The Entomological Section

President—Captain E. Page, M.C., Ivythorn Manor, Street, Som.

Treasurer—Mr. C. J. Perrens, 8, Park Road, Bridgwater.

Secretary—Dr. J. V. Blachford, c.B.E., Milverton Ho., Long Ashton, Bristol.

THE Annual Meeting of the Entomological Section was held at Taunton Castle on 14 February 1936. As there was no president owing to the death of Prebendary Wickham, Mr. St. George Gray was voted to the chair.

At this meeting Captain E. Page, M.C., of Ivythorn Manor, Street, was elected President; and the other officers were re-elected for the ensuing year.

A field meeting was held on Shapwick Heath on 6 June, but as it rained the whole day very few members turned up.

Mr. C. J. Perrens has sent the following notes:-

The writer of these notes found 1936 a singularly unproductive year as far as the Bridgwater district was concerned. Insects were scarce and the weather conditions left much to be desired.

April was very cold and the Sallows were not as good as usual, a few *T. opima* and a number of interesting forms of *T. gracilis* were taken at Shapwick.

May was a disappointing month, and much too cold. *Conspicillaris* was scarce, but one of the pale variety was noted, and therewere no *Chamomillae*. Light on the Polden Hills, usually so good at the end of May, was unproductive owing to the cold nights.

A fair number of Colias edusa were noted in mid-June, and a few

M. albicolon were taken at Burnham about the same date.

The latter part of the season was very poor. Vanessa C-album very scarce, and ivy very poor. The only interesting thing was finding C. Xerampelina in Loxley Wood: a new locality for it.

HORNETS AT CROWCOMBE

In July hornets were frequently noted flying about a garden and orchard at Crowcombe. By September they had become rather a nuisance in the house, and a watch was kept to see

The Rookeries of Somerset

BY B. W. TUCKER, M.A., M.B.O.U.

Addenda and Corrigenda

The following grants towards the cost of publication and maps, received too late for reference in the text of this paper (*Proceedings*—vol. lxxxi (1935), pp. 149–240), are gratefully acknowledged by the author: From the Christopher Welch Reserve Fund, Oxford, £35; from Oriel College, Oxford, £10; from Magdalen College, Oxford, £5.

The following corrections should be made:

- p. 155, line 6 from bottom, for 'definine' read' define'
- p. 159, line 20, for 'spacial' read' spatial'
- p. 164, No. 63, for 'Barrow Hill' read 'Barrow Court'. The number of nests (12) is also underestimated, part of the rookery having been evidently overlooked. The total some years ago was c. 40, but there are now fewer. (Col. W. O. Gibbs)
- p. 220, line 6, for 'prediliction' read 'predilection'
- p. 222, line 7 from bottom in column 4 of table, for '35,714' read '35,643'
- p. 222, line 12 from bottom, for 'Table VI' read 'Table VIII'
- p. 222, line 10 from bottom, for 'summarize' read' summarizes'
- p. 226, line 6, for 'B' read 'C.'

where they came from. They were traced to a small hole in a thatched roof, and the nest was treated with cyanide with satisfactory results.

'Last week the whole nest was removed, and contained dozens of dead hornets, besides grubs in every stage of development and decay. Some of the insects, which we suppose to be queens, were much larger than the majority, while a few were hardly as large as queen wasps. A single queen was still alive, though unable to do more than twiddle her feelers.

'Unlike the wasp's nest, this one had no outer covering, and was shaped like the upper half of a ball. It contained four layers of cells, the lowest one quite a foot across. A part of it is still in my possession; each cell is more than $\frac{3}{8}$ in across and $1\frac{1}{8}$ in deep, that

being also the length of the average hornet.

'A year or two ago a hornet was found in Crowcombe under the bark of a tree and destroyed, and it is believed that many queens had left this nest before its destruction, for three have already been found in a house about a mile away.'

The above is an extract from a letter published in the Somerset County Herald of 14 November 1936. Our thanks are due to Mr. A. S. Macmillan for allowing us to reprint it.

The Secretary also received the following letter from Mr. W. W. Macmillan:—

Castle Cary, Somerset, 3 December 1936.

Dear Dr. Blachford,

I understand the members of the Entomological Section have been asked to send in anything they may think of special interest as the result of the past season's records. Without doubt, both as regards larvae and imagines, the season of 1936 has been one of the most disappointing within the last twenty years. Many of the common things were either absent or scarce and such an abundant insect as Sociata (subtristata) I did not see. On the other hand Plusia gamma and Agrotis suffusa were very abundant.

It may be of interest to record the capture of a specimen of Sibylla at Hadspen House on 4 August. This was sent me by the under-gardener who realised it was something out of the common. Other insects I got that are certainly unusual in this neighbourhood were Polia chi (is it usual for it to come so far south?), costalis and

H. rostralis.

W. W. MACMILLAN.

Mr. A. R. Hayward sends four County records of Micros, and notes on some interesting Micros he took at Shapwick and Bridgwater in June with Mr. Perrens.

The following Tortrices and Tineina—new county records—have not yet found their way into the Section's report published in the *Proceedings*.

Argyroploce arcuella Clerck.

Crowcombe Park gates and elsewhere on the Quantocks, June 1920. Rev. R. E. E. Frampton.

Philedone gerningana Schiff.

Dulverton, 13/7/23, A. P. Wickham. I found this in his collection.

Mompha subbistrigella Haw.

Misterton, 5/5/36. This was a hibernated specimen, and its foodplant being a common weed round here, I collected a lot of it, expecting to breed some, but without luck.

Aristotelia lutulentella Zell.

Haselbury Park, 5/8/35; and I also took a few on the Turf Moor on 28 June last. Meyrick says about it 'Dry fields, very local', but it is fairly common in Denny Wood, a pretty wet part.

On the Turf Moor with Mr. Perrens on 28 June last there came to light a third Somerset specimen of *Lozopera beatricella* Wals. It has probably been confused hitherto with *francillana* Fab., which

it closely resembles.

Also, at same place and date, I took a couple of *Gelechiids* which I am almost certain are *Aristotelia divisella* Dgl., but I have not yet been able to get my diagnosis confirmed, so they must wait for publication till next year. I can find no record of this species anywhere outside the Cambridge and Norfolk fens.

On the same day in the brick-ponds at Bridgwater I took another *Gelechia*, an obscure looking insect, which may be *plantiginella*, *instabilella* or *atripicella*, all of which are very much alike. If it is

either of the first two, it is new to the county.

The following items of interest have also been received:—

From Dr. A. Bulleid, F.S.A., Midsomer Norton.

Male Clouded Yellow in garden, 18 October 1936. Caught and liberated.

Ernest Sprankling, "Brookland", South Road, Taunton. Large Tortoiseshell, 3.15—4 p.m., 8 August 1936.

H. St. George Gray, f.s.a. Colias edusa observed in Taunton Castle garden on 20 August 1936. From William Wyndham, F.S.A., Orchard Wyndham, Williton.

The following butterflies were observed on one day, viz-Sunday, 13 September 1936, at Orchard Wyndham.

Wood Argus-3

Wall-2

Meadow Brown—1 few

Red Admiral—6 or 8

Painted Lady—1

Small Tortoiseshell—60 or more

Peacock-4

Common Blue—several

Large White—one or two

Small White—several

Clouded Yellow—1 or 2

Brimstone—2 males

The point is that all these were noted on one day.

Professor Frank Balfour-Browne, M.A., has kindly presented the Library with a copy of *The Aquatic Coleoptera of North and* South Somersetshire.

The pamphlet is a very valuable guide to the distribution of the various species, as the author divides the County into twenty districts and furnishes a map showing the various divisions. In addition the insects are arranged in a tabulated list as they occur in the different districts.

The professor records 91 species of *Hydradephaga* and 53 of aquatic *Hydrophilidae*, a total of 144 species taken by himself, and a further 8 species which he did not collect personally.

It is probable that there are new records in this list, but it has not been possible to check the list in time to publish the results in this Report.

THOMAS PERRENS

Unfortunately we have to report the death of yet another of our small community, Mr. Thomas Perrens, and the following notes on his life are written at the request of a member who thought they might be of general interest.

Mr. Perrens' interest in Natural History dates back to 1874 when he gave up his practice as a solicitor and joined his brothers in the Argentine. He was commissioned to collect Lepidoptera (especially butterflies) for one or two friends, and in the course of his residence abroad he sent back many hundred specimens, several of which were not previously known.

In speaking of his experiences he often described the way in which butterflies used to sit on damp sand at the sides of streams, each species in a patch to itself, and how riding along the bank he frequently took as many as forty or fifty specimens with one stroke of the net. He said too that these big patches of butterflies sitting on the sand were one of the most beautiful things he had ever seen.

On his return to England in 1891 Mr. Watkins of Watkins and Doncaster was very anxious that he should collect for him abroad,

but as it involved constant travelling he declined.

Mr. Perrens joined our Section in 1914 and attended the field meetings whenever possible. One of his greatest pleasures was going out with the author of these notes and collecting moths with the aid of a sheet.

He took an active interest in educational affairs in Bridgwater, being secretary to the County School for Girls and on the governing bodies of three other schools in the town. In addition he was secretary of the Tuberculosis Care Committee, and had been vicar's warden of St. Mary's, Bridgwater, for twenty years.

He was able to carry on his various interests until a few days before his death, which took place on 3 July 1936, at the age of 88.

'MERMIS' THREAD-WORM (NEMATODA) in WASP (Vesper vulgaris) BY RICHARD BECK

On the 19 October 1932 I was asked to take a wasp's nest in a little lane off Durleigh Road, Bridgwater, as they were interfering with tradesmen delivering goods by horse-drawn vehicles. It was situated in a difficult position in a bank composed of loose earth. I gave it a good dose of petrol and covered the hole with a sod. In removing the nest, which was 10 in. in diameter and had nine 'platforms', I lost a good many of the wasps, but secured the

greater part of the nest.

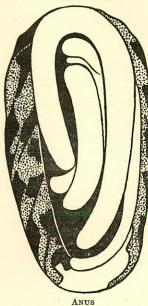
In sorting out the wasps from the comb and loose earth I was surprised to see the large number of what I thought were queens—301 altogether—but on dissecting some of them found the spermatheca abortive, very small or entirely absent. I sent a large number to Dr. A. D. Imms of the Zoological Laboratory, Cambridge, who replied:—'Towards the end of the season worker wasps often become fertile and closely resemble queens; in fact there is no way of separating very large workers from queens other than by dissection. Workers are therefore only able to lay unfertilized eggs and they die at the end of the season.'

I set to work and commenced dissecting these large worker wasps and queens, but was astonished to find *Nematode* worms occupying in many instances the entire abdomen. Out of thirty-one dissected

eight had Nematode worms.

With regard to the life history of the Thread-Worm, Dr. Imms writes me:—'The Mermis ultimately leaves the wasp and makes

Life Size: 10 x 5 mm.



its way into the earth, where it becomes sexually mature and lays eggs. When the larvae hatch from these eggs they make their way into various insects and come to live in the body cavity of the I have never come across such an intense parasitization of a wasp population by Mermis before.

The accompanying illustration shows the worm in situ in the abdomen. One of them I uncoiled and it measured 3½ in. long. I mounted three of these abdomens, with the worms exposed, in formalin so as to keep a record. As the worm increased in size the tracheae and digestive organs appear to have been squeezed against the inner wall of the abdomen and were scarcely visible. Whether these large wasps were able to fly I am unable to say. The nest was only three minutes' walk from my house; we had plenty of the ordinary size worker wasps visit us during the autumn, but none of the large workers.