## NEW FOREST ENTOMOLOGY

(LEPIDOPTERA)

Read at a Field Meeting, July 22nd, 1893, by the Rev. Geoffrey Hughes, M.A.

As the subject announced, "New Forest Entomology," has endless ramifications, it is necessary at once to limit it for the purposes of this paper. In speaking to members of the Field Club, it is natural for me, I think, to consider Entomology in connection with out of door life rather than in its stricter relations to science. There is no better way probably of becoming intimate with the charms of a particular district, such as this which we visit to day, than by making it the field in which we follow some favourite pursuit; applying to it, in fact, in some form the collecting instinct. To me, at least, the opportunities which I have found for occasional Entomological rambles as a collector, have been the means of raising and continually increasing the feelings of interest and affection for the beauties which are thus met with in such variety.

But out-door practical Entomology is still a larger subject than I can pretend to handle. In fact, of the several branches of insect life which can be studied here to the greatest advantage, there is only one to which I have paid any special attention, viz., that which comprises the *Lepidoptera* or butterflies and moths. To make a passing remark, it seems to me that this has the advantage over some others in the beauty of its objects, and in the sense of sympathetic communion with nature which is thus more readily promoted, while in the variety of its methods and the multiplicity of healthy inducements which it affords, it is probably unsurpassed.

It is very commonly the case that those who are as much seeking natural refreshment as wishing to promote science, are content, at least for some years, to limit their sphere of collection to the larger insects. And the classification of Lepidoptera admits of this very conveniently. Accordingly I refer to-day in detail only to the butterflies and moths down to the end of the Noctuæ, including the Geometrina. number of these in the British list is about 786. According to a compilation published by the Rev. A. C. Hervey, in the Papers and Proceedings of the H.F.C., the list of Hampshire Lepidoptera to the end of the Noctua comprises 655 species, or nearly six-sevenths of the whole number, and of these certainly by far the greater number are found in the New Forest. Such lists indeed are not to be taken exactly as they stand with regard to particular insects, except as shewing the history of the past; for species occasionally become extinct, while others appear or reappear. A very short examination, for instance, of the list mentioned shews two species of butterflies included. Pieris cratægi and Leucophasia sinapis, which have not I believe been taken here for many years, and of which the former is probably extinct in England. Of course the list includes records of what has happened; but as giving a general idea, we may conclude safely enough from Mr. Hervey's careful statement, that we have now quite threefourths of the British species with us in the New Forest.

Now when I come to speak of the actual open-air work of the collector, who is anxious to take as many as possible of these species, and to become personally familiar with their habits out of doors, I have nothing to say which will not appear common-place to anyone who has himself collected for any length of time. But still, personal experiences, however slight in themselves, generally interest Entomologists, and I may possibly offer a word or two to help some beginner in this particular district.

The part of the Forest which I know best may be indicated by its three boundaries, viz., 1st, the railway which lies between the stations of Lyndhurst and Brockenhurst; 2nd, the road from Lyndhurst station to Lyndhurst; 3rd, the road from Lyndhurst to Brockenhurst; with some adjacent parts which are important. In this part are contained several miles of country, wood, heath, and bog, containing resources

1 Vol. I., p. 28.

inexhaustible. For day collecting with the net, the most productive parts are generally Ramnor Enclosure and Stubby Copse, reached without much difficulty from Brockenhurst station. Here last year the interesting butterfly Colias edusa was plentiful; Limenitis sibylla, the graceful white admiral, is always abundant; A. valesina, the New Forest variety of A. Paphia, the silverwashed fritillary, is generally to be found; A. Iris, the Purple Emperor, Lord of Butterflies, is to be seen among the oak tops, if not taken. Nearer Lyndhurst I have taken Thecla quercus commonly; the beautiful silver .studded blue Lycana agon is the common butterfly of the heath; seeming to take the place of L. Alexis elsewhere. Colonies of Arge Galathea may be found in different places. V. polychlores is sometimes common in Stubby copse and other places: Of the moths which are to be taken on the wing or otherwise, by day, the most interesting which occur to me now are the clear wings Macroglossa fusiformis, and bombyliformis, in the rides off the woods; Eulepia cribrum, not in these parts, however, but near Ringwood; the beautiful little A. myrtilli is everywhere on the heaths; and among the Geometræ I have taken Selidosema plumaria plentifully at Emery Down; Scodonia belgiaria at Pondhead; Boarmia cinctaria. on Matley. Heath, and Cleora glabraria at various spots. Of course there are numbers besides, but I avoid a mere accumulation of names.

A kind of work of which I am now especially fond is larva beating; so many species can be easily obtained in this way which are only occasionally found otherwise. My advice to a beginner is that he should make or obtain as large a beating tray as he can conveniently-handle, and use as heavy a stick as he can easily wield; a good jar upon a bough is more efficacious in dislodging caterpillars uninjured than the slashing among twigs and leaves which is sometimes resorted to. This year I have had a few hours beating in Ironhill Enclosure, near Lyndhurst Station, and also in Denny Lodge Enclosure, and in both places found larva plentiful! Confining my attention almost entirely to the oaks, I obtained amongst others less interesting, Notodonta trepida and Chaonia; Cymatophora ridens plentifully, Taniocampa miniosa, 'Amphidasis' prodromaria, Selenia illustraria. Last year, on Balmer Lawn and in Stubby Copse I found Stauropus fagi (3), Demas coryli

(several); Eurymene dolobraria plentifully. I have also found the birches productive, and the Scotch fir in Denny Lodge Enclosure this June yielded any amount of Trachea piniperda. Noticing on the same ground an isolated sallow stripped of leaves, I examined it and found about 24 larva of V. polychloros feeding on the remnants, a sight which interested me, as this species is, of course, more commonly found on elm.

I pass over other points only mentioning, in regard to pupadigging, that I was fortunate enough, about Easter, to obtain several specimens of *Lithosia rubricollis*, by searching under moss at the roots of oaks—in order that I may add a word or two about night work.

By netting at dusk, there are many good moths to be taken, probably in any part of the Forest. I think at once of having taken the lovely Pericallia syringaria, Eunomos erosaria, Scotosia undulata, Macaria notata, Geometra papilionaria; of the thick bodied moths, Liparis monacha is then easily seen, and sometimes the delicate Calligenia miniata. But the Entomologist at night chiefly thinks of the seductive sugar (a semi-technical term I may explain to the uninitiated, signifying a mixture of treacle and beer, and perhaps rum, with which the moths are invited to regale themselves, generally on the trunks of trees). To do justice to the subject of sugar in the Forest, one ought however to be a resident within its limits. Every Entomologist knows the disappointment which he is apt to encounter when, with only one or two nights perhaps, or even a week available in some special locality, the weather probably, or some other circumstance, is unpropitious for the purpose.

I must confess that, though I greatly enjoy the outing, yet, entomologically, sugaring in the Forest has often with me resulted in disappointment. For two or three years, however, I have had a plan of taking a week or so of my holiday here with a friend or two in tents, which we pitch in a convenient spot carefully chosen. In this way we still meet with variable success of course, but I believe we are more masters of the situation than we could be on any other plan. There are, it must be confessed, inconveniences in our experience connected with cooking the food, and especially with washing up afterwards, as well as with the occasional yisits of a wandering cow or two, who may find out your

larder and eat up your last loaf of bread while you are asleep; yet, with all this, as an Entomologist, I recommend the experiment to others of similar taste. At sugaring I have taken in the Forest such moths as Noctua rhomboidea, Triphana fimbria rather commonly, Cerigo cytherea commonly, Lithosia quadra, Epunda nigra, and of course the handsome Crimson Underwings, for which the Forest is famous, Catocala sponsa and promissa. The capture of these splendid insects is fascinating and exciting; the number of those who go to Hurst Hill Enclosure on a single night for the purpose is sometimes considerable, I have had to race for a considerable distance in order to secure a series of trees for my own sugar, and there is a considerable sense of amusement in the whole proceeding. I have taken the Crimsons however elsewhere in the Forest, at a considerable distance from Hurst Hill, and it is obviously wise for Collectors not to be always following the beaten track.

I will not enter into the methods of attracting moths by artificial light, either in the open or in a trap; nor can I say anything about sweeping the heather and other low growths for larvæ. These and other points may be omitted.

The remarks I have made about New Forest Entomology are very slight in their character, but I hope their purpose is obvious, which is not for a moment to attempt any scientific information, but only to draw out a little interest in a healthy and instructive pursuit. I shall be very glad to exchange practical information with any other lepidopterist who will kindly offer his aid; some things can only be learnt by such interchanges of personal experiences. Books are valuable guides, but the best of them probably have mistakes, and they certainly have numberless omissions of useful detail.

I would conclude by expressing a wish that something may be done towards forming a collection of Hampshire Lepidoptera, available for public use in Southampton. The Hartley Museum would be a proper place in which to have such a collection; I am sure that there are entomologists enough who would be proud almost at once to contribute such insects as would ensure at least a fairly successful start, if they were invited to do so.

In Southampton there is, I know, at least one gentleman of the very highest attainments as a Coleopterist, and it cannot be doubted that sufficient talent in this and in other departments would be found somewhere within reach to support such an enterprize.