

ON SOME NEUROPTERA FROM THE SUMMIT
OF BEN NEVIS, COLLECTED BY MR. W. S.
BRUCE.

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AS a continuation of the series of articles on the insects collected at or near the summit of Ben Nevis, commenced by the Rev. A. Thornley (*ante*, pp. 28-37), I now give a list of the *Neuroptera* so far as I am able to determine them. There were about 120 examples in all, belonging to about 13 species. It is a significant fact that, with the exception of the aphidivorous *Hemerobius*, all are insects that pass their preparatory stages in water, and the greater part of them in running water, and that it is necessary that the supply of water be not intermittent. It is evident from Mr. Bruce's introductory remarks (p. 29) that most of them must have been carried up nearly 2000 feet. Viewing them as a whole, they are remarkable for the numerous individuals of small *Perlidae* and the extreme scarcity of *Trichoptera*, a condition of affairs somewhat inexplicable, considering that the preparatory requirements as to water are so similar in both.

The following is a list of the species observed :—

Div. TRICHOPTERA.

LIMNOPHILUS GRISEUS, L.—One example, 5th June.

BRACHYCENTRUS SUBNABILUS, C.—One example, 3rd June.

Div. PLANIPENNIA.

SIALIS LUTARIA, L.—About 18 examples, on various dates early in June. This generally common insect was probably bred in the lake below 2000 feet, alluded to in Mr. Bruce's introductory remarks. It is of weak power of flight, and I should think quite incapable of being transported voluntarily to any considerable height.

HEMEROBIUS NERVOSUS, *F.*—10 examples, from 10th May to 30th June. These must almost certainly have come from at or below the tree line.

Div. PSEUDO-NEUROPTERA.

PERLIDÆ.

CHLOROPERLA GRAMMATICA, *Poda.*—About a dozen in June.

ISOPTERYX TRIPUNCTATA, *Sc.*—More than a dozen in June.

I. BURMEISTERI, *Pict.?*—Three examples in June possibly belong here.

TÆNIOPTERYX RISI, *Morton.*—Two examples may be referred to this species, which has quite recently been separated from *T. trifasciata*, *Pict.*, 26th May and 6th June.

LEUCTRA, *sp.?*—Nearly 20 specimens of a small species that it is inadvisable to refer to under any particular name in the present uncertain condition of the genus. End of May and beginning of June. One is indicated as found alive on the snow.

NEMOURA MEYERI, *Pict.*—Two specimens presumably belong here; they are in bad condition.

EPHEMERIDÆ.

RHITHROGENA SEMICOLORATA, *C.*—Nearly 40 examples, mostly in beginning of June. The habit of soaring, mostly in swarms, so common in *Ephemeridæ*, especially in the males, would render these insects especially liable to be carried away by sudden inrushes of warm air. But a certain small percentage of the individuals are still in the sub-imago condition, and in that state could not have voluntarily taken any lofty flight.

SIPHLURUS, *sp.??*—One example, 2nd June, *may* pertain to this genus, but its condition precludes precise definition.

ODONATA.

PYRRHOSOMA MINIMUM, *Harris.*—One male example, 5th June. This is the only dragon-fly in the collection.