

## The Spiders of Ben Hope and Foinaven, Sutherland.

P. Merrett

Furzebrook Research Station, Wareham, Dorset.

A brief note was published by Cooke (1968), on a collection of spiders made in July 1967 during an expedition to Ben Hope organised by the Oxford University Scientific Society. In this paper, 29 species were recorded, nine of which were new county records for Sutherland.

Similar expeditions were mounted in 1968, 1969 and 1970, and the spiders collected were passed on to me for identification. In 1968, collections were made by hand only, at heights ranging from 30 ft (9 m) to 3,000 ft (914 m) on Ben Hope, and at the summit of a neighbouring peak, Foinaven (2,980 ft/908 m). In 1969, spiders were collected on Ben Hope only, in pitfall traps between 900 ft (274 m) and 3,000 ft, and by hand from 1,775 ft (541 m) to 3,000 ft. In 1970, collections on Ben Hope were made by hand and by pitfall trapping between 2,000 ft (610 m) and 3,000 ft, and by hand near the summit of Foinaven. The total number of species recorded from Ben Hope has now reached 57, four of them also having been collected on Foinaven.

The species recorded in all four years are listed in Table 1, in order of descending altitude at which they were found. They may be divided for convenience into three groups: — a) species found at altitudes up to 3,000 ft; b) species found at 2,000 ft or over, but not at 3,000 ft; c) species found only at altitudes lower than 2,000 ft.

### a) Species found at altitudes up to 3,000 ft (914 m)

15 species were found at heights up to 3,000 ft, seven of these, including the typical montane species *Lepthyphantes whymeri*, *Collinsia holmgreni* and *Entelegara errata*, being taken only at 3,000 ft. Four other montane species were also found at lower altitudes; *Caledonia evansi*, represented by four specimens at 3,000 ft and four at 2,550 ft (777 m), *Meioneta nigripes*, five specimens at 3,000 ft, one at 2,500 ft (762 m), and three at 1,825 ft (556 m), *Erigone tirolensis*, nine at 3,000 ft and one at 900 ft (274 m), and *Hilaira frigida*, most of the specimens of

which were taken at over 2,000 ft (610 m). Some of the other species found at 3,000 ft are common aeronauts, e.g. the *Erigone* spp., *Savignya frontata* and *Oedothorax retusus*; it is noteworthy that 33 out of the total of 37 specimens of *E. promiscua* were taken at 3,000 ft, and *Lycosa tarsalis* is perhaps a surprising record at that altitude.

### b) Species found at altitudes of 2,000 ft (610 m) or over, but not at 3,000 ft.

23 species were taken at 2,000 ft or more, but not at 3,000 ft. These included two typical montane species, *Oreonetides vaginatus* and *Tiso aestivus*, and a number of species which frequently occur on mountains but which are also found at lower altitudes, especially in the north, e.g. *Porrhomma pallidum*, *Diplocentria bidentata*, *Rhaebothorax morulus*, *Cryphoea silvicola*, *Robertus arundineti*, *Silometopus elegans* and *Hilaira excisa*. In most cases the number of specimens collected was insufficient for one to be sure that these species do not occur at 3,000 ft, but the species in this group, with the possible exception of *T. aestivus*, are generally found at lower altitudes than some of those in the first group. *Lepthyphantes zimmermanni* was found in about equal numbers throughout its altitude range of 900-2,000 ft (274-610 m), as was *Robertus lividus* in its range of 500-2,000 ft (152-610 m), but *Lycosa pullata* was found mainly below 1,500 ft (457 m).

### c) Species found only at altitudes lower than 2,000 ft (610 m)

19 species were recorded only at altitudes below 2,000 ft, the only species in this group which are typical of upland areas being *Hilaira nubigena*, *Dicymbium tibiale*, and possibly *Jacksonella falconeri*. The record of *H. nubigena* is particularly noteworthy, as this is only the fifth record for Britain, all the others having come from the North of England. The remainder of the species in this group are all typical lowland species.

It appears from these collections that the spider fauna of Ben Hope, in the extreme north of Scotland, is similar to that of the much better known Cairngorms region.

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## Reference

COOKE, J. A. L. 1968 : A collection of spiders from Ben Hope, Sutherland.  
*Bull. Brit. Sp. Stud. Gr.* 38, 6.

SPECIES	BEN HOPE				FOINAVEN	
	Altitude		Years	No. of specimens	2,980 ft (908 m)	
	feet	metres			Years	No. of specimens
<i>Collinsia holmgreni</i> (Thorell)	3,000	914	67,68	3		
<i>Entelecara errata</i> O.P.-C.	3,000	914	67	3		
<i>Lepthyphantes whymeri</i> F.O.P.-C.	3,000	914	67,68	2		
<i>Savignia frontata</i> (Blk.)	3,000	914	68,70	4		
<i>Erigone dentipalpis</i> (Wider)	3,000	914	69	1		
<i>Oedothorax retusus</i> (Westr.)	3,000	914	69	1		
<i>Lycosa tarsalis</i> Thorell	3,000	914	69	1		
<i>Caledonia evansi</i> O.P.-C.	2,550-3,000	777-914	67,69	8		
<i>Meioneta nigripes</i> (Simon)	1,825-3,000	556-914	68,69	9		
<i>Hilaira frigida</i> (Thorell)	900-3,000	274-914	67,68,69,70	45	68,70	6
<i>Erigone tirolensis</i> L.Koch	900-3,000	274-914	69,70	10		
<i>E. promiscua</i> (O.P.-C.)	900-3,000	274-914	67,69,70	37		
<i>Porrhomma convexum</i> (Westr.)	900-3,000	274-914	67,68,69	3	70	1
<i>Lepthyphantes ericaeus</i> (Blk.)	500-3,000	152-914	67,68,70	10		
<i>L. mingei</i> Kulczynski	30-3,000	9-914	67,68,70	18		
<i>Oreonetides vaginatus</i> (Thorell)	2,000-2,850	610-869	67,68,69	7		
<i>Tiso aestivus</i> (L.Koch)	2,500-2,550	762-777	69,70	4		
<i>Porrhomma pallidum</i> Jackson	2,000-2,550	610-777	69,70	3	70	1
<i>Trachynella nudipalpis</i> (Westr.)	900-2,550	274-777	69	3		
<i>Cryphoea silvicola</i> (C.L.Koch)	2,500	762	68	1		
<i>Centromerus prudens</i> (O.P.-C.)	2,000-2,500	610-762	67,68	5		
<i>Diplocentria bidentata</i> (Emerton)	2,000-2,500	610-762	67,70	3		
<i>Rhaebothorax morulus</i> (O.P.-C.)	2,000-2,500	610-762	68,70	2		
<i>Robertus arundineti</i> (O.P.-C.)	1,825-2,500	556-762	69,70	7		
<i>Agyreta decora</i> (O.P.-C.)	1,775-2,500	541-762	68,69	2		
<i>Lepthyphantes zimmermanni</i> Bertk.	900-2,500	274-762	67,68,69,70	42	68	2
<i>Oreonetides abnormis</i> (Blk.)	500-2,500	152-762	67,68,69,70	15		
<i>Cornicularia cuspidata</i> (Blk.)	2,000	610	68	1		
<i>Diplocephalus permixtus</i> (O.P.-C.)	2,000	610	70	1		
<i>Araeoncus humilis</i> (Blk.)	2,000	610	67	1		
<i>Walckenaera acuminata</i> Blk.	1,600-2,000	488-610	69,70	3		
<i>Agyreta cauta</i> (O.P.-C.)	1,600-2,000	488-610	69	2		
<i>Hilaira excisa</i> (O.P.-C.)	900-2,000	274-610	67,68,69,70	10		
<i>Centromerita concinna</i> (Thorell)	900-2,000	274-610	68,69	4		
<i>Silometopus elegans</i> (O.P.-C.)	900-2,000	274-610	69,70	2		
<i>Lycosa pullata</i> (Clerck)	500-2,000	152-610	67,68,69	18		
<i>Robertus lividus</i> (Blk.)	500-2,000	152-610	67,68,69,70	14		
<i>Gonatium rubens</i> (Blk.)	500-2,000	152-610	67,68,69	7		
<i>Jacksonella falconeri</i> (Jackson)	1,825	556	69	1		
<i>Hilaira nubigena</i> Hull	1,775	541	69	1		
<i>Micrargus herbigradus</i> (Blk.)	1,600	488	69	1		
<i>Tarentula pulverulenta</i> (Clerck)	1,600	488	69	1		
<i>Dicymbium nigrum</i> (Blk.)	1,500-1,600	457-488	67,69	2		
<i>D. tibiale</i> (Blk.)	900-1,600	274-488	69	3		
<i>Gongylidiellum vivum</i> (O.P.-C.)	1,500	457	68	1		
<i>Monocephalus fuscipes</i> (Blk.)	1,500	457	67	1		
<i>Ceratinella brevipes</i> (Westr.)	1,500	457	67	1		
<i>Agyreta subtilis</i> (O.P.-C.)	1,500	457	67	1		
<i>Xysticus cristatus</i> (Clerck)	500-1,500	152-457	67,68	4		
<i>Theonoe minutissima</i> (O.P.-C.)	1,000	305	67	2		
<i>Pirata piraticus</i> (Clerck)	900-1,000	274-305	67,69	2		
<i>Pachygnatha clercki</i> Sundevall	900	274	69	1		
<i>Neon reticulatus</i> (Blk.)	500	152	67	2		
<i>Clubiona trivialis</i> C.L.Koch	500	152	67	1		
<i>Hahnia helveola</i> Simon	500	152	67	1		
<i>Bathypantes gracilis</i> (Blk.)	30	9	68	4		
<i>Lepthyphantes tenuis</i> (Blk.)	30	9	68	1		

Table 1. Species recorded in all four years, in order of descending altitude