Dr. A. M. Massee of the East Malling Research Station reported to me that, while collecting at Shapwick last September, he had taken a series of the rare weevil **Acalyptus carpini** on the flowerheads of Meadow-sweet. He expressed surprise at finding them on that plant as hitherto he had only taken the insect when beating Sallow at Wicken Fen. When thanking Dr. Massee for the record I said I was very much interested in his remark concerning the alternate pabulum of

**Acalyptus** as I was aware that the same thing occurred with the Chrysomelid beetle. *Galerucella tenella* which fed both on Sallow and Meadow-sweet. Both these plants are known to contain salicin and I felt that this substance was in some way bound up with the normal functioning of economy of the beetles concerned. Since expressing that view, I found that Dr. H. E. Hinton of the Bristol University, had thrown some light on the problem in a paper entitled "Protective Devices of Endopterygote Pupae" published in *Trans. Soc. Brit. Ent.*, November 1955. Under the subtitle "Poison Reservoirs in attached Larval Cuticle", Dr. Hinton states that the mature larvae of some **Chrysomelid** beetles feeding on Willow and Sallow have large paired cuticular reservoirs on the last two thoracic and the first seven abdominal segments. The external opening of each reservoir is on the apex of a large lateral tubercle. Each reservoir receives the secretion of numerous pyriform glands. The secretion is probably salicylaldehyde derived from the glucoside salicin in the plants on which the insects feed. When the beetle pupates, the cuticle of the final instar larva remains attached to the pupa, the reservoirs still retaining their contents. If the pupa is agitated by the attacks of a predator, the poisonous fluid in the reservoirs is forced out and collects in a large drop on the end of the larval tubercle, proving an effective deterrent to any would-be attacker.

A note published in the *Entomologist's Gazette* reported the finding by Dr. Eve of the **Histerid** beetle **Saprinus virescens** at West Monkton on **Nasturtium officinale**. A new record for the County, the beetle was feeding on the larvae of **Phaedon armoraciae** which is sometimes a pest in watercress beds, as well as on mustard crops. Canon Fowler in his *British Coleoptera* states that **Saprinus virescens** is rare, but, as the insect bears a superficial resemblance in size, colour and form to the adult beetles of the larvae on which it preys, there is a possibility that it is occasionally overlooked by collectors, especially if it falls into the net among the adult **Phaedon armoraciae** which generally occur in some numbers.

Among a small batch of beetles which Mr. Cowley collected at Witham Friary last July and passed on to me, I found a specimen of **Chrysolina menthastri**. This is only the second time the beetle has been recorded from Somerset. The previous occasion was when it was found at Bath by Col. Balthwayt, over 50 years ago, and reported in the *Victoria County History*. The insect feeds on **Mentha aquatica**.

Lastly, I would like to mention a letter I received last December from Dr. E. B. Ford. Dr. Ford said that Mr. E. R. Creed who works in the laboratories was studying the ecological genetics of the **Chrysomelid, Adalia bipunctata** (the common 2-spotted ladybird), especially the distribution of the different polymorphic phases. He would be exceedingly grateful, therefore, if I, being Recorder of **Coleoptera** in Somerset, could send him any data on the frequencies of the black forms (with red spots), compared with the typical red form (with black spots). Even if I had no actual counts, it would be valuable to know whether the black form occurred commonly, as a rarity, or virtually not at all, in Somerset.

In replying, I said I had no actual data on the comparative frequencies of the two forms, but polymorphic phases were not at all uncommon in specimens taken in the field. However, every autumn and winter **Adalia bipunctata** hibernated in my house in varying numbers from year to year, but, so far as I can remember, during the 16 years I had lived in Minehead, the insects I had encountered indoors had been, without exception, of the type form only. I said I would make an effort to obtain, in the field during the coming season, some comparative figures to work on.

I have since had a reply from Mr. Creed in which he states his own observations indicate that in small hibernating groups one does not get a representative selection of varieties. This was confirmed by my experience at Minehead. What figures he has suggest that the black varieties tend to be somewhat uncommon in the South-west, but his records are very far from complete. For that reason any actual counts that I am able to make around Minehead during the year will be most valuable.

W. A. WILSON.