

The status and distribution of the jumping spider *Sitticus floricola* in Northwest England and Wales



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**World
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Contents List

Summary	8
Introduction	9
Materials & methods	12
Results	16
<i>Sitticus floricola</i>	17
Llay Bog	19
Vicarage Moss	21
Bettisfield Moss	24
Fenn's Moss	29
Whixall Moss	35
Wem Moss	40
Clarepool Moss	44
Black Lake	46
Hockenhull	49
Great Blakemere	51
LM 09 & 10	54
Hatch Mere	56
Flaxmere	58
Oakmere Moss	62
Abbots Moss, Gull Moss	65
Abbots Moss, South Moss	68
Abbots Moss, Shemmy Moss	71
Lily Pool	75
Brackenhurst Bog	78
Snipe Island	83
Hogshead Moss	85
Little Budworth Common	88
Wybunbury Moss	94
Other recorded species	102
<i>Carorita limnaea</i>	102
<i>Glyphesis cottonae</i>	103
<i>Gnaphosa nigerrima</i>	104
<i>Minicia marginella</i>	105
<i>Sitticus caricis</i>	106
<i>Microbisium brevifemoratum</i>	107
Nationally Scarce spiders	108
Threats to the conservation of <i>Sitticus floricola</i>	109
Scrub encroachment	109
Afforestation	110
Drainage	110
Inundation	110
Fire	110
Pollution	110
Acknowledgments	111
References	111
Appendix	113

List of figures

Fig. 1	Vacuum sampling bog vegetation for <i>Sitticus floricola</i>	13
Fig. 2	Sieving vacuumed sample over plastic tray to concentrate the sample	13
Fig. 3	Inspecting the vacuum sample for <i>Sitticus floricola</i> and other arachnids	14
Fig. 4	Immature <i>Sitticus floricola</i> on sample tray	14
Fig. 5	Immature Salticidae from Little Budworth Common bogs	15
Fig. 6	Immature <i>Sitticus floricola</i> from Oakmere Moss	15
Fig. 7	<i>Sitticus floricola</i> female, Vicarage Moss	17
Fig. 8	<i>Sitticus floricola</i> male, Vicarage Moss	17
Fig. 9	Relative locations of survey sites in vice-counties Cheshire, Denbighshire and Shropshire	18
Fig. 10	Llay Bog sample point location	19
Fig. 11	Llay Bog sample point location on aerial imagery	19
Fig. 12	Llay Bog	20
Fig. 13	Vicarage Bog sample point locations	21
Fig. 14	Vicarage Moss (large and small basins) sample point locations on aerial imagery	21
Fig. 15	Fenn's, Whixall, Bettisfield and Wem Mosses sample point locations	24
Fig. 16	Bettisfield Moss sample point locations on aerial imagery	24
Fig. 17	Bettisfield Moss sample point 1	25
Fig. 18	Bettisfield Moss sample point 2	26
Fig. 19	Bettisfield Moss sample point 3	27
Fig. 20	Bettisfield Moss sample point 4	28
Fig. 21	Fenn's Moss sample point locations on aerial imagery	29
Fig. 22	Fenn's Moss sample point locations on aerial imagery in detail	29
Fig. 23	Fenn's Moss sample point 1	30
Fig. 24	Fenn's Moss sample point 2	31
Fig. 25	Fenn's Moss sample point 3	32
Fig. 26	Fenn's Moss sample point 4	33
Fig. 27	Fenn's Moss sample point 5	34
Fig. 28	Whixall Moss sample point locations on aerial imagery	35
Fig. 29	Whixall Moss sample point 1	36
Fig. 30	Whixall Moss sample point 2	37
Fig. 31	Whixall Moss sample point 3	38
Fig. 32	Whixall Moss sample point 4	39
Fig. 33	Wem Moss sample point locations on aerial imagery	40
Fig. 34	Wem Moss sample point 1	41
Fig. 35	Wem Moss sample point 2	42
Fig. 36	Wem Moss sample point 3	43
Fig. 37	Clarepool Moss sample point location	44
Fig. 38	Clarepool Moss sample point locations on aerial imagery	44
Fig. 39	Clarepool Moss showing high water level and remnant island of inaccessible bog vegetation	45
Fig. 40	Delamere, Flaxmere and Hatch Mere sample point locations	46
Fig. 41	Black Lake sample point locations on aerial imagery	46
Fig. 42	Black Lake sample point 1	47
Fig. 43	Black Lake sample point 2	48
Fig. 44	Hockenhull sample point location on aerial imagery	49
Fig. 45	Hockenhull sample point 1	50
Fig. 46	Great Blakemere sample point locations on aerial imagery	51
Fig. 47	Great Blakemere sample point 1	52
Fig. 48	Great Blakemere sample point 2	53
Fig. 49	LM 09 & 10 sample point location on aerial imagery	54
Fig. 50	LM 09 & 10 sample point 1	55
Fig. 51	Hatch Mere sample point location on aerial imagery	56
Fig. 52	Hatch Mere sample point 1	57
Fig. 53	Flaxmere sample point locations on aerial imagery	58

Fig. 54	Flaxmere sample point 1	59
Fig. 55	Flaxmere sample point 2	60
Fig. 56	Flaxmere sample point 3	61
Fig. 57	Oakmere Moss sample point locations	62
Fig. 58	Oakmere Moss sample point locations on aerial imagery	62
Fig. 59	Oakmere Moss sample point 1	63
Fig. 60	Oakmere Moss sample point 2	64
Fig. 61	Abbots Moss sample point locations	65
Fig. 62	Abbots Moss, Gull Moss sample point locations on aerial imagery	65
Fig. 63	Gull Moss sample point 1	66
Fig. 64	Gull Moss sample point 2	67
Fig. 65	Abbots Moss, South Moss sample point locations on aerial imagery	68
Fig. 66	South Moss sample point 1	69
Fig. 67	South Moss sample point 2	70
Fig. 68	Abbots Moss, Shemmy Moss sample point locations on aerial imagery	71
Fig. 69	Shemmy Moss sample point 1	72
Fig. 70	Shemmy Moss sample point 2	73
Fig. 71	Shemmy Moss sample point 3	74
Fig. 72	Lily Pool sample point locations on aerial imagery	75
Fig. 73	Lily Pool sample point 1	76
Fig. 74	Lily Pool sample point 2	77
Fig. 75	Brackenhurst Bog and Hogshead Moss sample point locations	78
Fig. 76	Brackenhurst Bog sample point locations on aerial imagery	78
Fig. 77	Brackenhurst Bog sample point 1	79
Fig. 78	Brackenhurst Bog sample point 2	80
Fig. 79	Brackenhurst Bog sample point 3	81
Fig. 80	Brackenhurst Bog sample point 4	82
Fig. 81	Snipe Island sample point location	83
Fig. 82	Snipe Island sample point locations on aerial imagery	83
Fig. 83	Snipe Island sample point 1	84
Fig. 84	Hogshead Moss sample point locations on aerial imagery	85
Fig. 85	Hogshead Moss sample point 1	86
Fig. 86	Hogshead Moss sample point 2	87
Fig. 87	Little Budworth Common sample point locations	88
Fig. 88	Little Budworth Common (North Moss, Central Moss, East Moss and Whitehall Moss) sample point locations on aerial imagery	88
Fig. 89	Whitehall Moss sample point 1	89
Fig. 90	East Moss sample point 1	90
Fig. 91	Central Moss sample point 1	91
Fig. 92	Central Moss sample point 2	92
Fig. 93	North Moss sample point 1	93
Fig. 94	Wybunbury Moss sample point locations	94
Fig. 95	Wybunbury Moss sample point locations on aerial imagery	94
Fig. 96	Wybunbury Moss sample point 1	95
Fig. 97	Wybunbury Moss sample point 2	96
Fig. 98	Wybunbury Moss sample point 3	97
Fig. 99	Wybunbury Moss sample point 4	98
Fig. 100	Wybunbury Moss sample point 5	99
Fig. 101	Wybunbury Moss sample point 6	100
Fig. 102	Wybunbury Moss sample point 7	101
Fig. 103	<i>Carorita limnaea</i> female, Bettisfield Moss	102
Fig. 104	<i>Carorita limnaea</i> distribution on Wybunbury Moss	102
Fig. 105	<i>Carorita limnaea</i> distribution on Bettisfield Moss	102
Fig. 106	<i>Glyphesis cottonae</i> female, Bettisfield Moss	103
Fig. 107	<i>Gnaphosa nigerrima</i> female, Wybunbury Moss	104
Fig. 108	<i>Gnaphosa nigerrima</i> distribution on Wybunbury Moss	104
Fig. 109	<i>Minicia marginella</i> subadult male, Bettisfield Moss	105
Fig. 110	<i>Minicia marginella</i> subadult male, Bettisfield Moss	105

Fig. 111	<i>Minicia marginella</i> distribution on Bettisfield Moss	105
Fig. 112	<i>Sitticus caricis</i> male, Whixall Moss	106
Fig. 113	<i>Sitticus caricis</i> distribution on Fenn's & Whixall Moss	106
Fig. 114	<i>Microbisium brevifemorum</i> , Bettisfield Moss	107
Fig. 115	<i>Microbisium brevifemorum</i> distribution on Bettisfield Moss	107
Fig. 116	Hand pulling birch saplings at Llay Bog	109
Fig. 117	Llay Bog following scrub removal	109
Fig. 118	Larger trees removed and treated to prevent regrowth at Llay Bog	109
Fig. 119	Young birch and pine saplings encroaching on bog at Budworth	109

List of tables

Table 1	Previous records of <i>Sitticus floricola</i> in England and Wales by site and individual bog	10
Table 2	Bogs surveyed for <i>Sitticus floricola</i> during 2017; showing year of last site record and maximum area of potentially suitable bog habitat	16
Table 3	Llay Bog sample point 1	20
Table 4	Vicarage Moss Large basin sample point 1	22
Table 5	Vicarage Moss Large basin sample point 2	22
Table 6	Vicarage Moss Large basin sample point 3	22
Table 7	Vicarage Moss Small basin sample point 1	23
Table 8	Bettisfield Moss sample point 1	25
Table 9	Bettisfield Moss sample point 2	26
Table 10	Bettisfield Moss sample point 3	27
Table 11	Bettisfield Moss sample point 4	28
Table 12	Fenn's Moss sample point 1	30
Table 13	Fenn's Moss sample point 2	31
Table 14	Fenn's Moss sample point 3	32
Table 15	Fenn's Moss sample point 4	33
Table 16	Fenn's Moss sample point 5	34
Table 17	Whixall Moss sample point 1	36
Table 18	Whixall Moss sample point 2	37
Table 19	Whixall Moss sample point 3	38
Table 20	Whixall Moss sample point 4	39
Table 21	Wem Moss sample point 1	41
Table 22	Wem Moss sample point 2	42
Table 23	Wem Moss sample point 3	43
Table 24	Wem Moss sample point 4	43
Table 25	Clarepool Moss sample point 1	45
Table 26	Black Lake sample point 1	47
Table 27	Black Lake sample point 2	48
Table 28	Hockenhull sample point 1	50
Table 29	Great Blakemere sample point 1	52
Table 30	Great Blakemere sample point 2	53
Table 31	LM 09 & LM10 sample point 1	55
Table 32	Hatch Mere sample point 1	57
Table 33	Flaxmere sample point 1	59
Table 34	Flaxmere sample point 2	60
Table 35	Flaxmere sample point 3	61
Table 36	Oakmere Moss sample point 1	63
Table 37	Oakmere Moss sample point 2	64
Table 38	Gull Moss sample point 1	66
Table 39	Gull Moss sample point 2	67
Table 40	South Moss sample point 1	69
Table 41	South Moss sample point 2	70
Table 42	Shemmy Moss sample point 1	72
Table 43	Shemmy Moss sample point 2	73
Table 44	Shemmy Moss sample point 3	74

Table 45	Lily Pool sample point 1	76
Table 46	Lily Pool sample point 2	77
Table 47	Brackenhurst Bog sample point 1	79
Table 48	Brackenhurst Bog sample point 2	80
Table 49	Brackenhurst Bog sample point 3	81
Table 50	Brackenhurst Bog sample point 4	82
Table 51	Snipe Island sample point 1	84
Table 52	Hogshead Moss sample point 1	86
Table 53	Hogshead Moss sample point 2	87
Table 54	Whitehall Moss sample point 1	89
Table 55	East Moss sample point 1	90
Table 56	Central Moss sample point 1	91
Table 57	Central Moss sample point 2	92
Table 58	North Moss sample point 1	93
Table 59	Wybunbury Moss sample point 1	95
Table 60	Wybunbury Moss sample point 2	96
Table 61	Wybunbury Moss sample point 3	97
Table 62	Wybunbury Moss sample point 4	98
Table 63	Wybunbury Moss sample point 5	99
Table 64	Wybunbury Moss sample point 6	100
Table 65	Wybunbury Moss sample point 7	101
Table 66	Llay Bog, sample point 1 records	113
Table 67	Vicarage Moss, large basin, sample point 1 records	113
Table 68	Vicarage Moss, large basin, sample point 2 records	113
Table 69	Vicarage Moss, large basin, sample point 3 records	114
Table 70	Vicarage Moss, small basin, sample point 1 records	114
Table 71	Bettisfield Moss, sample point 1 records	114
Table 72	Bettisfield Moss, sample point 2 records	114
Table 73	Bettisfield Moss, sample point 3 records	115
Table 74	Bettisfield Moss, sample point 4 records	115
Table 75	Fenn's Moss, sample point 1 records	115
Table 76	Fenn's Moss, sample point 2 records	116
Table 77	Fenn's Moss, sample point 3 records	116
Table 78	Fenn's Moss, sample point 4 records	116
Table 79	Fenn's Moss, sample point 5 records	116
Table 80	Fenn's Moss, sample point 6 records	116
Table 81	Whixall Moss, sample point 1 records	117
Table 82	Whixall Moss, sample point 2 records	117
Table 83	Whixall Moss, sample point 3 records	117
Table 84	Whixall Moss, sample point 4 records	118
Table 85	Wem Moss, sample point 1 records	118
Table 86	Wem Moss, sample point 2 records	118
Table 87	Wem Moss, sample point 3 records	118
Table 88	Wem Moss, sample point 4 records	118
Table 89	Clarepool Moss, sample point 1 records	119
Table 90	Black Lake, Delamere Forest, sample point 1 records	119
Table 91	Black Lake, Delamere Forest, sample point 2 records	119
Table 92	Hockenhull, Delamere Forest, sample point 1 records	119
Table 93	Great Blakemere, Delamere Forest, sample point 1 records	119
Table 94	Great Blakemere, Delamere Forest, sample point 2 records	120
Table 95	LM09 & LM10, Delamere Forest, sample point 1 records	120
Table 96	Hatch Mere, sample point 1 records	120
Table 97	Flaxmere, sample point 1 records	120
Table 98	Flaxmere, sample point 2 records	121
Table 99	Flaxmere, sample point 3 records	121
Table 100	Oakmere Moss, sample point 1 records	121
Table 101	Oakmere Moss, sample point 2 records	122
Table 102	Abbots Moss, Gull Moss, sample point 1 records	122

Table 103	Abbots Moss, Gull Moss, sample point 2 records	122
Table 104	Abbots Moss, South Moss, sample point 1 records	122
Table 105	Abbots Moss, South Moss, sample point 2 records	122
Table 106	Abbots Moss, South Moss, sample point 3 records	122
Table 107	Abbots Moss, Shemmy Moss, sample point 1 records	123
Table 108	Abbots Moss, Shemmy Moss, sample point 2 records	123
Table 109	Abbots Moss, Shemmy Moss, sample point 3 records	123
Table 110	Lily Pool, sample point 1 records	123
Table 111	Lily Pool, sample point 2 records	124
Table 112	Brackenhurst Bog, sample point 1 records	124
Table 113	Brackenhurst Bog, sample point 2 records	124
Table 114	Brackenhurst Bog, sample point 3 records	124
Table 115	Brackenhurst Bog, sample point 4 records	125
Table 116	Snipe Island, sample point 1 records	125
Table 117	Hogshead Moss, sample point 1 records	125
Table 118	Hogshead Moss, sample point 2 records	125
Table 119	Little Budworth Common, Whitehall Moss, sample point 1 records	126
Table 120	Little Budworth Common, East Moss, sample point 1 records	126
Table 121	Little Budworth Common, Central Moss, sample point 1 records	126
Table 122	Little Budworth Common, Central Moss, sample point 2 records	126
Table 123	Little Budworth Common, North Moss, sample point 1 records	127
Table 124	Little Budworth Common, sample point 1 records	127
Table 125	Wybunbury Moss, sample point 1 records	127
Table 126	Wybunbury Moss, sample point 2 records	128
Table 127	Wybunbury Moss, schwingmoor, sample point 3 records	128
Table 128	Wybunbury Moss, <i>Sphagnum</i> lawn, sample point 3 records	129
Table 129	Wybunbury Moss, sample point 4 records	129
Table 130	Wybunbury Moss, sample point 5 records	129
Table 131	Wybunbury Moss, sample point 6 records	130
Table 132	Wybunbury Moss, sample point 7 records	130
Table 133	Wybunbury Moss, sample point 8 records	130
Table 134	Wybunbury Moss, sample point 9 records	131
Table 135	Wybunbury Moss, sample point 10 records	131
Table 136	Wybunbury Moss, sample point 11 records	131

Summary

A field survey of the Near Threatened and Nationally Rare jumping spider *Sitticus floricola* (C. L. Koch, 1837) was undertaken between 8th August and 8th October 2017 to ascertain its current distribution in England and Wales.

A desk study revealed that *Sitticus floricola* was recorded previously from 21 bogs (17 sites), however four sites/bogs have been lost to agriculture. Of the 17 extant bogs, 16 were resurveyed and a further 11 investigated.

Sitticus floricola was reconfirmed at 8 known sites (11 bogs) and recorded for the first time at a further two sites (four bogs: Vicarage Moss Small basin, Lily Pool, Brackenhurst Bog, Little Budworth Common North Moss). It was not found at five bogs where it had previously been recorded. Potential threats to *S. floricola* populations are outlined and its current area of occupancy in England and Wales calculated to be about 12 ha in total.

This lowland raised bog survey recorded 108 spider species, 6 harvestmen, a pseudoscorpion and a centipede. The survey produced records of the Nationally Rare spiders *Carorita limnaea* (Crosby & Bishop, 1927), *Glyphesis cottonae* (La Touche, 1946), *Gnaphosa nigerrima* L. Koch, 1877, *Minicia marginella* (Wider, 1834) and *Sitticus caricis* (Westring, 1861). *Glyphesis cottonae* is recorded as new to Wales.

Populations of the Bog Pseudoscorpion *Microbisium brevifemorum* (Ellingsen, 1903), *C. limnaea* and *M. marginella* were discovered at Bettisfield Moss; each representing the third known British localities for these species.

Introduction

Sitticus floricola is a large jumping spider strongly associated with acidic lowland raised bogs. It is recorded from 17 bogs, known regionally as “mosses”, on the Shropshire-Cheshire Plain, including two regionally associated Welsh sites near Wrexham (Spider Recording Scheme, Wallace & Wallace, 1991). Two outlier populations occur in southeast Scotland at Loch Ken and Loch Stroan where the species occupies loch-side bogs (Dobson, 1982, 1987). An unsubstantiated, pre-1930 record of *S. floricola* from Meathop Moss, Cumbria made by J. E. Hull is mentioned by Mackie (1959). The mosses of the Shropshire-Cheshire Plain therefore represent this species’ stronghold in Britain.

On the 11th August 2016 a preliminary vacuum sampling survey of the Delamere Forest Bogs recorded *S. floricola* at Black Lake and Abbots South Moss. However, it was not recorded at Great Blakemere (SJ54687120), Doolittle (SJ54267144), Hockenhull (SJ54237093), Pierson’s (SJ54587156), LM09 & 10 (SJ53817111), A06 (SJ53867204), Barnsbridge Basin (SJ54227191) and Flaxmere (SJ55597226) Mosses.

Females internally occupy *Eriophorum angustifolium* and *Eriophorum vaginatum* (Cottongrass) flower heads where they construct their egg-sac (Jackson, 1916, Locket & Millidge, 1951, Wild, 1969); with multiple females inhabiting a single head in May (Wallace & Wallace, 1991). Adults of both sexes have been recorded in Britain in all months between May and September.

Many of the mosses where this species occurs are small and isolated, dotted within an intensive agricultural/forested landscape. These isolated populations are potentially at risk of localised extinction, with recolonisation likely to be problematic because of their fragmentary distribution.

Sitticus floricola is listed as Near Threatened and Nationally Rare in the recent spider status review (Harvey *et al.*, 2017). There are few recent records from many of its British sites, so this survey was commissioned by the Tanyptera Trust (World Museum, Liverpool) to clarify its current distribution in England and Wales.

Prószyński (2017) proposed the transfer of *Sitticus floricola* to the new genus *Sittiflor*, although this revised nomenclature is not used in this report.

Table 1. Previous records of *Sitticus floricola* in England and Wales by site and individual bog.

Site	Location	Grid Ref.	Date	Sex	Recorder
1	Llay Bog	SJ322554	22/05/1988	f	Wallace, B. & I.D.
2	Vicarage Moss	SJ360540	05/06/1988	m f	Wallace, B. & I.D.
3	Bettisfield Moss	SJ481350	1988		W.P.I.S.
3	Bettisfield Moss	SJ481350	15/06/1988	2m f	Wallace, I.D.
4	Fenn's Moss	SJ43	1993		Anon.
5	Whixall Moss	SJ5134	27/07/2004	1	Denton, J.
6	Delamere Forest	SJ5471	29/03/1905		Jackson, A. R.
6	Delamere Forest	-	26/04/1915	f	Jackson, A. R.
6	Delamere	-		48 mf	Jackson, A. R.
6	Delamere	-		1m 1f	Falconer, W.
6	Frodsham & Delamere	SJ57	11/05/1905?		Mackie, D.W.
6	Delamere Forest	SJ5471	May 1961	1m	Milnes, J.E.D. det. Jerrard, P.C.
6	Delamere Forest	-	Sep. 1961	1m	Milnes, J.E.D.
6	Delamere	-	02/08/1970	1m 1f	Anon.
6a	Black Lake, Delamere Forest	-	08/08/1959	m f	Mackie, D. W.
6a	Black Lake, Delamere Forest	SJ5370	14/06/1986	1i	Judd, S.
6a	Black Lake, Delamere Forest	SJ537709	06/07/1997		Merritt, R.
6a	Black Lake, Delamere Forest	SJ53747092	21/06/2013	1m 1f	Gallon, R.
6a	Black Lake, Delamere Forest	SJ53747092	11/08/2016	1m 7i	Gallon, R.
7	Flaxmere	-	c.1959		Mackie, D. W.
7	Flaxmere "Hatchmere"	SJ554721	22/07/1967	m f	Leighton, R.
7	Flaxmere "Hatchmere"	SJ554721	02/08/1970	m f	Leighton, R.
7	Flaxmere	SJ556723	30/06/1990	3f	Felton, C.
7	Flaxmere	SJ557724	24/08/1991	1m 1f	Wright, J.
7	Flaxmere	SJ555722	24/08/1991	1i	Felton, C.
7	Flaxmere	SJ557723	1997		Scott, A.G.
8	Hartford	SJ6371	1897		Greening, L.
9	Oakmere Moss	SJ5768	05/08/1991	m f	Scott, A.G.
9	Oakmere Moss	SJ576681	1998		Scott, A.G.
10	Abbots Moss "Nunsmere area"	-	27/05/1956	1m 1if	Wild, A. M.
10	Abbots Moss	-	07/08/1961	9 mf	Mackie, D.W.
10	Abbots Moss	SJ5868	01/03/1964		Mackie, D.W.
10	Abbots Moss	SJ56	27/06/1969	1m 3f	Murphy, F. & J.
10	Abbots Moss	SJ5968	09/08/1969		Leighton, R.
10	Abbots Moss	SJ5968	24/08/1969	M F	Leighton, R.
10	Abbots Moss	SJ595688	21/06/1986	1m	Judd, S.
10	Abbots Moss	SJ5968	20/07/1996	immms	Scott, A.G.
10	Abbots Moss	SJ5968	27/07/1996	3f	Scott, A.G.
10	Abbots Moss	SJ5968	03/08/1996	m f	Scott, A.G.
10	Abbots Moss	SJ5968	04/06/1997	1f	Scott, A.G.
10a	Abbots Moss, East Bog (Gull Moss)	SJ601687	1998		Scott, A.G.
10b	Abbots Moss, South Moss	SJ59376853	11/08/2016	2m 5f	Gallon, R.

10c	Abbots Moss, Shemmy Moss	SJ595687	1971		Mackie, D.W.
10c	Abbots Moss, Shemmy Moss	SJ593688	12/09/1990		Fowles, A.P.
10c	Abbots Moss, Shemmy Moss	SJ595689	06/07/1997		Merritt, R.
11	Hogshead Moss	SJ584695	1998		Scott, A.G.
11	Hogshead Moss	SJ584695	30/06/1998	1f	Scott, A.G.
11	Hogshead Moss	SJ584695	03/07/1998	1f	Scott, A.G.
11	Hogshead Moss	SJ584695	21/07/1998	1m 1f	Scott, A.G.
11	Hogshead Moss	SJ584695	07/09/1998	m f i	Scott, A.G.
12	Petty Pool	SJ6169	17/07/1897		Anon.
12	Petty Pool	-	20/07/1897	22	Greening, L.
13	Little Budworth Common	SJ5965	20/08/1972		Leighton, R.
13	Little Budworth Common	SJ5865	28/02/1982		Dobson, S.
13	Little Budworth Common	SJ5965	24/07/1985	3m 1f	Judd, S.
13	Little Budworth Common	SJ5865	26/07/1986	1f	Harvey, P.R.
13	Little Budworth Common	SJ585661	19/07/1990	1m 3f	Scott, A. G.
13	Little Budworth Common	SJ5865	23/07/1997		Scott, A. G.
13a	Little Budworth Common, Whitehall Moss	SJ587658	15/08/1971		Mackie, D.W. <i>et al.</i>
13a	Little Budworth Common, Whitehall Moss	SJ588658	1997		Scott, A.G.
13b	Little Budworth Common, East Moss	SJ586657	1997		Scott, A.G.
13c	Little Budworth Common, Central Moss	SJ585657	1997		Scott, A.G.
14	Willington	SJ56	1958		Mackie, D.W.
15	Duddon	SJ56	1958		Mackie, D.W.
16	Tarporley	SJ56	1958		Mackie, D.W.
17	Wybunbury Moss	SJ697503	1986		Bailey <i>et al.</i>
17	Wybunbury Moss	SJ697503	11/07/1993	2m 1f	Scott, A.G., Dobson <i>et al.</i>
17	Wybunbury Moss	SJ697503	01/01/1994		Felton, C.
17	Wybunbury Moss	SJ697502	01/05/1999		Scott, A.G.
17	Wybunbury Moss	SJ6950	05/06/1999		Scott, A.G.
17	Wybunbury Moss	SJ6950	26/06/1999	1f	Scott, A.G.

Yellow records from World Museum, Liverpool.

Green records from Natural History Museum, London.

White records from Spider Recording Scheme and published sources.

Materials & Methods

An initial desk study was undertaken to identify sites where *Sitticus floricola* had been recorded previously in England and Wales. Records were obtained from the British Arachnological Society's Spider Recording Scheme, World Museum (Liverpool) and Natural History Museum (London) specimens, as well as published sources (Table 1).

Although there was considerable record overlap between these sources, it was possible to strip out duplication, revealing 71 unique records of *S. floricola* from 17 sites in England and Wales (Bettisfield, Fenn's & Whixall Mosses are considered here as three separate sites). From these 17 sites, 21 separate bogs (peat basins) were identified to have held populations. However, four of these sites/bogs (Hartford, Willington, Duddon & Tarporley) are presumed to have been lost to agricultural intensification.

Of the 17 extant bogs, 16 were resurveyed during this study (Petty Pool Moss could not be surveyed due to safety restrictions). In addition to these 16 bogs where *S. floricola* had been recorded in the past, 11 other bogs were surveyed to try and locate further undiscovered populations. These 11 speculative bogs were identified from aerial imagery, Sinker (1962) and through discussions with Cheshire Wildlife Trust and Natural England staff.

In total 27 bogs at 15 sites were visited and surveyed for *Sitticus floricola* (Table 2).

Sampling methods

This survey was undertaken between 8th August and 8th October 2017. Two sampling methods were used to locate *Sitticus floricola*.

Initially, timed hand-searches of cottongrass flowers (*Eriophorum angustifolium* and *E. vaginatum*) were employed to locate breeding adults. However, this was only possible early in the survey since the flower heads had largely disintegrated by early September.

Vacuum sampling (Fig. 1) was the primary search method employed, having been used successfully before in surveying for *Sitticus caricis* on the Anglesey fens (Gallon, 2011). At first, 3-minute-long vacuum samples were trialled, but this was revised down to 2-minute sessions to avoid operator fatigue. Sample points were selected based on the known habitat preferences of *S. floricola* (open, wet, acidic bog vegetation, particularly with areas rich in *Sphagnum*, *Eriophorum* and *Vaccinium oxycoccos*). Larger bogs were sampled at several different points and, where the habitat was deemed particularly suitable, multiple 2-minute vacuum sessions were undertaken. During this survey 162 minutes of vacuum sampling was undertaken in total.

The contents of the vacuum's sample bag were sieved over a plastic tray (Figs. 2–4). All *Sitticus* spp. were counted *in situ* and released immediately on the bog where they were found (a small number of preserved voucher specimens were retained for microscopic confirmation). Similarly, almost all *Gnaphosa nigerrima* immatures were released alive on Wybunbury Moss. A qualitative sample of the other arachnid species was collected at each vacuum sample point in addition to *ad hoc* samples collected by other means (see appendices).



Figure 1. Vacuum sampling bog vegetation for *Sitticus floricola*.



Figure 2. Sieving vacuumed sample over plastic tray to concentrate the sample.

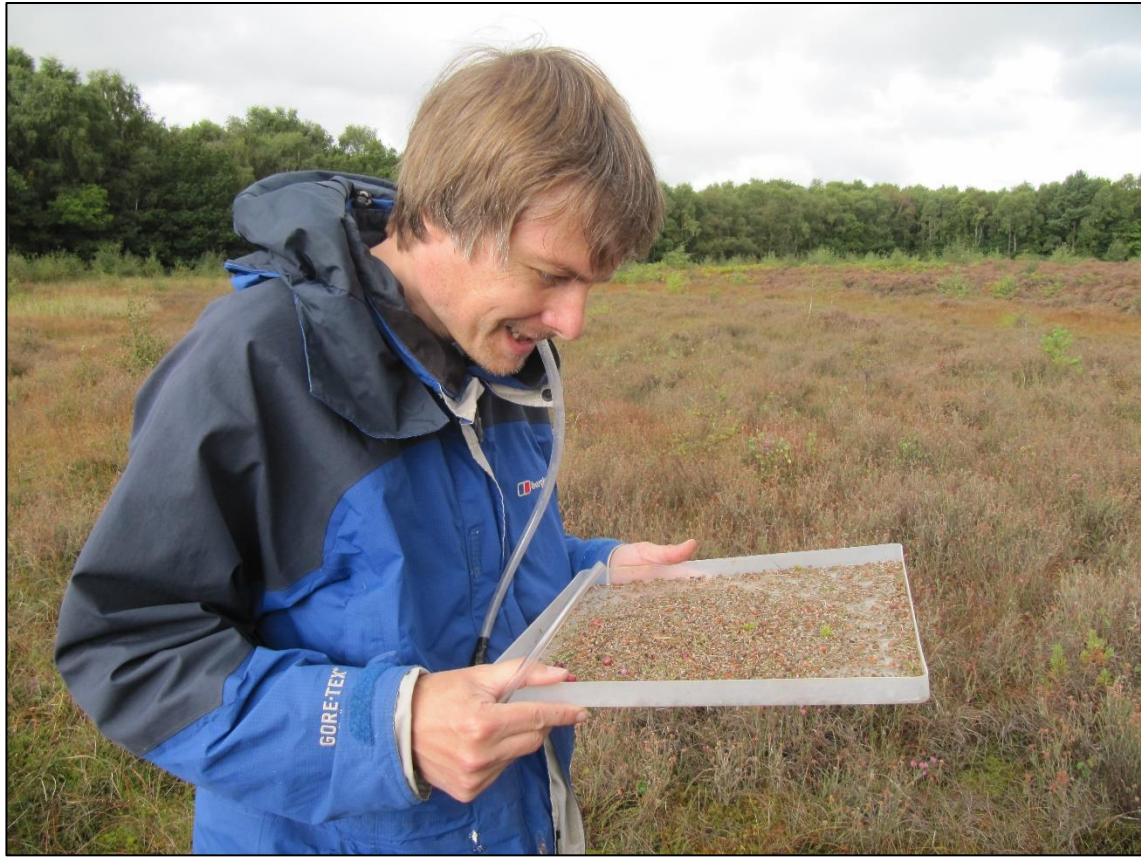


Figure 3. Inspecting the vacuum sample for *Sitticus floricola* and other arachnids.



Figure 4. Immature *Sitticus floricola* on sample tray. The black abdominal spots and grey coloration are characteristic of *Sitticus* helping to distinguish it from other Salticidae found in this habitat (e.g. *Neon reticulatus*, *Heliophanus* sp., *Evarcha* sp. and *Euophrys frontalis*).

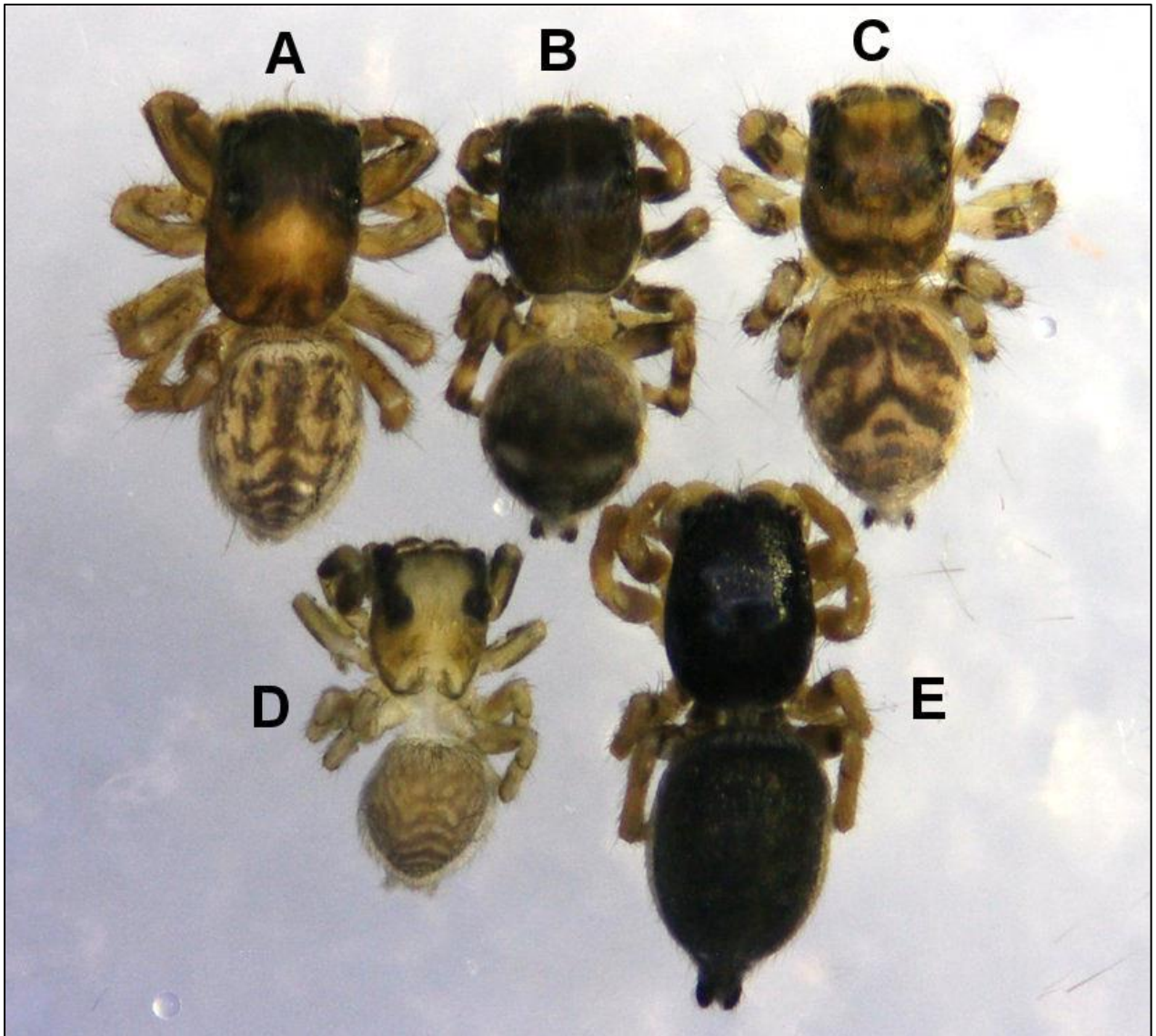


Figure 5. Immature Salticidae from Little Budworth Common bogs: **A** *Euophrys frontalis* (imm. ♂); **B** *Sitticus floricola*; **C** *Evarcha* sp. (almost certainly *E. falcata*); **D** *Neon reticulatus* (imm. ♂); **E** *Heliophanus* sp. (imm. ♂).



Figure 6. Immature *Sitticus floricola* from Oakmere Moss.

Results

Table 2. Bogs surveyed for *Sitticus floricola* during 2017; showing year of last site record and maximum area of potentially suitable bog habitat.

Grouping	Bog/peat basin	Maximum area of habitat available (ha)	<i>Sitticus floricola</i> last recorded	<i>Sitticus floricola</i> recorded during 2017 survey
Wrexham	Llay Bog	0.024	1988	+
	Vicarage Moss, Large basin	2.5	1988	+
	Vicarage Moss, Small basin	0.215	-	+
Fenn's	Bettisfield Moss	13.23*	1988	-
	Fenn's Moss	400*	1993	-
	Whixall Moss	76.8*	2004	-
	Wem Moss	13.8*	-	-
	Clarepool Moss	0.561*	-	-
Delamere	Black Lake	0.195	2016	+
	Hockenhull	1.10*	-	-
	Great Blakemere	2.40*	-	-
	LM 09 & 10	0.130*	-	-
	Hatch Mere	0.154*	-	-
	Flaxmere	1.68*	1997	-
	Hartford	0	1897	Bog lost
	Oakmere Moss	0.244	1998	+
	Abbots Moss, Gull Moss	0.22	1998	+
	Abbots Moss, South Moss	2.58	2016	+
	Abbots Moss, Shemmy Moss	2.21*	1997	-
	Lily Pool	0.406	-	+
	Brackenhurst Bog	0.77	-	+
	Snipe Island	0.167*	-	-
	Hogshead Moss	0.768	1998	+
	Petty Pool	0.121*	1897	Not surveyed
	Little Budworth Common, Whitehall Moss	0.242	1997	+
	Little Budworth Common, East Moss	0.165	1997	+
	Little Budworth Common, Central Moss	0.156	1997	+
	Little Budworth Common, North Moss	0.048	-	+
Willington	0	1958	Bog lost	
Duddon	0	1958	Bog lost	
Tarporley	0	1958	Bog lost	
Wybunbury	Wybunbury Moss	1.32	1999	+

Maximum total extent of potential habitat at confirmed *S. floricola* sites = 12 ha (excludes Bettisfield, Fenn's, Whixall, Flaxmere & Petty Pool, but includes Shemmy Moss).

*Inferred potential habitat extent based at sites where *S. floricola* was not found during the 2017 survey. Likely to be grossly over-exaggerated within the Fenn's grouping.

***Sitticus floricola* (C.L. Koch, 1837)** Near Threatened and Nationally Rare



Figure 7. *Sitticus floricola* female, Vicarage Moss.

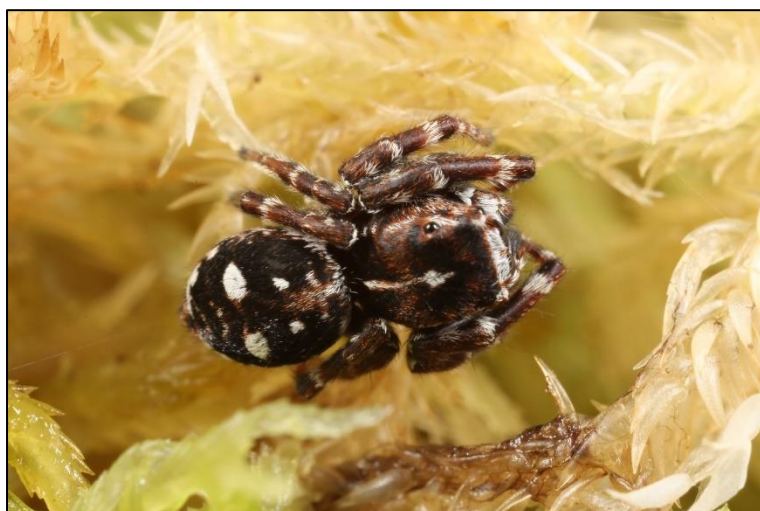


Figure 8. *Sitticus floricola* male, Vicarage Moss.

During this survey *Sitticus floricola* was reconfirmed at 8 known sites (11 bogs) and recorded for the first time at a further four bogs: Vicarage Moss Small basin, Lily Pool, Brackenhurst Bog, Little Budworth Common North Moss (Table 2, Fig. 9).

It was not rediscovered at five bogs where it had previously been recorded from (Bettisfield Moss, Fenn's Moss, Whixall Moss, Flaxmere, Shemmy Moss). Seven other surveyed bogs also produced negative records of *S. floricola* (Wem Moss, Clarepool Moss, Hockenhull, Great Blakemere, LM 09 & 10, Hatch Mere, Snipe Island).

Aerial photographs were used to define areas of potentially suitable *Sitticus floricola* habitat (Table 2). The extent of this habitat in England and Wales amounts to **12 ha**. This figure excludes Bettisfield, Fenn's, Whixall and Flaxmere, since it was not possible to define exactly which sections were being used at these sites.

If these sites are included, then the maximum extent of potentially suitable habitat would be about **492 ha**, although this figure is likely to be grossly over-exaggerated. *Sitticus floricola* is unlikely to use the entire bog at these large sites, and populations are likely to be more localised given that this survey failed to locate them there.

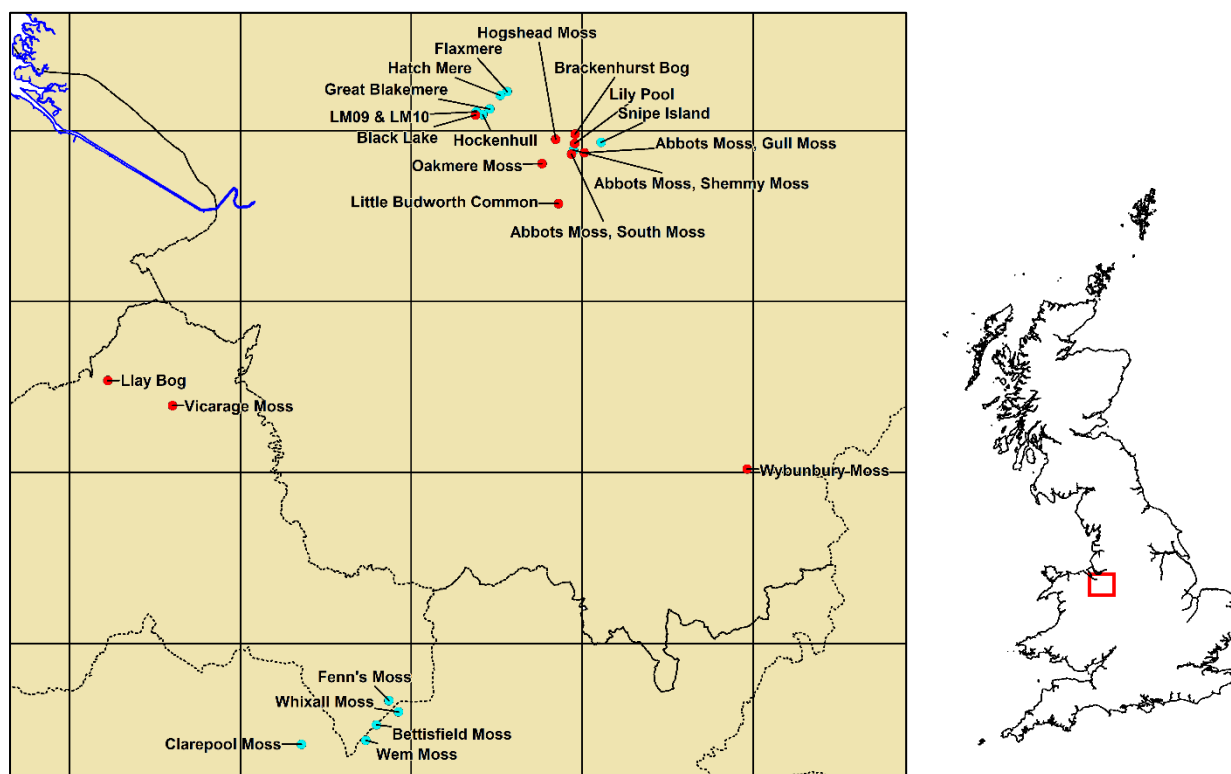


Figure 9. Relative locations of survey sites in vice-counties Cheshire, Denbighshire and Shropshire (10km grid). *Sitticus floricola* recorded in this survey: ● present, ● absent.

At Llay Bog and Vicarage Moss adult female *Sitticus floricola* were observed to be occupying both *Eriophorum angustifolium* and *E. vaginatum* flower heads with their egg-sacs or newly hatched spiderlings. However, *E. angustifolium* heads were found to support more females than the smaller dense heads of *E. vaginatum*. At Llay a single mature male *S. floricola* was found sitting on the outside of an *E. angustifolium* head containing females, an observation also made by Mackie (1959) at Black Lake (coincidentally both observations were made on the 8th August). These observations might suggest that males of this species practice mate-guarding to ensure paternity, although further observations would be needed to confirm this.

Wild (1969) showed that a male *Sitticus floricola* matured in three months (four moults) from a spring brood, living a total of 10.5 months. He demonstrated that the female lives two years and that a captive female can produce three egg-sacs (September, May, June), with egg-sacs containing 13–19 young. These captive observations, together with field records, suggest that both adults and immatures overwinter, presumably deep within bog vegetation.

Like many salticids *Sitticus floricola* is diurnal and captive specimens observed during this study were seen to seal themselves within a silken cell overnight, emerging during the day.

From observations made during this survey *S. floricola* favours the wetter parts of open, unshaded, lowland raised bogs, particularly areas with deep *Sphagnum/Vaccinium oxycoccus* mats associated with *Eriophorum angustifolium* and/or *E. vaginatum*. A high water table at or just below the surface is also preferred, conditions typically found on schwingmoors.

Llay Bog (SSSI)

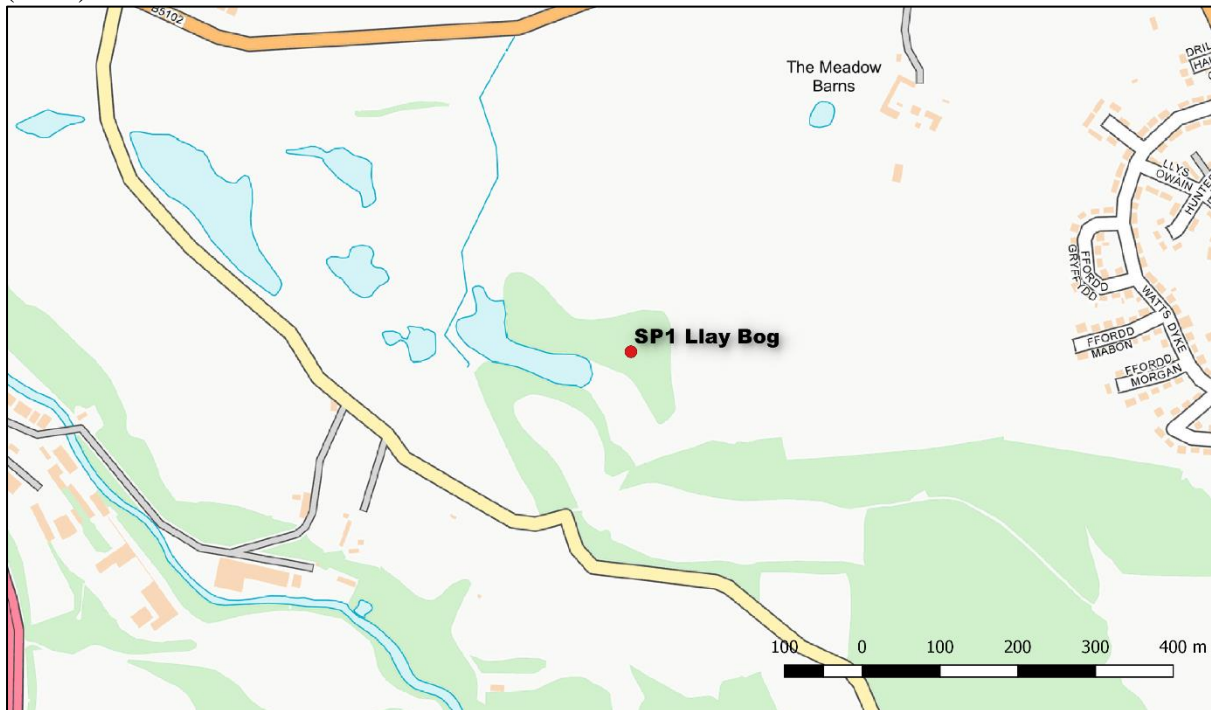


Figure 10. Llay Bog sample point location.

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Figure 11. Llay Bog sample point location on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.

© Google imagery (2018).

Table 3

Llay Bog sample point 1	08/08/2017	SJ32235539 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	3	3i
<i>Eriophorum</i> seed head Search (2 people)		
1	Not timed	1♂, 5♀, 1i



Figure 12. Llay Bog.

Site Description

A small 0.024 ha raised bog in a basin mire largely dominated by *Betula/Alnus* carr woodland. Sample point vegetation comprises *Sphagnum*, *Eriophorum angustifolium*, *Vaccinium oxycoccos* and *Polytrichum commune*. Water table just below the surface.

Other arachnid species recorded

17 spiders

1 harvestman

See appendix Table 66.

Vicarage Moss (SSSI; Phase 2 Ramsar)

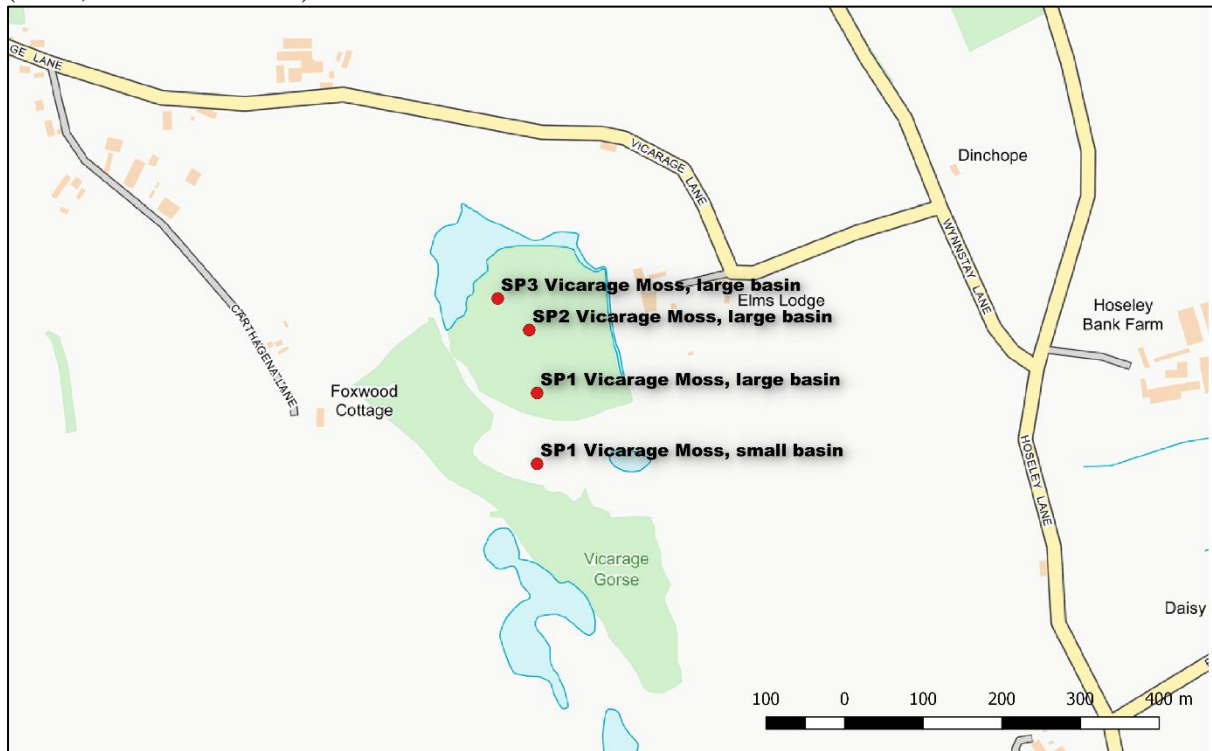


Figure 13. Vicarage Bog sample point locations.
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Figure 14. Vicarage Moss (large and small basins) sample point locations on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 4

Vicarage Moss Large basin sample point 1	08/08/2017	SJ36025392 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	3	1♀, 1i
<p>Site Description A 2.5 ha raised bog with a drier central area and wetter lagg zone, particularly at the northwest margin where it grades into <i>Phragmites</i> and then into a pond. This basin mire is fringed by deciduous woodland to the North and West. Sample point vegetation comprising <i>Vaccinium oxycoccos</i>, <i>Erica tetralix</i> and <i>Sphagnum</i>. Water table below the surface.</p> <p>Other arachnid species recorded 9 spiders See appendix Table 67.</p>		

Table 5

Vicarage Moss Large basin sample point 2	08/08/2017	SJ36015400 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	3	Negative
<p>Site Description Sample point vegetation comprising <i>Vaccinium oxycoccos</i>, <i>Erica tetralix</i> and <i>Sphagnum</i>. Water table below the surface.</p> <p>Other arachnid species recorded 8 spiders See appendix Table 68.</p>		

Table 6

Vicarage Moss Large basin sample point 3	08/08/2017	SJ35975404 Wales
<i>Eriophorum</i> seed head Search (2 people)		<i>Sitticus floricola</i>
1	Not timed	2F, 1i
<p>Site Description Sample point vegetation comprising largely of <i>Eriophorum vaginatum</i> tussocks. Water table at the surface.</p>		

Table 7

Vicarage Moss Small basin sample point 1	08/08/2017	SJ36025383 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	3	2♂, 9i
<i>Eriophorum</i> seed head Search (4 people)		
1	60	7♂, 4♀, 1 Adult, 6i
<p>Site Description A small 0.215 ha basin mire isolated by 40 m of grassland from the main section of Vicarage Moss to the North. This mire is fringed by <i>Quercus</i> woodland to the South and West. Sample point vegetation comprising emergent clumps of <i>Sphagnum</i>, <i>Eriophorum angustifolium</i> and <i>Polytrichum commune</i>. Water table above the surface with areas of open water.</p> <p>Other arachnid species recorded 6 spiders See appendix Table 70.</p>		

Bettisfield Moss
(SSSI; NNR; SAC; Phase 2 Ramsar)

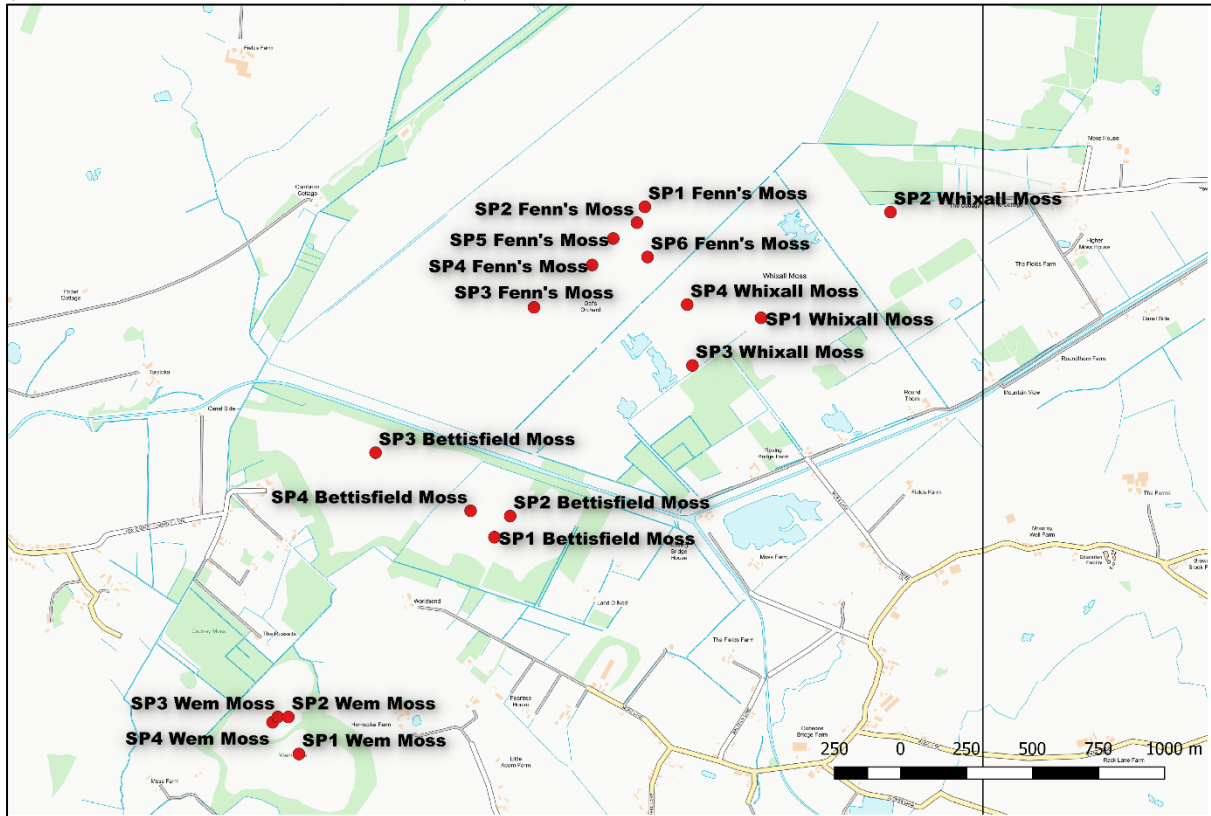


Figure 15. Fenn's, Whixall, Bettisfield and Wem Mosses sample point locations.
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Figure 16. Bettisfield Moss sample point locations on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 8

Bettisfield Moss sample point 1	03/09/2017	SJ48153513 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	Negative



Figure 17. Bettisfield Moss sample point 1.

Site Description

A large, previously forested, raised bog separated from Fenn's and Whixall Mosses to the North by a woodland-fringed canal. Sample point vegetation comprises *Eriophorum vaginatum* tussocks, *Vaccinium oxycoccos*, *Deschampsia*, *Erica tetralix* and *Empetrum nigrum*. Water table below the surface.

SSSI management section: 19.4

Other arachnid species recorded

15 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare. 3rd British site & 1st site record).

See appendix Table 71.

Table 9

Bettisfield Moss sample point 2	03/09/2017	SJ48213521 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 18. Bettisfield Moss sample point 2.

Site Description

Sample point vegetation comprises *Eriophorum vaginatum* tussocks, *Deschampsia*, *Erica tetralix*, *Vaccinium oxycoccos* and *Sphagnum*. Water table below the surface.

SSSI management section: 19.4

Other arachnid species recorded

10 spiders
See appendix Table 72.

Table 10

Bettisfield Moss sample point 3	03/09/2017	SJ47703545 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 19. Bettisfield Moss sample point 3.

Site Description

Sample point vegetation comprises *Eriophorum vaginatum* tussocks, *Empetrum nigrum*, *Vaccinium oxycoccos*, *Calluna vulgaris*, *Erica tetralix* and a little *Andromeda polifolia*. Water table just below the surface.

SSSI management section: 18.2

Other arachnid species recorded

7 spiders

See appendix Table 73.

Table 11

Bettisfield Moss sample point 4	08/10/2017	SJ48063523 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
3	6	Negative



Figure 20. Bettisfield Moss sample point 4.

Site Description

Schwingmoor with saturated *Sphagnum* lawn and areas of *Rhynchospora alba*, punctuated with fine examples of *Sphagnum/Vaccinium oxycoccos/Eriophorum vaginatum* tussocks. Water table high with areas of open water, but emergent species-rich tussocks drier.

SSSI management section: 19.1

Other arachnid species recorded

19 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare. 3rd British site & 1st site record).

Glyphesis cottonae (Vulnerable & Nationally Rare. 1st site record).

Minicia marginella (Nationally Rare. 3rd British site & 1st site record).

1 pseudoscorpion:

Microbisium brevifemoratum (3rd British site & 1st site record).

See appendix Table 74.

Fenn's Moss

(SSSI; NNR; SAC; Phase 2 Ramsar)



Figure 21. Fenn's Moss sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.

© Google imagery (2018).



Figure 22. Fenn's Moss sample point locations on aerial imagery in detail.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.

© Google imagery (2018).

Table 12

Fenn's Moss sample point 1	02/09/2017	SJ48723638 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
3	6	Negative



Figure 23. Fenn's Moss sample point 1.

Site Description

An extremely large modified raised bog contiguous with Whixall Moss to the south. Sample point in a former peat-cutting with a *Sphagnum* lawn and tall vegetation comprising *Eriophorum angustifolium* and *Molinia caerulea*. Water table at the surface.

SSSI management section: 3.11

Other arachnid species recorded

13 spiders – including:

Sitticus caricis 3i in vacuum sample (Nationally Rare. 1st site record).

1 harvestmen.

See appendix Table 75.

Table 13

Fenn's Moss sample point 2	02/09/2017	SJ48693632 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 24. Fenn's Moss sample point 2.

Site Description

Sample point in a former peat-cutting measuring 3 x 5 m. Vegetation comprising a *Sphagnum* lawn with emergent *Eriophorum angustifolium*. Water table at the surface.

SSSI management section: 3.11

Other arachnid species recorded

6 spiders – including:

Sitticus caricis 5i in vacuum sample (Nationally Rare. 1st site record).

See appendix Table 76.

Table 14

Fenn's Moss sample point 3	08/10/2017	SJ48303600 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 25. Fenn's Moss sample point 3.

Site Description

Sample point in a ditch with *Sphagnum*, *Eriophorum vaginatum* and *Erica tetralix*. *Calluna vulgaris* marginal to the ditch. Water table at the surface.

SSSI management section: 3.17

Other arachnid species recorded

10 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. 1st Welsh record).

1 harvestmen.

See appendix Table 77.

Table 15

Fenn's Moss sample point 4	08/10/2017	SJ48523616 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 26. Fenn's Moss sample point 4.

Site Description

Sample point vegetation comprising *Eriophorum vaginatum* tussocks on a saturated *Sphagnum* lawn in a former peat-cutting.

SSSI management section: 6.2

Other arachnid species recorded

3 spiders.

See appendix Table 78.

Table 16

Fenn's Moss sample point 5	08/10/2017	SJ48603626 Wales
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 27. Fenn's Moss sample point 5.

Site Description

Sample point with saturated *Sphagnum*, emergent *Eriophorum angustifolium* and *Eriophorum vaginatum*. Water table at the surface.

SSSI management section: 3.13

Other arachnid species recorded

9 spiders.

See appendix Table 79.

Whixall Moss

(SSSI; NNR; SAC; Phase 2 Ramsar)

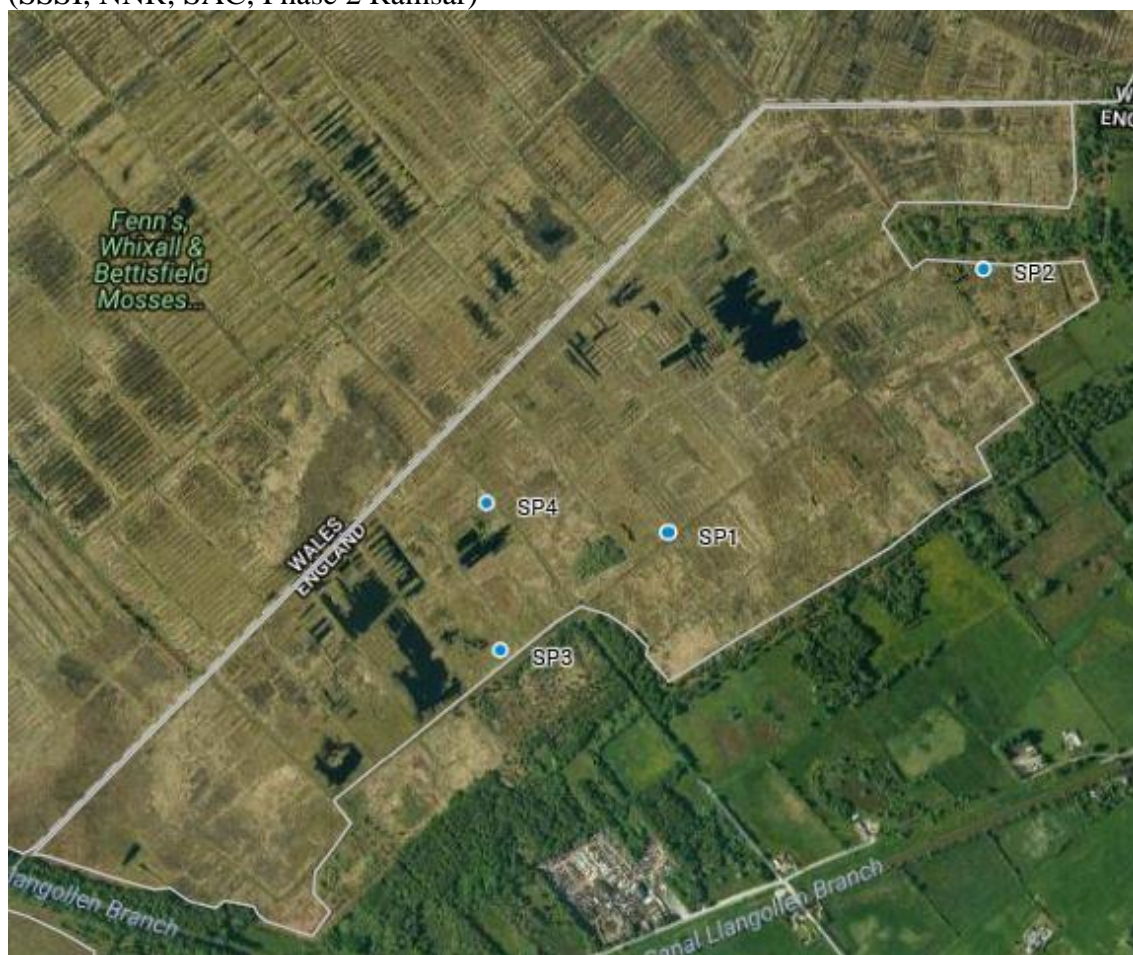


Figure 28. Whixall Moss sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.

© Google imagery (2018).

Table 17

Whixall Moss sample point 1	02/09/2017	SJ49163596 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
3	6	Negative
<i>Eriophorum</i> seed head search		
1	10	Negative



Figure 29. Whixall Moss sample point 1.

Site Description

An extremely large modified raised bog contiguous with Fenn's Moss to the North. Sample point with a wet *Sphagnum* lawn and marginal *Eriophorum angustifolium* and *Eriophorum vaginatum*. Water table below the surface.

SSSI management section: 13.10

Other arachnid species recorded

21 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare).

Sitticus caricis 2♂, 1♀, 35i in vacuum sample (Nationally Rare. 1st site record).

See appendix Table 81.

Table 18

Whixall Moss sample point 2	02/09/2017	SJ49653636 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
3	6	Negative
<i>Eriophorum</i> seed head search		
1	10	Negative



Figure 30. Whixall Moss sample point 2.

Site Description

Sample point a ditch with *Sphagnum* lawn emergent *Eriophorum angustifolium* and *Calluna vulgaris*. Water table at the surface.

SSSI management section: 24.3

Other arachnid species recorded

10 spiders.
See appendix Table 82.

Table 19

Whixall Moss sample point 3	02/09/2017	SJ48903578 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	Negative



Figure 31. Whixall Moss sample point 3.

Site Description

Sample point a *Sphagnum* lawn with *Rhynchospora alba* and *Andromeda polifolia*. Water table at the surface.

SSSI management section: 14.3

Other arachnid species recorded

12 spiders – including:

Sitticus caricis 1♂, 15i in vacuum sample (Nationally Rare. 1st site record).

See appendix Table 83.

Table 20

Whixall Moss sample point 4	02/09/2017	SJ48883601 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 32. Whixall Moss sample point 4.

Site Description

Sample point in an old peat cutting with a saturated *Sphagnum cuspidatum* lawn and emergent *Eriophorum vaginatum* tussocks. Water table at the surface.

SSSI management section: 14.2

Other arachnid species recorded

8 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare).

Sitticus caricis 3i in vacuum sample (Nationally Rare. 1st site record).

See appendix Table 84.

Wem Moss
(SSSI; NNR; SAC; Phase 2 Ramsar)



Figure 33. Wem Moss sample point locations on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 21

Wem Moss sample point 1	03/09/2017	SJ47413431 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 34. Wem Moss sample point 1.

Site Description

A large, somewhat dry bog to the southwest of Bettisfield Moss. The bog is almost bisected by a band of short trees. sample point on an area of *Molinia caerulea*, *Erica tetralix* and *Calluna vulgaris*. Water table well below the surface.

Other arachnid species recorded

8 spiders.
See appendix Table 85.

Table 22

Wem Moss sample point 2	03/09/2017	SJ47373445 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 35. Wem Moss sample point 2.

Site Description

Sample point in a wet 4 x 2 m *Sphagnum* hollow, with *Erica tetralix* and *Eriophorum angustifolium*. Water table at the surface in the hollow.

Other arachnid species recorded

7 spiders.

See appendix Table 86.

Table 23

Wem Moss sample point 3	03/09/2017	SJ47333445 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative


Figure 36. Wem Moss sample point 3.

Site Description

Sample point in a 5 x 1 m hollow with *Sphagnum*, *Erica tetralix*, *Calluna vulgaris*, *Eriophorum angustifolium* and a little *Molinia caerulea* and *Rhynchospora alba*. Water table just below the surface, but wet.

Other arachnid species recorded

12 spiders – including:

Philodromus histrio (Nationally Scarce. 1st site record).

See appendix Table 87.

Table 24

Wem Moss sample point 4	03/09/2017	SJ47313443 England
Site Description		
Dry <i>Erica tetralix</i> at the side of a path.		
Arachnid species recorded		
1 spider: <i>Singa hamata</i> with its egg-sac (Nationally Scarce. Last site record 1963). See appendix Table 88.		

Clarepool Moss (SSSI; SAC; Phase 1 Ramsar)

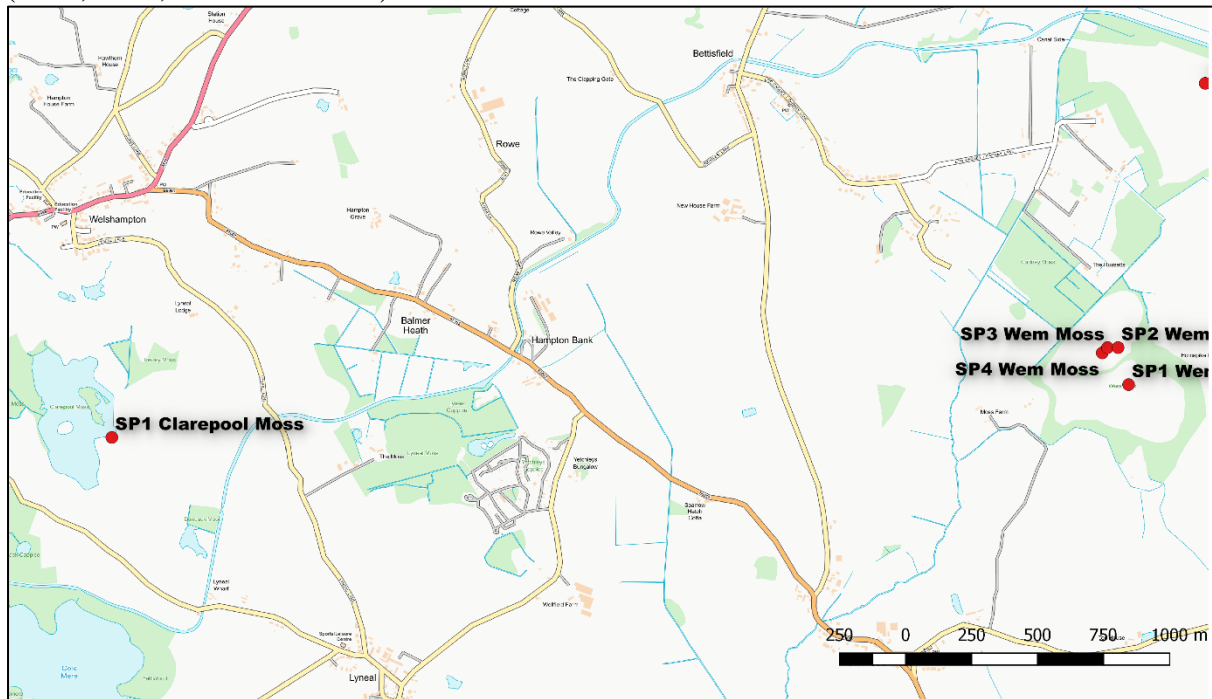


Figure 37. Clarepool Moss sample point location.

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Figure 38. Clarepool Moss sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 25

Clarepool Moss sample point 1	08/10/2017	SJ43563411 England
----------------------------------	------------	-----------------------

Water table too high and no safe access to island of remnant bog vegetation.



Figure 39. Clarepool Moss showing high water level and remnant island of inaccessible bog vegetation (arrowed).

Site Description

The site was previously covered with bog vegetation, but a blocked drain has significantly raised the water level, inundating most of the bog apart from an island of habitat in the East. Sample point amongst short pool-side ruderals (including *Crassula helmsii*, so the G-vac was not used to avoid contaminating the equipment).

Other arachnid species recorded

3 spiders.
See appendix Table 89.

Black Lake (SSSI)

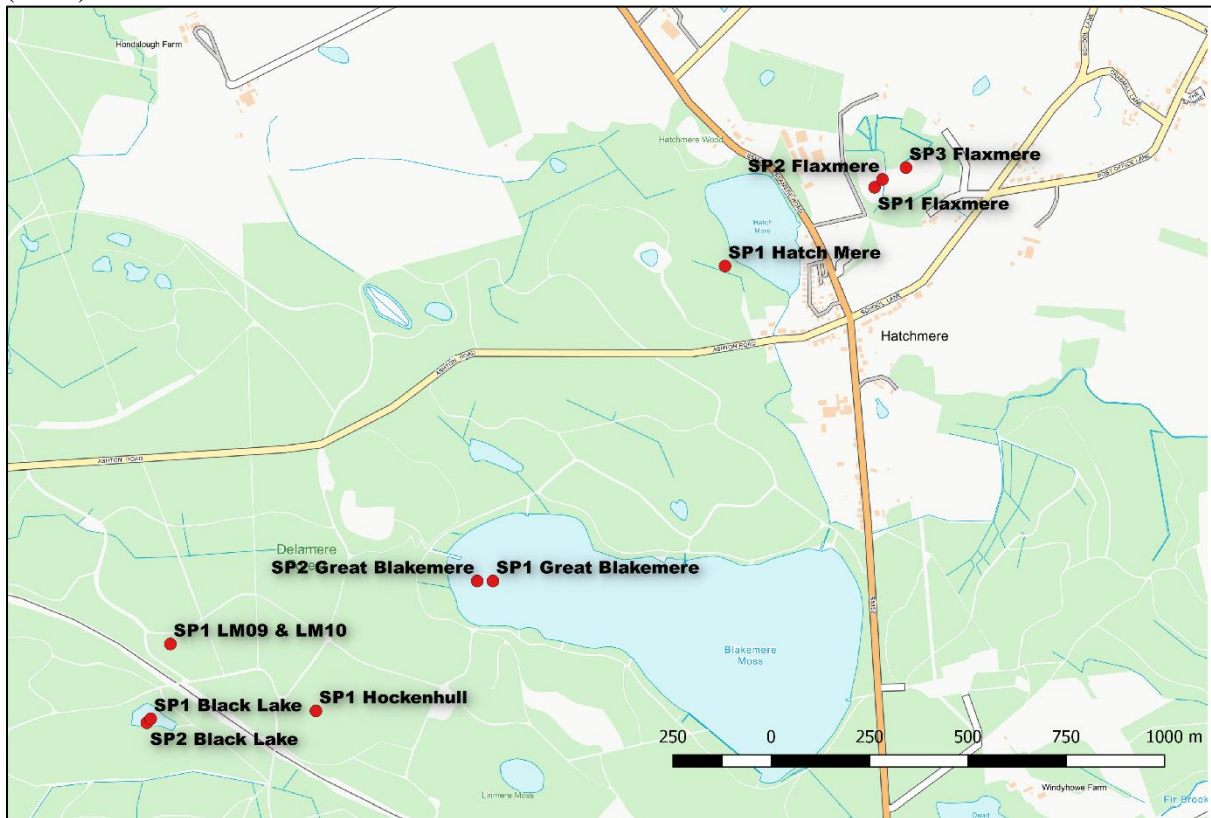


Figure 40. Delamere, Flaxmere and Hatch Mere sample point locations.
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Figure 41. Black Lake sample point locations on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 26

Black Lake sample point 1	07/09/2017	SJ53757091 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	3i



Figure 42. Black Lake sample point 1.

Site Description

A basin mire with an area of open water, fringed to the West with a species-rich schwingmoor raft of *Sphagnum*, *Erica tetralix*, *Vaccinium oxycoccos* and *Eriophorum angustifolium*. *Sphagnum* hummocks with *Drosera rotundifolia* punctuate the wetter zones. sample point included the schwingmoor and hummock vegetation. Water table at and just above the surface.

Other arachnid species recorded

6 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. Last site record 1980).

See appendix Table 90.

Table 27

Black Lake sample point 2	07/09/2017	SJ53747090 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	5i



Figure 43. Black Lake sample point 2.

Site Description

Sample point an almost pure *Sphagnum* lawn with marginal *Erica tetralix*. Water table at the surface.

Other arachnid species recorded

5 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. Last site record 1980).

See appendix Table 91.

Hockenhull



Figure 44. Hockenhull sample point location on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat. © Google imagery (2018).

Table 28

Hockenhull sample point 1	07/09/2017	SJ54177093 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 45. Hockenhull sample point 1.

Site Description

A recovering basin mire which was previously forested over. The sample point vegetation comprises *Sphagnum*, *Calluna vulgaris*, *Polytrichum commune*, *Eriophorum angustifolium* and *Carex rostrata*. Water table above the surface.

Other arachnid species recorded

10 spiders.

See appendix Table 92.

Great Blakemere



Figure 46. Great Blakemere sample point locations on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat. © Google imagery (2018).

Table 29

Great Blakemere sample point 1	07/09/2017	SJ54627126 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 47. Great Blakemere sample point 1.

Site Description

The western mire section of a large peat basin with a mere. The site was previously forested over. Sample point vegetation comprises *Sphagnum*, *Calluna vulgaris* and *Eriophorum angustifolium*. Water table just below the surface.

Other arachnid species recorded

11 spiders.

See appendix Table 93.

Table 30

Great Blakemere sample point 2	07/09/2017	SJ54587126 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 48. Great Blakemere sample point 2.

Site Description

Sample point with *Sphagnum*, *Eriophorum angustifolium* and a little *Calluna vulgaris*. Water table just below the surface.

Other arachnid species recorded

9 spiders.
See appendix Table 94.

LM 09 & 10



Figure 49. LM 09 & 10 sample point location on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 31

LM 09 & LM10 sample point 1	07/09/2017	SJ53807110 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 50. LM 09 & 10 sample point 1.

Site Description

A small, previously forested basin mire with a central (5m diameter) *Sphagnum* lawn over deep water (+40 cm), fringed by *Juncus effusus* and *Polytrichum commune*. Sampling was on the deep *Sphagnum* lawn amongst *Eriophorum angustifolium*.

Other arachnid species recorded

4 spiders.

See appendix Table 95.

Hatch Mere (SSSI; Phase 1 Ramsar)

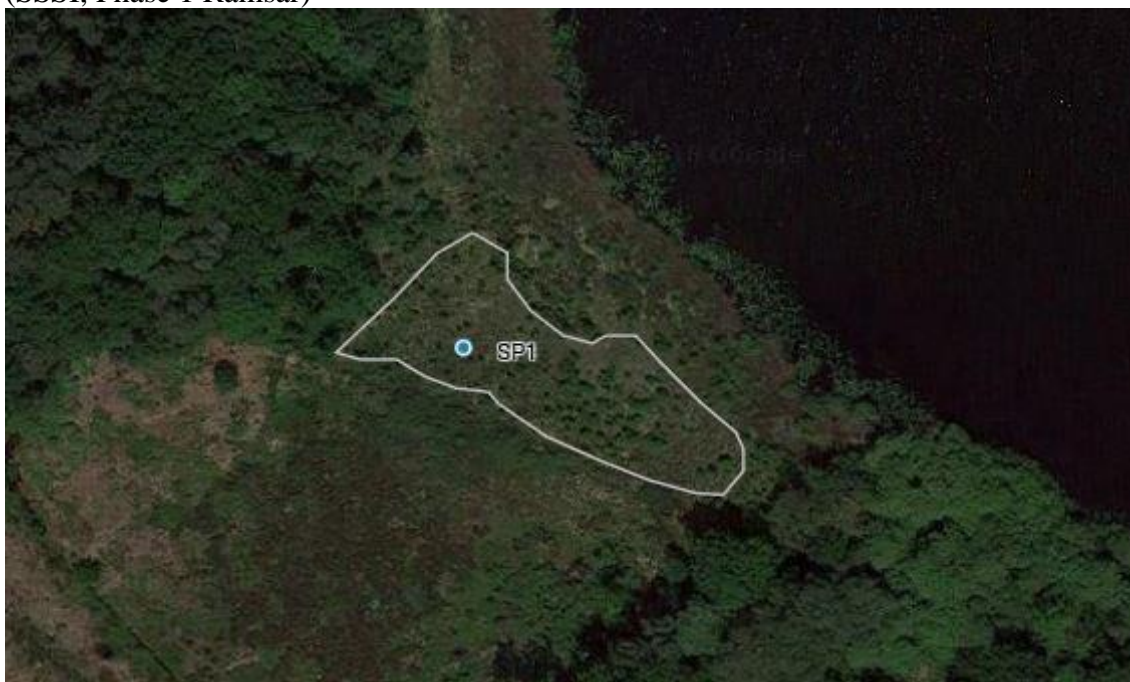


Figure 51. Hatch Mere sample point location on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 32

Hatch Mere sample point 1	07/09/2017	SJ55217206 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 52. Hatch Mere sample point 1.

Site Description

A boggy area on the western margin of Hatch Mere, just above the mere's *Phragmites* fringe. The sample point vegetation comprised *Carex rostrata*, *Sphagnum* and a little *Molinia caerulea*. Water table just below the surface.

Other arachnid species recorded

13 spiders.

See appendix Table 96.

Flaxmere
(SSSI; Phase 1 Ramsar)



Figure 53. Flaxmere sample point locations on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 33

Flaxmere sample point 1	07/09/2017	SJ55597226 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 54. Flaxmere sample point 1.

Site Description

A large basin mire, with a wetter western section. The sample point was on a schwingmoor with *Sphagnum*, *Erica tetralix*, *Vaccinium oxycoccos*, *Eriophorum angustifolium*, *Andromeda polifolia* and *Narthecium ossifragum*. Water table just below the surface, but wet.

Other arachnid species recorded

5 spiders.

See appendix Table 97.

Table 34

Flaxmere sample point 2	07/09/2017	SJ55617228 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 55. Flaxmere sample point 2.

Site Description

Sample site vegetation comprising *Molinia caerulea*, *Eriophorum vaginatum*, *Calluna vulgaris*, *Sphagnum* and a little *Vaccinium oxycoccos*. Water table below the surface, but only moist.

Other arachnid species recorded

8 spiders.

See appendix Table 98.

Table 35

Flaxmere sample point 3	07/09/2017	SJ55677231 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 56. Flaxmere sample point 3.

Site Description

Sample point with *Eriophorum vaginatum*, *Erica tetralix*, *Eriophorum angustifolium*, *Sphagnum* and a little *Molinia caerulea*. Water table below the surface, but only moist.

Other arachnid species recorded

8 spiders.
See appendix Table 99.

Oakmere Moss
(SSSI; SAC; Phase 2 Ramsar)

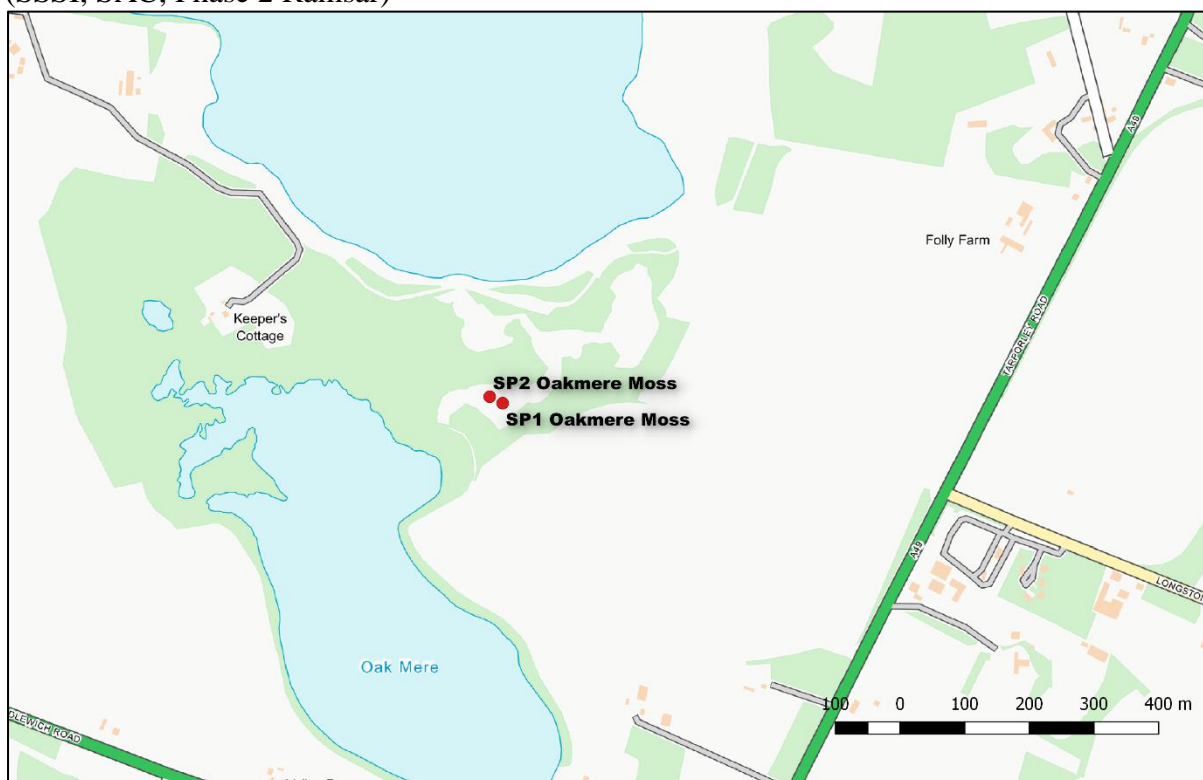


Figure 57. Oakmere Moss sample point locations.

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Figure 58. Oakmere Moss sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 36

Oakmere Moss sample point 1	29/09/2017	SJ57656807 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	1i



Figure 59. Oakmere Moss sample point 1.

Site Description

A small basin mire surrounded by mixed woodland. Sample point with *Sphagnum*, *Eriophorum angustifolium*, *Carex rostrata* and *Polytrichum commune*. Water table just below the surface.

Other arachnid species recorded

16 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. 1st site record).

3 harvestmen.

See appendix Table 100.

Table 37

Oakmere Moss sample point 2	29/09/2017	SJ57636808 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	4	1i



Figure 60. Oakmere Moss sample point 2.

Site Description

Sample point with *Sphagnum*, *Eriophorum angustifolium*, *Carex rostrata* and *Polytrichum commune*. Water table just below the surface.

Other arachnid species recorded

5 spiders.

See appendix Table 101.

Abbots Moss, Gull Moss
(SSSI; SAC; Phase 2 Ramsar)

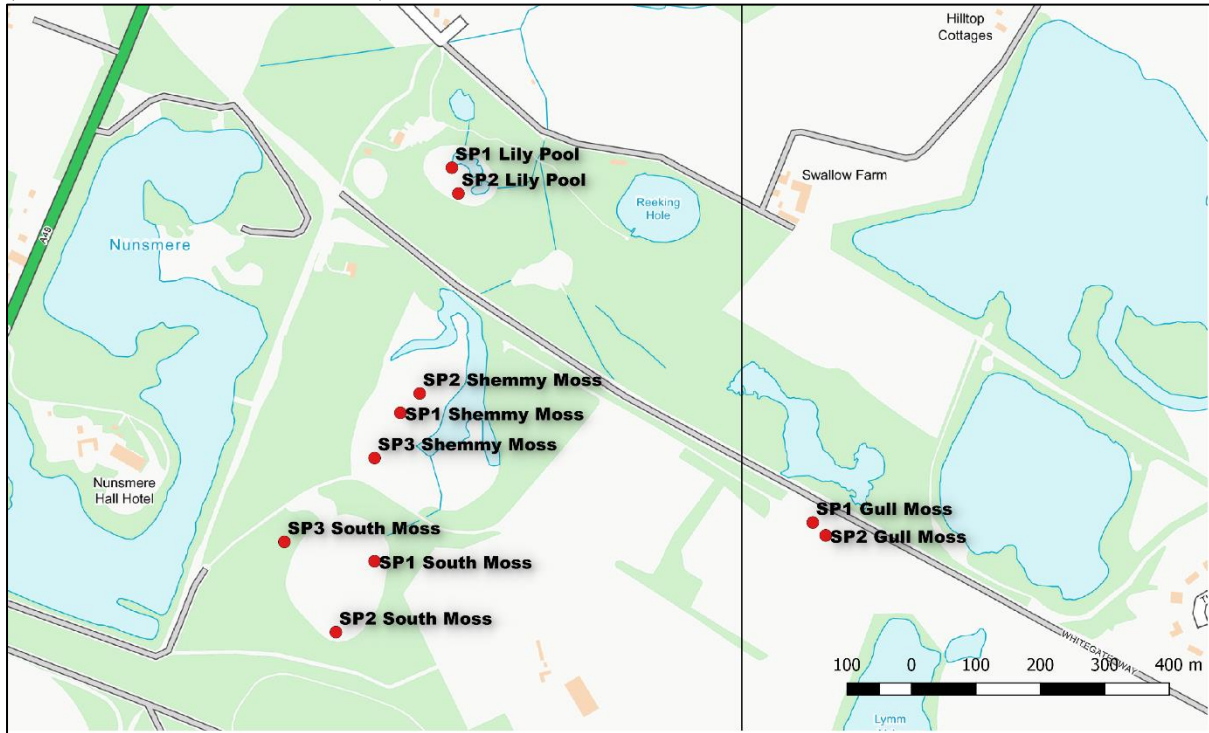


Figure 61. Abbots Moss sample point locations.
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Figure 62. Abbots Moss, Gull Moss sample point locations on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 38

Gull Moss sample point 1	06/09/2017	SJ60116871 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2i



Figure 63. Gull Moss sample point 1.

Site Description

Part of the Abbots Moss complex. The sample point on this basin mire section comprises of abundant *Vaccinium oxycoccos* intermixed with *Sphagnum* and punctuated by *Carex rostrata*. Water table below the surface, moist under foot.

Other arachnid species recorded

8 spiders.

See appendix Table 102.

Table 39

Gull Moss sample point 2	06/09/2017	SJ60136869 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2i



Figure 64. Gull Moss sample point 2.

Site Description

The vegetation at this sample point comprises predominantly of a thick layer of *Sphagnum* and *Vaccinium oxycoccos*. Water table below the surface, moist under foot.

Other arachnid species recorded

6 spiders.

See appendix Table 103.

Abbots Moss, South Moss
(SSSI; SAC; Phase 2 Ramsar)



Figure 65. Abbots Moss, South Moss sample point locations on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat. © Google imagery (2018).

Table 40

South Moss sample point 1	06/09/2017	SJ59436865 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	1♂, 1i



Figure 66. South Moss sample point 1.

Site Description

Part of the Abbots Moss complex. Sample point vegetation comprises of *Erica tetralix*, *Vaccinium oxycoccos* intermixed with *Sphagnum*, *Rhynchospora alba*, *Eriophorum angustifolium* and *Calluna vulgaris*. Water table just below the surface.

Other arachnid species recorded

1 spider.

See appendix Table 104.

Table 41

South Moss sample point 2	06/09/2017	SJ59376854 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2♂



Figure 67. South Moss sample point 2.

Site Description

Sample point with *Eriophorum angustifolium*, *Erica tetralix*, *Vaccinium oxycoccos* intermixed with *Sphagnum* and *Rhynchospora alba*. Vegetation on a schwingmoor with the water table just below the surface.

Other arachnid species recorded

5 spiders.

See appendix Table 105.

Abbots Moss, Shemmy Moss

(SSSI; SAC; Phase 2 Ramsar)

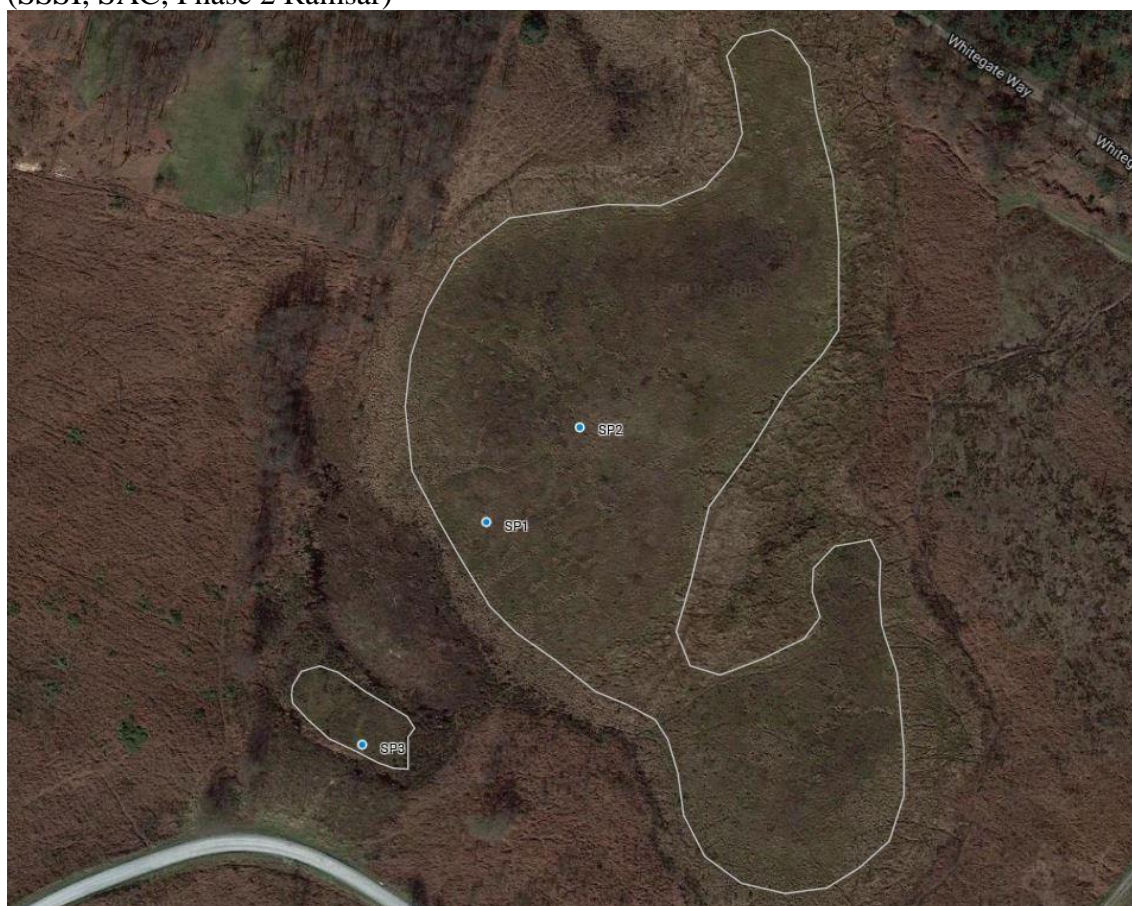


Figure 68. Abbots Moss, Shemmy Moss sample point locations on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat. © Google imagery (2018).

Table 42

Shemmy Moss sample point 1	06/09/2017	SJ59476888 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 69. Shemmy Moss sample point 1.

Site Description

Part of the Abbots Moss complex. Sample point vegetation comprising *Eriophorum angustifolium*, *Eriophorum vaginatum* and *Vaccinium oxycoccos* intermixed with *Sphagnum*. Water table below the surface.

Other arachnid species recorded

8 spiders.

See appendix Table 107.

Table 43

Shemmy Moss sample point 2	06/09/2017	SJ59506891 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 70. Shemmy Moss sample point 2.

Site Description

Sample point vegetation with *Eriophorum vaginatum* and *Vaccinium oxycoccos* intermixed with *Sphagnum*. Water table below the surface.

Other arachnid species recorded

8 spiders.

See appendix Table 108.

Table 44

Shemmy Moss sample point 3	06/09/2017	SJ59436881 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 71. Shemmy Moss sample point 3.

Site Description

A small peat basin isolated from the main part of Shemmy Moss by a bank of dry heathland. Sample point vegetation dominated by *Erica tetralix* over *Sphagnum* with a little *Eriophorum angustifolium*. Water table just below the surface.

Other arachnid species recorded

5 spiders.

See appendix Table 109.

Lily Pool

(SSSI; SAC; Phase 2 Ramsar)



Figure 72. Lily Pool sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat (pond excluded).

© Google imagery (2018).

Table 45

Lily Pool sample point 1	06/09/2017	SJ59556926 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2♂, 6i



Figure 73. Lily Pool sample point 1.

Site Description

A peat bog around the margin of an open pool of water. Sample point vegetation with *Vaccinium oxycoccos* intermixed with *Sphagnum* and punctuated with *Carex rostrata*. Water table below the surface.

Other arachnid species recorded

7 spiders.

See appendix Table 110.

Table 46

Lily Pool sample point 2	06/09/2017	SJ59566922 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 74. Lily Pool sample point 2.

Site Description

Sample point vegetation comprising *Sphagnum*, *Eriophorum angustifolium*, *Vaccinium oxycoccos* and *Rhynchospora alba*. Water table just below the surface.

Other arachnid species recorded

7 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. 1st site record).

See appendix Table 111.

Brackenhurst Bog



Figure 75. Brackenhurst Bog and Hogshead Moss sample point locations.

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Figure 76. Brackenhurst Bog sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.

© Google imagery (2018).

Table 47

Brackenhurst Bog sample point 1	29/09/2017	SJ59586980 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	Negative



Figure 77. Brackenhurst Bog sample point 1.

Site Description

A basin mire fringed with trees. Sample point vegetation on a *Sphagnum* lawn with *Erica tetralix*, *Vaccinium oxycoccos*, *Empetrum nigrum* and *Eriophorum angustifolium*. Water table just below the surface.

Other arachnid species recorded

9 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. 1st site record).

See appendix Table 112.

Table 48

Brackenhurst Bog sample point 2	29/09/2017	SJ59586976 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2i



Figure 78. Brackenhurst Bog sample point 2.

Site Description

Sample point dominated by *Eriophorum vaginatum* tussocks surrounded by *Sphagnum*, *Erica tetralix* and *Vaccinium oxycoccos*. Water table below the surface.

Other arachnid species recorded

5 spiders.

See appendix Table 113.

Table 49

Brackenhurst Bog sample point 3	29/09/2017	SJ59666982 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	1i



Figure 79. Brackenhurst Bog sample point 3.

Site Description

Sample point vegetation with *Eriophorum vaginatum* tussocks surrounded by a deep mat of *Sphagnum* intermixed with *Vaccinium oxycoccos*. Water table below the surface.

Other arachnid species recorded

9 spiders.

See appendix Table 114.

Table 50

Brackenhurst Bog sample point 4	29/09/2017	SJ59566983 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 80. Brackenhurst Bog sample point 4.

Site Description

Sample point vegetation comprising *Eriophorum angustifolium*, *Sphagnum* and *Vaccinium oxycoccos*. Water table below the surface.

Other arachnid species recorded

6 spiders.

See appendix Table 115.

Snipe Island

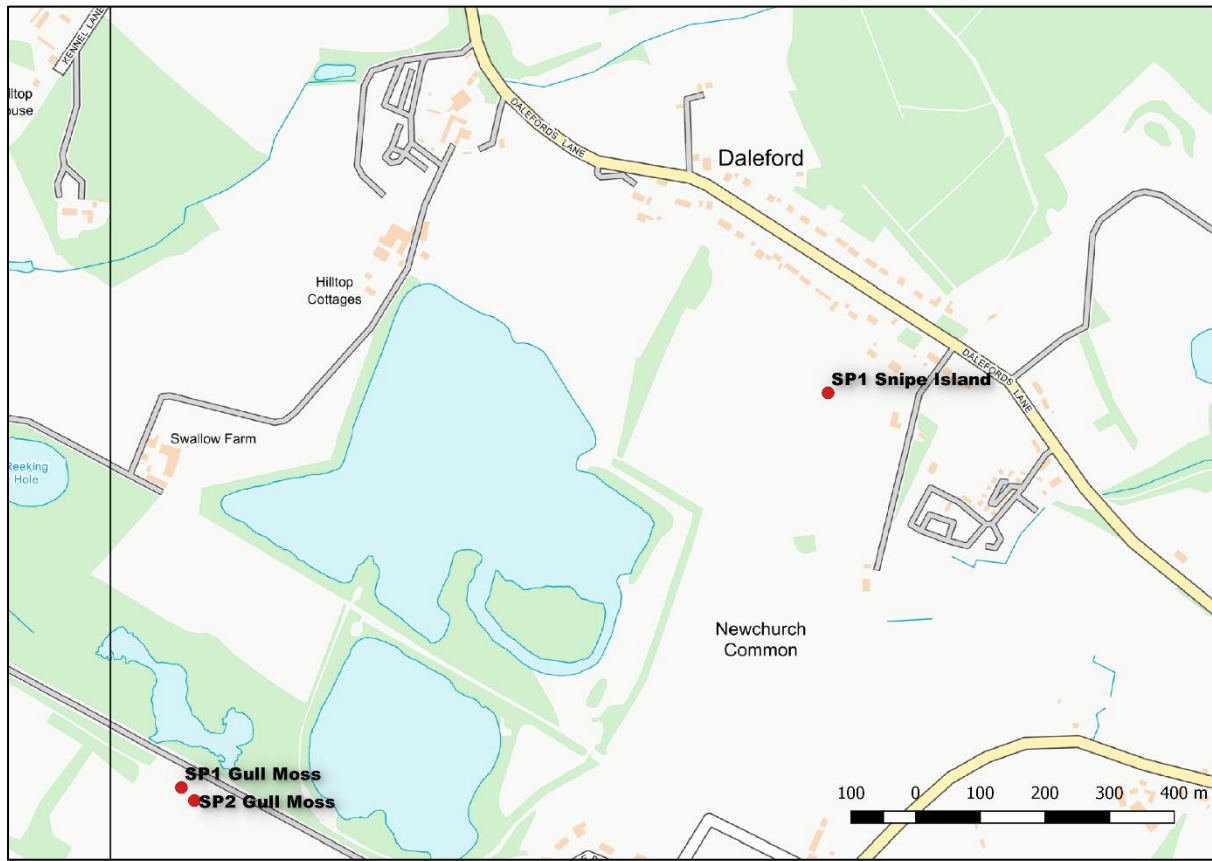


Figure 81. Snipe Island sample point location.
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Figure 82. Snipe Island sample point locations on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 51

Snipe Island sample point 1	29/09/2017	SJ61116932 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	Negative



Figure 83. Snipe Island sample point 1.

Site Description

A small isolated basin mire fringed with trees. sample point vegetation dominated by *Eriophorum vaginatum* tussocks with *Sphagnum*, *Erica tetralix* and *Vaccinium oxycoccus*. Water table below the surface, although an old ditch provides an area of saturated *Sphagnum*.

Other arachnid species recorded

15 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. 1st site record).

1 harvestman.

See appendix Table 116.

Hogshead Moss



Figure 84. Hogshead Moss sample point locations on aerial imagery. *Sitticus floricola* ● present, ● absent. White polygon indicates area of potentially suitable bog habitat. © Google imagery (2018).

Table 52

Hogshead Moss sample point 1	06/09/2017	SJ58426952 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	4i



Figure 85. Hogshead Moss sample point 1.

Site Description

An open well-developed basin mire within a conifer plantation. This bog is fringed by a water-filled lagg ditch. Sample point vegetation with a deep *Sphagnum* lawn punctuated with *Carex rostrata*. Water table at the surface.

Other arachnid species recorded

3 spiders.

1 harvestman.

See appendix Table 117.

Table 53

Hogshead Moss sample point 2	06/09/2017	SJ58456948 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2i

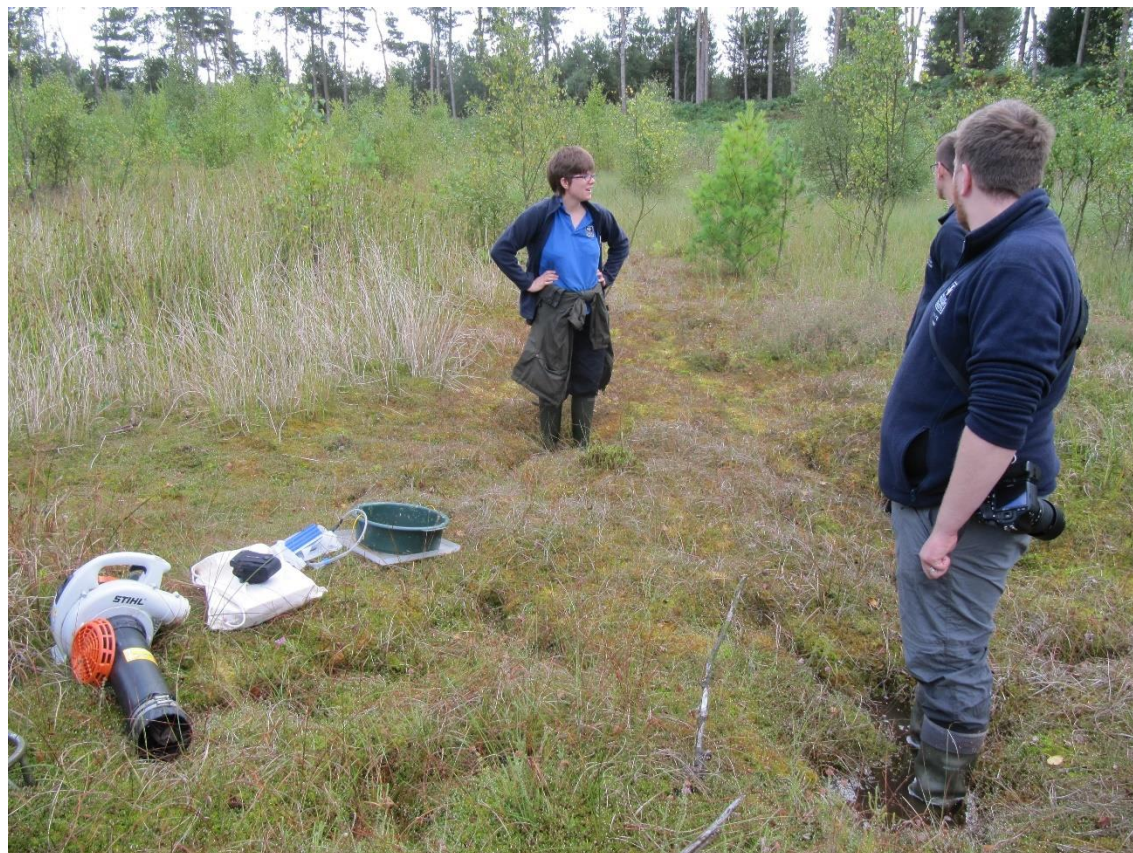


Figure 86. Hogshead Moss sample point 2.

Site Description

Sample point vegetation comprising a deep mat of *Sphagnum* intermixed with *Vaccinium oxycoccos* and punctuated by *Eriophorum angustifolium*. Water table just below the surface.

Other arachnid species recorded

4 spiders – including:

Glyphesis cottonae (Vulnerable & Nationally Rare. Last site record 1998).

See appendix Table 118.

Little Budworth Common (SSSI)

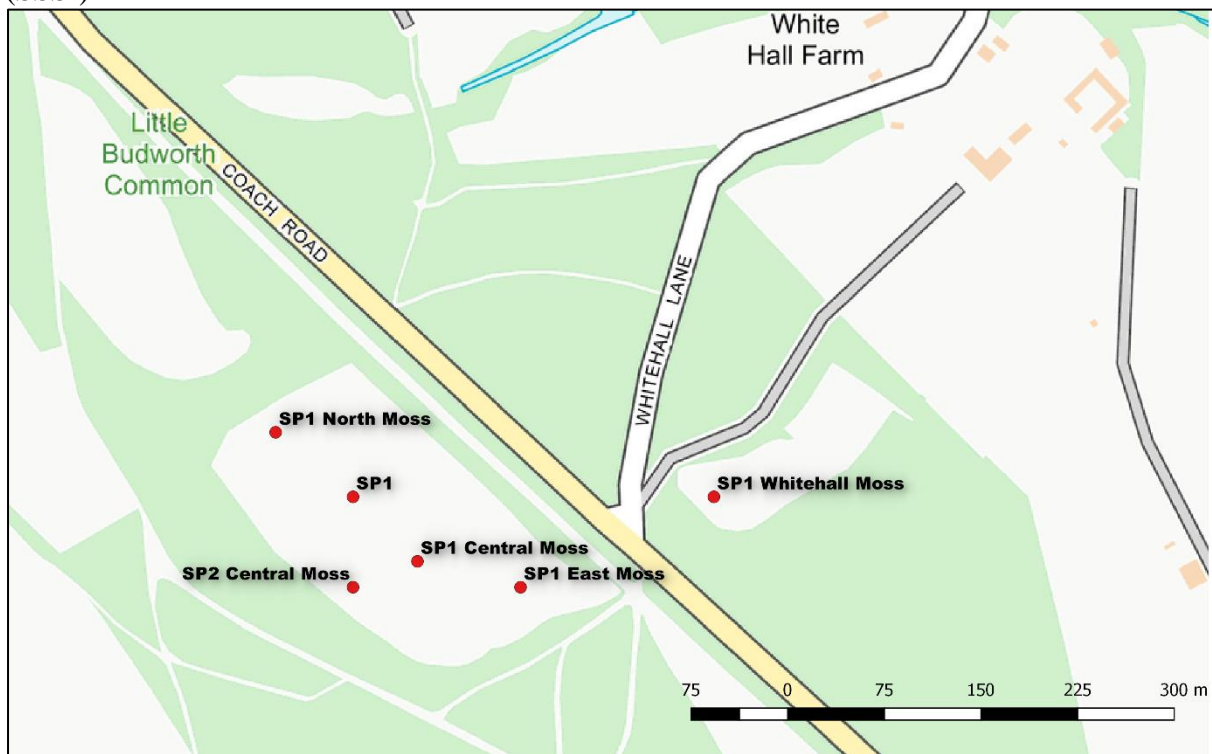


Figure 87. Little Budworth Common sample point locations.
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Figure 88. Little Budworth Common (North Moss, Central Moss, East Moss and Whitehall Moss) sample point locations on aerial imagery.
Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.
© Google imagery (2018).

Table 54

Whitehall Moss sample point 1	17/09/2017	SJ58766579 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	1i



Figure 89. Whitehall Moss sample point 1.

Site Description

Part of the Little Budworth Common bog complex. This bog is fringed with *Betula/Quercus* woodland. Sample point vegetation on a schwingmoor with *Sphagnum*, *Vaccinium oxycoccos*, *Eriophorum angustifolium* and *Erica tetralix*. Water table below the surface.

Other arachnid species recorded

10 spiders.

See appendix Table 119.

Table 55

East Moss sample point 1	17/09/2017	SJ58616572 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	1♂, 1♀, 5i



Figure 90. East Moss sample point 1.

Site Description

Part of the Little Budworth Common bog complex. This basin mire is largely surrounded by heathland. Sample point vegetation on a schwingmoor with *Sphagnum*, *Vaccinium oxycoccos*, *Eriophorum angustifolium* and dominant *Erica tetralix*. Water table below the surface.

Other arachnid species recorded

5 spiders.

See appendix Table 120.

Table 56

Central Moss sample point 1	17/09/2017	SJ58536574 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 91. Central Moss sample point 1.

Site Description

Part of the Little Budworth Common bog complex. This basin mire is largely surrounded by heathland. Sample point vegetation on a schwingmoor with *Sphagnum*, *Vaccinium oxycoccos*, *Eriophorum angustifolium* and *Erica tetralix*. Water table just below the surface.

Other arachnid species recorded

6 spiders.

See appendix Table 121.

Table 57

Central Moss sample point 2	17/09/2017	SJ58486572 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	2i



Figure 92. Central Moss sample point 2.

Site Description

Sample point on a schwingmoor with *Sphagnum*, *Vaccinium oxycoccos*, *Eriophorum angustifolium* and *Erica tetralix*. Water table just below the surface.

Other arachnid species recorded

11 spiders.

See appendix Table 122.

Table 58

North Moss sample point 1	17/09/2017	SJ58426584 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	7i



Figure 93. North Moss sample point 1.

Site Description

Part of the Little Budworth Common bog complex. This small bog is largely surrounded by heathland. Sample point with *Molinia caerulea* tussocks, *Erica tetralix*, *Sphagnum* and a little *Eriophorum angustifolium*. Water table at the surface.

Other arachnid species recorded

9 spiders.

See appendix Table 123.

Wybunbury Moss (SSSI; NNR; SAC; Phase 1 Ramsar)

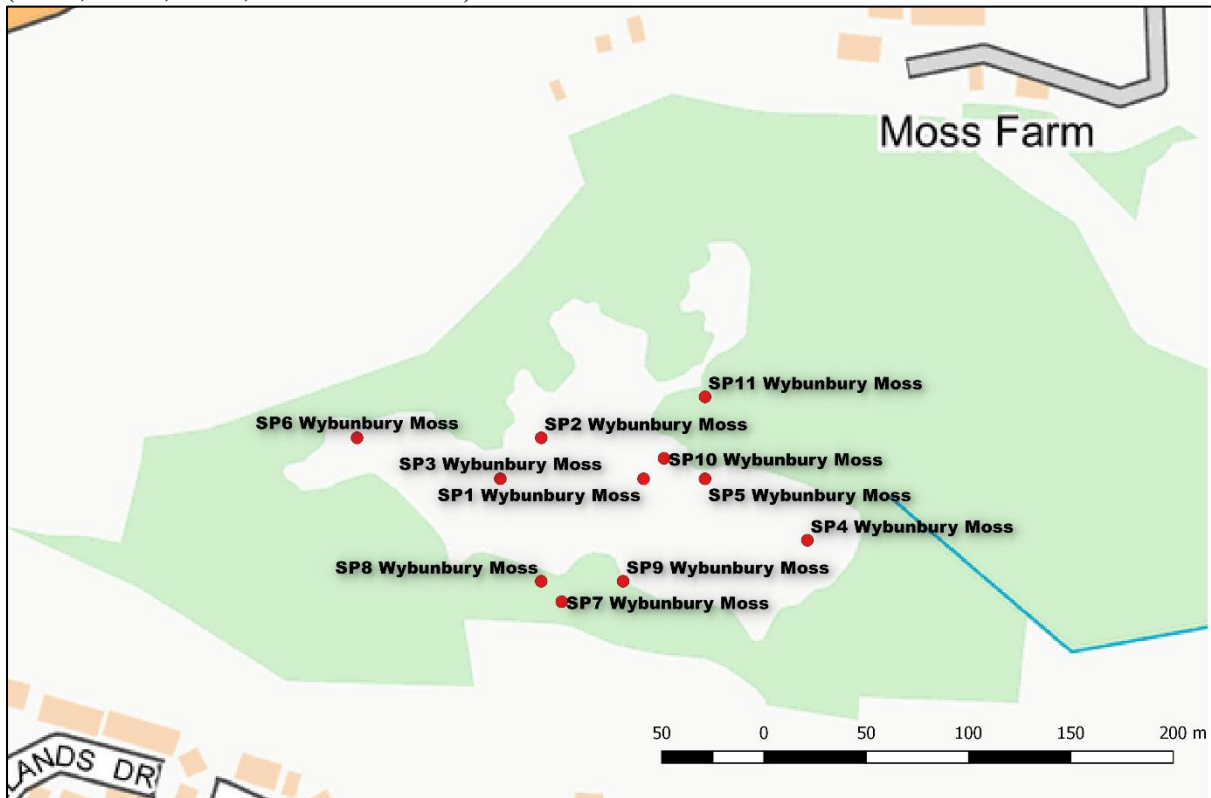


Figure 94. Wybunbury Moss sample point locations.

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Figure 95. Wybunbury Moss sample point locations on aerial imagery.

Sitticus floricola ● present, ● absent. White polygon indicates area of potentially suitable bog habitat.

© Google imagery (2018).

Table 59

Wybunbury Moss sample point 1	27/09/2017	SJ69655021 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	Negative



Figure 96. Wybunbury Moss sample point 1.

Site Description

An open schwingmoor bog largely fringed by woodland. Sample point vegetation with *Sphagnum*, *Erica tetralix*, *Eriophorum angustifolium* and *Rhynchospora alba*. Water table below the surface.

Other arachnid species recorded

19 spiders – including:
Carorita limnaea (Vulnerable & Nationally Rare).
 1 centipede.
 See appendix Table 125.

Table 60

Wybunbury Moss sample point 2	27/09/2017	SJ69605023 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	Negative



Figure 97. Wybunbury Moss sample point 2.

Site Description

Sample point dominated by *Eriophorum vaginatum* tussocks with *Sphagnum* and *Erica tetralix*. Water table below the surface.

Other arachnid species recorded

27 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare).

Gnaphosa nigerrima (Vulnerable & Nationally Rare).

See appendix Table 126.

Table 61

Wybunbury Moss sample point 3	27/09/2017	SJ69585021 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	7i



Figure 98. Wybunbury Moss sample point 3.

Site Description

Sample point on a schwingmoor with a *Sphagnum* lawn, *Erica tetralix*, *Eriophorum angustifolium* and *Andromeda polifolia*. Water table at the surface.

Other arachnid species recorded

19 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare).

Gnaphosa nigerrima (Vulnerable & Nationally Rare).

See appendix Tables 127 & 128.

Table 62

Wybunbury Moss sample point 4	27/09/2017	SJ69735018 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 99. Wybunbury Moss sample point 4.

Site Description

Sample point vegetation comprising *Sphagnum*, *Eriophorum vaginatum* and *Calluna vulgaris*. Water table below the surface, although some small open water pools are present.

Other arachnid species recorded

16 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare).

Gnaphosa nigerrima (Vulnerable & Nationally Rare).

See appendix Table 129.

Table 63

Wybunbury Moss sample point 5	27/09/2017	SJ69685021 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	4i



Figure 100. Wybunbury Moss sample point 5.

Site Description

Sample point with a mosaic of *Sphagnum* lawn, open water, *Eriophorum angustifolium*, *Vaccinium oxycoccos*, *Molinia caerulea* and *Rhynchospora alba*. Water table at the surface.

Other arachnid species recorded

8 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare).

Gnaphosa nigerrima (Vulnerable & Nationally Rare).

See appendix Table 130.

Table 64

Wybunbury Moss sample point 6	27/09/2017	SJ69515023 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
2	4	2i



Figure 101. Wybunbury Moss sample point 6.

Site Description

Sample point with *Eriophorum vaginatum* tussocks punctuating a carpet of *Sphagnum* and *Erica tetralix*. Water table below the surface.

Other arachnid species recorded

18 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare).

Gnaphosa nigerrima (Vulnerable & Nationally Rare).

See appendix Table 131.

Table 65

Wybunbury Moss sample point 7	27/09/2017	SJ69615015 England
Vacuum samples	Total sampling duration (minutes)	<i>Sitticus floricola</i>
1	2	Negative



Figure 102. Wybunbury Moss sample point 7.

Site Description

Sample point with *Eriophorum vaginatum*, *Erica tetralix*, *Sphagnum* and a little *Molinia caerulea*. Water table below the surface.

Other arachnid species recorded

15 spiders – including:

Carorita limnaea (Vulnerable & Nationally Rare).

Gnaphosa nigerrima (Vulnerable & Nationally Rare).

See appendix Table 132.

Other recorded species

In total 108 spider, 6 harvestmen, 1 pseudoscorpion and 1 centipede species were recorded during this survey (see appendices); of these, six rare species are worthy of further discussion. Critical voucher specimens will be deposited in the collections of the World Museum (Liverpool) and the Hope Museum (Oxford).

***Carorita limnaea* (Crosby & Bishop, 1927)** Vulnerable and Nationally Rare



Figure 103. *Carorita limnaea* female, Bettisfield Moss (carapace length 0.71 mm).



Figure 104. *Carorita limnaea* distribution on Wybunbury Moss.

© Google imagery (2018).

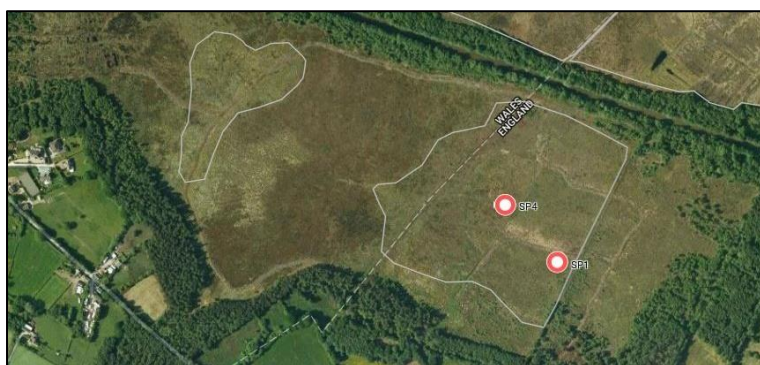


Figure 105. *Carorita limnaea* distribution on Bettisfield Moss.

© Google imagery (2018).

This Nationally Rare, Vulnerable linyphiid spider was previously only known from two sites in Britain: Wybunbury Moss and Whixall Moss (Felton & Judd, 1997). It was last recorded at Wybunbury in 1999 by Alan Scott, and at Whixall in 1993 by Rixom.

During this survey it was recorded widely across Wybunbury Moss at 7 sample points, totalling 40 females and 4 males. It was also recorded at two sample points on Bettisfield Moss (6 females in total), representing a new British locality for this species.

***Glyphesis cottonae* (La Touche, 1946)** Vulnerable and Nationally Rare



Figure 106. *Glyphesis cottonae* female, Bettisfield Moss (carapace length 0.51 mm).

This tiny, Nationally Rare, Vulnerable linyphiid spider was recorded at 9 sites during this survey. At Black Lake, Hogshead Moss and Whixall Moss the species was reconfirmed, but is recorded as new to the following 6 sites: Bettisfield Moss, Brackenhurst Bog, Fenn's Moss, Lily Pool, Oakmere Moss and Snipe Island. The Fenn's Moss record represents the first Welsh record.

In the Shropshire-Cheshire Plain it was previously known from only 6 bogs, so this survey has significantly increased its known range in the northwest.

On Whixall Moss 6 *Glyphesis cottonae* were sieved from a carpet of *Sphagnum cuspidatum* (in its terrestrial form) growing on the floor of an old peat-cutting. The *Sphagnum* was growing out of several centimetres of water. The species was also vacuumed from schwingmoor habitats at other sites, but mainly from the wettest zones.

***Gnaphosa nigerrima* L. Koch, 1877** Vulnerable and Nationally Rare



Figure 107. *Gnaphosa nigerrima* female, Wybunbury Moss.

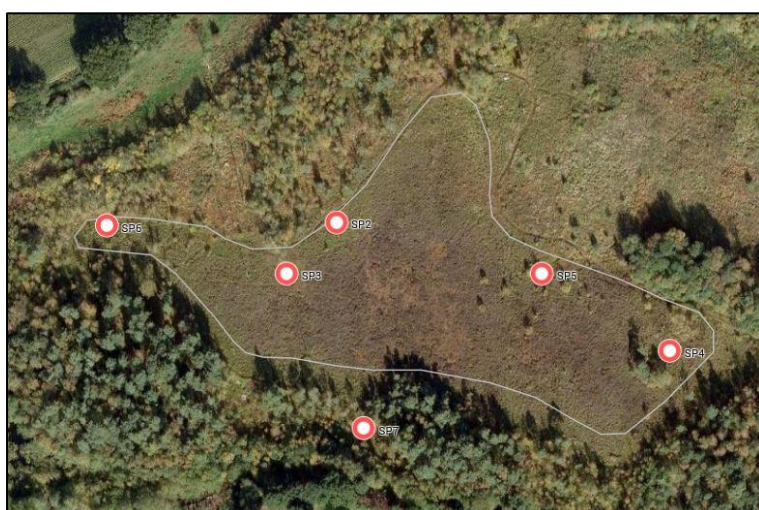


Figure 108. *Gnaphosa nigerrima* distribution on Wybunbury Moss.

© Google imagery (2018).

In Britain this gnaphosid spider is only known from Wybunbury Moss (Felton, 1997; Felton & Judd, 1997). It was reconfirmed at Wybunbury during this survey and was recorded widely at 6 sampling points across the schwingmoor (2 adult females and 18 immatures). In Denmark it is known from only the best quality bog habitats (Glime & Lissner, 2013). It was last recorded at Wybunbury in 1999 (Scott, 2001).

***Minicia marginella* (Wider, 1834)** Nationally Rare



Figure 109. *Minicia marginella* subadult male, Bettisfield Moss (carapace length 0.65 mm). Showing raised carapace structure and abdominal bands.



Figure 110. *Minicia marginella* subadult male, Bettisfield Moss (carapace length 0.65 mm).

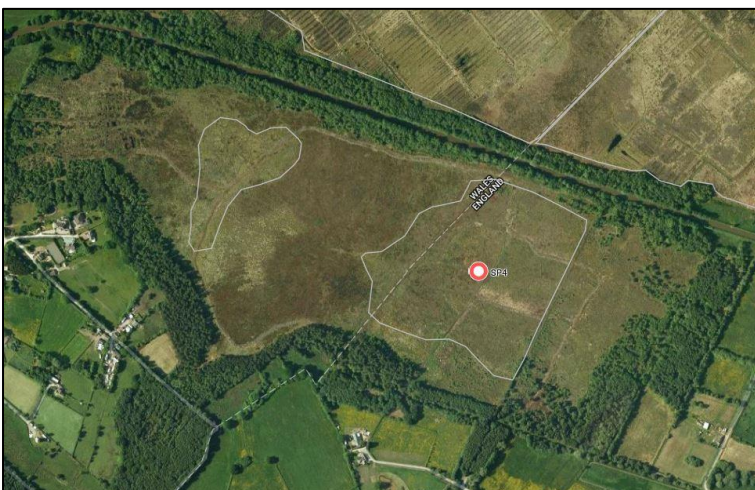


Figure 111. *Minicia marginella* distribution on Bettisfield Moss.

© Google imagery (2018).

Minicia marginella is a well-marked linyphiid spider known previously in Britain from only two sites. In Britain it was first recorded at the base of chalk cliffs near Dover, Kent (Snazell, 1991, 1992), but has been found more recently at Butterburn Flow, Cumbria in raised/blanket bog habitat (Wilson, 2016). It is recognised as a raised bog specialist in Denmark (Glime & Lissner, 2013) and Ireland (Nolan, 2007). Wilson (2016) extensively reviewed the known ecology of this species. In raised bogs it seems to occupy warmer, drier hummocks (Glime & Lissner, 2013, Wilson, 2016).

A single sub-adult male (with characteristic abdominal markings, raised carapace and 0.9 TmI and TmIV) was vacuumed from schwingmoor hummocks on Bettisfield Moss. This represents a new site for this species in Britain.

***Sitticus caricis* (Westring, 1861) Nationally Rare**



Figure 112. *Sitticus caricis* male, Whixall Moss © Steven Barlow.

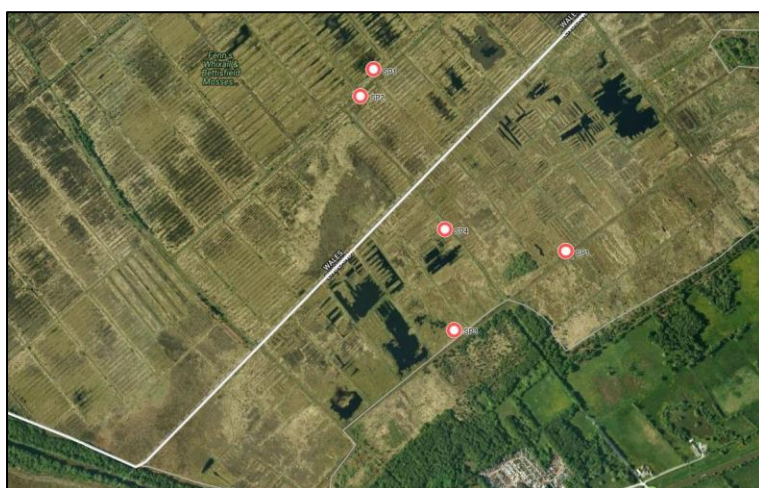


Figure 113. *Sitticus caricis* distribution on Fenn's & Whixall Moss.

© Google imagery (2018).

The jumping spider *Sitticus caricis* was discovered at five sample points on both Fenn's and Whixall Mosses (2 adult males, 1 adult female and 61 immatures). It is surprising that this spider has not been recorded here previously, however it is not easily found without vacuuming.

On the Anglesey Fens *S. caricis* was found to be utilising *Schoenus nigricans* tussocks surrounded by water (Gallon, 2011). It appears to be occupying a structurally similar habitat on Fenn's & Whixall Mosses where *Eriophorum vaginatum* forms the tussocks.

Sitticus floricola specimens from Whixall & Bettisfield Mosses (World Museum, Liverpool) were re-examined to ensure they were not misidentified *S. caricis* (no misidentifications were found).

***Microbisium brevifemoratum* (Ellingsen, 1903)**



Figure 114. *Microbisium brevifemoratum*, Bettisfield Moss.

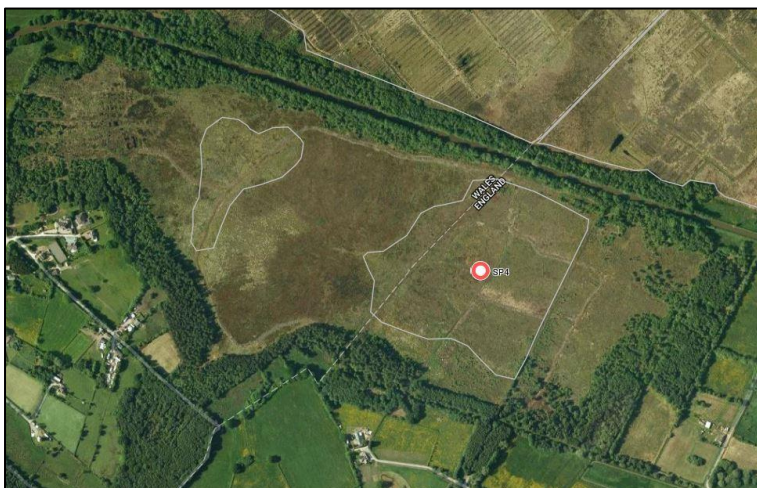


Figure 115. *Microbisium brevifemoratum* distribution on Bettisfield Moss.

© Google imagery (2018).

Three specimens (2 adult, 1 juvenile) of the pseudoscorpion *Microbisium brevifemoratum* were vacuumed from schwingmoor at Bettisfield Moss. This is only the third British locality for this species, having previously been recorded from Chartley Moss and Cors Fochno (Legg, 2018).

All three British sites are good quality raised bog habitats, perhaps suggesting that this species is a specialist of this type of bog. In Denmark *M. brevifemoratum* is a recognised bog specialist associated with hummocks (Glime & Lissner, 2013). Lissner (2014) also notes that it is only known from three localities in Denmark, where it is found alongside other rare bog arachnids e.g. *Minicia marginella* and *Carorita limnaea*, both of which were found at the Bettisfield sample point.

Nationally Scarce spiders

Twelve Nationally Scarce species of spider were recorded during the survey:

Bathypantes setiger (4 bogs):

Hogshead Moss, LM09 & 10, Fenn's Moss, Whixall Moss.

Dolomedes fimbriatus (1 bog):

Whixall Moss.

Erigonella ignobilis (6 bogs):

Black Lake, Great Blakemere, Hatch Mere, Hockenhull, LM09 & 10, Snipe Island.

Hypselistes jacksoni (12 bogs):

Abbots Gull Moss, Abbots Shemmy Moss, Abbots South Moss, Bettisfield Moss, Brackenhurst Bog, Fenn's Moss, Lily Pool, Budworth Central Moss, Budworth East Moss, Budworth North Moss, Budworth Whitehall Moss, Whixall Moss.

Notioscopus sarcinatus (1 bog):

Wybunbury Moss.

Philodromus histrio (1 bog):

Wem Moss.

Pirata tenuitarsis (3 bogs):

Fenn's Moss, Vicarage Moss large basin, Whixall Moss.

Scotina gracilipes (3 bogs):

Bettisfield Moss, Wem Moss, Wybunbury Moss.

Singa hamata (1 bog):

Wem Moss.

Taranucnus setosus (1 bog):

Wybunbury Moss.

Walckenaeria alticeps (1 bog):

Bettisfield Moss.

Walckenaeria furcillata (1 bog):

Wybunbury Moss.

Threats to the conservation of *Sitticus floricola*

Many of the isolated populations of *Sitticus floricola* on the Shropshire-Cheshire Plain occupy tiny patches of habitat; with 12 populations occupying habitats less than 1 ha in area. The Llay Bog population exists in only 0.024 ha of habitat. As such these populations are highly susceptible to habitat deterioration or stochastic events.

In the event of localised extinctions, natural recolonisation would be extremely difficult given the bogs' isolated nature within an agriculturally intensive landscape.

Scrub encroachment

Betula pubescens, *Pinus silvestris* and non-natives like *Tsuga heterophylla* and *Rhododendron ponticum* will readily colonise the surface of *Sitticus floricola* bogs (Fig. 119). Given the opportunity, these woody species will scrub-over a bog's surface, shading out the raised bog plant communities used by *S. floricola*. This situation is exacerbated when bogs dry out. On deep schwingmoors encroaching trees naturally die as they grow, sinking into the bog under their own weight.

Conservation groups (often volunteers) and site managers actively remove scrub and their seedlings from many of the *S. floricola* bogs, but this needs to be undertaken regularly. This current survey identified birch encroachment at Llay Bog; this was quickly and enthusiastically addressed by NRW and the land owner (Figs. 116–118).



Figure 116. Hand pulling birch saplings at Llay Bog.



Figure 117. Llay Bog following scrub removal.



Figure 118. Larger trees removed and treated to prevent regrowth at Llay Bog.



Figure 119. Young birch and pine saplings encroaching on bog at Budworth.

Afforestation

Historically many mosses have been drained and planted over with commercial crops of conifers. This has undoubtedly resulted in the loss of unrecorded *S. floricola* populations in the past. However, this habitat loss has been reversed at Bettisfield Moss where conifers were removed in 2001 by Natural England. Conifer removal at several previously wooded mosses in Delamere Forest has also been undertaken by the Forestry Commission and Cheshire Wildlife Trust, with bog plant assemblages slowly recovering (Anon., 2018).

Drainage

Many mosses were drained historically to facilitate peat cutting or conversion to agricultural land through the application of marl and Mancunian nightsoil (Baines, 1868; Phillips, 1979/80). Maps of the region reveal numerous examples suggesting the former existence of a nearby bog (e.g. Moss Farm, Moss Lane etc.) and regions of dark peat soils can still be seen in ploughed fields on aerial images.

Recorded populations of *S. floricola* at Willington, Duddon, Tarporley and Hartford are all likely to have been lost due to habitat loss (no suitable bogs now exist near these places).

It is now unlikely that extant *S. floricola* populations will succumb to drainage habitat loss, given the protection afforded to raised bogs. Indeed, many bogs are being actively rewetted with historic drains dammed to improve the habitat and bog hydrology.

Inundation

An unintentionally blocked drain at Clarepool Moss demonstrates that raising a bog's water table excessively can result in the loss of bog habitat and a return to an open water mere (Fig. 39). Although *Sitticus floricola* has not been recorded at Clarepool Moss, despite considerable spider survey effort in the past (Duffey, 1964), it highlights a potential issue for other sites, particularly if water levels increase dramatically in a short space of time.

Delamere's Black Lake bog has been subjected to periods of inundation/modification in the past (Fairhurst, 1988). It was dug out in 1820 to create a wildfowl pond and surrounded by an artificial embankment. By 1949 it had regained a *Sphagnum* skin, but was open water again in the 1970s and water levels rose again in 1987/88 when the outflow blocked. Clearly the *S. floricola* population there persisted through these water level oscillations, but the available bog habitat must be severely reduced when water levels rise dramatically.

Fire

Some bogs where *S. floricola* exist can dry considerably in summer (e.g. Llay Bog). Although the spiders can retreat deeper into damp vegetation to get through such seasonal events, a comprehensive burn could easily result in localised extinctions of *S. floricola*.

Pollution

Intact raised bogs are nutrient-poor, rain-fed systems, however many are now influenced by man-made drainage ditches. These ditches may compromise the integrity of the bog's hydrology, permitting nutrient-rich water to enter from surrounding agricultural land during periods of high rainfall.

This nutrient ingress would, over time, alter the bog plant communities inhabited by *S. floricola*, thereby compromising the species' conservation. Tomassen *et al.* (2004) demonstrated experimentally that increasing Nitrogen levels on ombrotrophic bogs favours the growth and spread of *Molinia caerulea*, to the detriment of more suitable bog plant communities favoured by *S. floricola*.

Any base-rich water ingress (from agricultural lime or limestone chippings used on adjacent paths) could raise the pH of a bog to the detriment of *Sphagnum* moss species. These mosses

are keystone species in the development and maintenance of raised bogs. They lower the pH of the bog's water, thereby favouring the formation of peat and the growth of the acidic bog plant communities used by *S. floricola*.

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Gary Hedges (Tanyptera Trust) is thanked for commissioning this survey and for help with survey work. Steve Judd and Tony Hunter (World Museum, Liverpool) helped with literature and historic records from the museum's collection. Jan Beccaloni and Bill Parker provided information on specimens held at the Natural History Museum, London.

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Special thanks are due to the private owners and tenants for allowing survey work on their land and kindly granting access (not named to respect their privacy). Lucia Ruffino is thanked for the identification of *Sphagnum cuspidatum*. Gerald Legg confirmed the identification of *Microbisium brevifemoratum*.

Stephen Barlow is acknowledged for his guidance, support and *Sitticus caricis* photography on Fenn's and Whixall Moss. Katie Piercy (formerly of Cheshire Wildlife Trust) was instrumental in suggesting and locating survey sites in the Delamere Forest. Danny Fletton and Joe Taylor (Cheshire Wildlife Trust), and Anthony Gallon also helped with survey work on often difficult terrain.

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Appendix

All records have been submitted to the British Arachnological Society's Spider Recording Scheme.

Table 66. 08/08/2017, SJ32235539, Llay Bog, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	CLUBIONIDAE	<i>Clubiona diversa</i>		LC	1F
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Linyphia triangularis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Meioneta saxatilis s. l.</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Neriene clathrata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	11F
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata latitans</i>		LC	3F
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	4F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1M 5F 3i
Araneae	THERIIDAE	<i>Enoplognatha ovata</i>		LC	1F
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	2F
Opiliones	LEIOBUNIDAE	<i>Leiobunum rotundum</i>			1M

Table 67. 08/08/2017, SJ36025392, Vicarage Moss, large basin, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1M 2F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1M 2F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	2F
Araneae	LYCOSIDAE	<i>Pirata tenuitarsis</i>	NS	LC	1F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1F 1i
Araneae	TETRAGNATHIDAE	<i>Pachygnatha degeeri</i>		LC	1M
Araneae	THOMISIDAE	<i>Ozyptila trux</i>		LC	1F

Table 68. 08/08/2017, SJ36015400, Vicarage Moss, large basin, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	2M
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	4F
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Silometopus elegans</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata tenuitarsis</i>	NS	LC	1M 1F

Table 69. 08/08/2017, SJ35975404, Vicarage Moss, large basin, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2F 1i

Table 70. 08/08/2017, SJ36025383, Vicarage Moss, small basin, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1M
Araneae	CLUBIONIDAE	<i>Clubiona stagnatilis</i>		LC	1F
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	2i
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	7M 4F 1Ad 9i
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	2M 1F

Table 71. 03/09/2017, SJ48153513, Bettisfield Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Hahnna montana</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2M
Araneae	LINYPHIIDAE	<i>Peponocranium ludicrum</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	5F
Araneae	LYCOSIDAE	<i>Pardosa nigriceps</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata uliginosus</i>		LC	1F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	3iM
Araneae	SALTICIDAE	<i>Evarcha</i>			1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM 2iF
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 2F
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	1M
Araneae	THOMISIDAE	<i>Ozyptila atomaria</i>		LC	1F

Table 72. 03/09/2017, SJ48213521, Bettisfield Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	CLUBIONIDAE	<i>Clubiona diversa</i>		LC	1M 1F
Araneae	HAHNIIDAE	<i>Hahnna montana</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M 1F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Tenuiphantes mengei</i>		LC	1F
Araneae	SALTICIDAE	<i>Evarcha</i>			2i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM 1F
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 1F
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	1F

Table 73. 03/09/2017, SJ47703545, Bettisfield Moss, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	LIOCRANIDAE	<i>Scotina gracilipes</i>	NS	LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1F

Table 74. 08/10/2017, SJ48063523, Bettisfield Moss, sample point 4 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	5F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Dicymbium nigrum</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	6M 6F
Araneae	LINYPHIIDAE	<i>Gnathonarium dentatum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	4F
Araneae	LINYPHIIDAE	<i>Minicia marginella</i>	NR	DD	1iM
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Walckenaeria alticeps</i>	NS	LC	1M
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Evarcha</i>			1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	6iM 2F
Araneae	TETRAGNATHIDAE	<i>Pachygnatha degeeri</i>		LC	1M
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	3M 8F
Araneae	THOMISIDAE	<i>Ozyptila trux</i>		LC	1F
Pseudoscorpiones	NEOBISIDAE	<i>Microbisium brevifemoratum</i>			2, 1i

Table 75. 02/09/2017, SJ48723638, Fenn's Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	CLUBIONIDAE	<i>Clubiona stagnatilis</i>		LC	1F
Araneae	CYBAEIDAE	<i>Argyroneta aquatica</i>		LC	1i
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Bathyphantes setiger</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tapinopa longidens</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata tenuitarsis</i>	NS	LC	2F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	3iM 1F
Araneae	SALTICIDAE	<i>Sitticus caricis</i>	NR	LC	3i
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1F
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	2M 1F
Opiliones	NEMASTOMATIDAE	<i>Nemastoma bimaculatum</i>			1F

Table 76. 02/09/2017, SJ48693632, Fenn's Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	CLUBIONIDAE	<i>Clubiona stagnatilis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M 1F
Araneae	LINYPHIIDAE	<i>Kaestneria pullata</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pardosa nigriceps</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus caricis</i>	NR	LC	5i

Table 77. 08/10/2017, SJ48303600, Fenn's Moss, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	2M 1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Lophomma punctatum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	2F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	THERIIDAE	<i>Robertus arundineti</i>		LC	1M
Opiliones	NEMASTOMATIDAE	<i>Nemastoma bimaculatum</i>			1F

Table 78. 08/10/2017, SJ48523616, Fenn's Moss, sample point 4 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1M
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1F

Table 79. 08/10/2017, SJ48603626, Fenn's Moss, sample point 5 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1M 2F
Araneae	LINYPHIIDAE	<i>Drepanotylus uncatus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	1M 4F
Araneae	LINYPHIIDAE	<i>Walckenaeria cuspidata</i>		LC	1F
Araneae	MIMETIDAE	<i>Ero cambridgei</i>		LC	1M
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM 1iF

Table 80. 03/09/2017, SJ48733619, Fenn's Moss, sample point 6 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1M 1F
Araneae	HAHNIIDAE	<i>Hahnia montana</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata tenuitarsis</i>	NS	LC	2F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F
Araneae	THERIIDAE	<i>Robertus arundineti</i>		LC	1F

Table 81. 02/09/2017, SJ49163596, Whixall Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Diplocephalus permixtus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	2M 1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	3M 1F
Araneae	LINYPHIIDAE	<i>Lophomma punctatum</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tiso vagans</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pardosa nigriceps</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	1F
Araneae	MIMETIDAE	<i>Ero cambridgei</i>		LC	1F
Araneae	PHILODROMIDAE	<i>Tibellus maritimus</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus caricis</i>	NR	LC	2M 1F 35i
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M
Araneae	THERIIDAE	<i>Neottiura bimaculata</i>		LC	1F
Araneae	THOMISIDAE	<i>Ozyptila brevipes</i>		LC	1M

Table 82. 02/09/2017, SJ49653636, Whixall Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	ARANEIDAE	<i>Larinioides cornutus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Bathyphantes setiger</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Gnathonarium dentatum</i>		LC	1M 4F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Kaestneria pullata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	5M 3F
Araneae	LYCOSIDAE	<i>Pirata tenuitarsis</i>	NS	LC	1F
Araneae	PISAURIDAE	<i>Dolomedes fimbriatus</i>	NS	LC	Several imms
Araneae	PISAURIDAE	<i>Pisaura mirabilis</i>		LC	1i

Table 83. 02/09/2017, SJ48903578, Whixall Moss, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LYCOSIDAE	<i>Pirata tenuitarsis</i>	NS	LC	1F
Araneae	PISAURIDAE	<i>Dolomedes fimbriatus</i>	NS	LC	1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	SALTICIDAE	<i>Sitticus caricis</i>	NR	LC	1M 15i
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1F
Araneae	THOMISIDAE	<i>Ozyptila brevipes</i>		LC	1M
Araneae	THOMISIDAE	<i>Ozyptila trux</i>		LC	1F
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	1F

Table 84. 02/09/2017, SJ48883601, Whixall Moss, sample point 4 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Antistea elegans</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Diplocephalus permixtus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	3M 3F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus caricis</i>	NR	LC	3i
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	2F
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	1F

Table 85. 03/09/2017, SJ47413431, Wem Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis juncea</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Walckenaeria acuminata</i>		LC	1iF
Araneae	LIOCRANIDAE	<i>Scotina gracilipes</i>	NS	LC	2F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 2F
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	1F

Table 86. 03/09/2017, SJ47373445, Wem Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Bathyphantes gracilis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Peponocranium ludicrum</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata uliginosus</i>		LC	1F
Araneae	SALTICIDAE	<i>Evarcha</i>			1iF
Araneae	THERIIDAE	<i>Neottiura bimaculata</i>		LC	2F

Table 87. 03/09/2017, SJ47333445, Wem Moss, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Neoscona adianta</i>		LC	1F
Araneae	CLUBIONIDAE	<i>Clubiona diversa</i>		LC	1M
Araneae	CLUBIONIDAE	<i>Clubiona trivialis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Meioneta rurestris</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M
Araneae	PHILODROMIDAE	<i>Philodromus histrio</i>	NS	LC	1iF
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	2iM
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M
Araneae	THERIIDAE	<i>Neottiura bimaculata</i>		LC	1F

Table 88. 03/09/2017, SJ47313443, Wem Moss, sample point 4 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Singa hamata</i>	NS	LC	1F

Table 89. 08/10/2017, SJ43563411, Clarepool Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Erigone dentipalpis</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Oedothorax fuscus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M

Table 90. 07/09/2017, SJ53757091, Black Lake, Delamere Forest, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2iM 1i

Table 91. 07/09/2017, SJ53747090, Black Lake, Delamere Forest, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	2M 1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Oedothorax fuscus</i>		LC	3F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	5i

Table 92. 07/09/2017, SJ54177093, Hockenhull, Delamere Forest, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	5M 2F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Maso sundevalli</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax retusus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2F
Araneae	TETRAGNATHIDAE	<i>Pachygnatha clercki</i>		LC	2M
Araneae	THERIIDAE	<i>Neottiura bimaculata</i>		LC	2F

Table 93. 07/09/2017, SJ54627126, Great Blakemere, Delamere Forest, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	2M 1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Walckenaeria nudipalpis</i>		LC	1M
Araneae	LIOCRANIDAE	<i>Agroeca proxima</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	THERIIDAE	<i>Phylloneta impressa</i>		LC	1F

Table 94. 07/09/2017, SJ54587126, Great Blakemere, Delamere Forest, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	1M 1F
Araneae	LINYPHIIDAE	<i>Gnathonarium dentatum</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M
Araneae	LIOCRANIDAE	<i>Agroeca proxima</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	2M

Table 95. 07/09/2017, SJ53807110, LM09 & LM10, Delamere Forest, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Bathyphantes setiger</i>	NS	LC	1M 1F
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	2F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata piraticus</i>		LC	1F

Table 96. 07/09/2017, SJ55217206, Hatch Mere, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Bathyphantes approximatus</i>		LC	2M
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	1M 4F
Araneae	LINYPHIIDAE	<i>Kaestneria pullata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Maso sundevalli</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Nerienne clathrata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	2F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	MIMETIDAE	<i>Ero cambridgei</i>		LC	1F
Araneae	PISAURIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	1M

Table 97. 07/09/2017, SJ55597226, Flaxmere, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Linyphia triangularis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Peponocranium ludicrum</i>		LC	2F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1iM
Araneae	SALTICIDAE	<i>Heliophanus</i>			1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM

Table 98. 07/09/2017, SJ55617228, Flaxmere, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Gonatum rubens</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M 1F
Araneae	SALTICIDAE	<i>Heliophanus</i>			1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	TETRAGNATHIDAE	<i>Metellina segmentata</i>		LC	1M
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1F

Table 99. 07/09/2017, SJ55677231, Flaxmere, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Larinioides cornutus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	1F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1iM 1iF
Araneae	SALTICIDAE	<i>Heliophanus</i>			1iM
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	TETRAGNATHIDAE	<i>Pachygnatha degeeri</i>		LC	1F
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 1F
Araneae	THERIIDAE	<i>Phylloneta impressa</i>		LC	1F

Table 100. 29/09/2017, SJ57656807, Oakmere Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	2F
Araneae	ARANEIDAE	<i>Larinioides cornutus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Diplocephalus permixtus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	2M 4F
Araneae	LINYPHIIDAE	<i>Gongyliellum vivum</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	3F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	3F
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1i
Araneae	TETRAGNATHIDAE	<i>Metellina segmentata</i>		LC	1F
Araneae	TETRAGNATHIDAE	<i>Pachygnatha degeeri</i>		LC	1F
Araneae	TETRAGNATHIDAE	<i>Tetragnatha montana</i>		LC	1F
Opiliones	LEIOBUNIDAE	<i>Dicranopalpus ramosus s. s.</i>			1M
Opiliones	PHALANGIIDAE	<i>Mitopus morio</i>			1M
Opiliones	PHALANGIIDAE	<i>Paroligolophus agrestis</i>			1F

Table 101. 29/09/2017, SJ57636808, Oakmere Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Linyphia triangularis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	1M
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1i

Table 102. 06/09/2017, SJ60116871, Abbots Moss, Gull Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1M 5F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2M
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax fuscus</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Heliophanus</i>			2i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	1F

Table 103. 06/09/2017, SJ60136869, Abbots Moss, Gull Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	2F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i
Araneae	TETRAGNATHIDAE	<i>Pachygnatha degeeri</i>		LC	1M
Araneae	THERIIDAE	<i>Robertus lividus</i>		LC	1F

Table 104. 06/09/2017, SJ59436865, Abbots Moss, South Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	SALTICIDAE	<i>Evarcha</i>			2i
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1M 1i

Table 105. 06/09/2017, SJ59376854, Abbots Moss, South Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Meioneta rurestris</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2M

Table 106. 06/09/2017, SJ59296868, Abbots Moss, South Moss, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pardosa saltans</i>		LC	1F

Table 107. 06/09/2017, SJ59476888, Abbots Moss, Shemmy Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Hahnna montana</i>		LC	1M 3F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2M 1F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	TETRAGNATHIDAE	<i>Pachygnatha degeeri</i>		LC	1F

Table 108. 06/09/2017, SJ59506891, Abbots Moss, Shemmy Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	HAHNIIDAE	<i>Hahnna montana</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	2M
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes menzei</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM

Table 109. 06/09/2017, SJ59436881, Abbots Moss, Shemmy Moss, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Peponocranium ludicrum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	SALTICIDAE	<i>Heliophanus flavipes</i>		LC	1M 1iM 1i

Table 110. 06/09/2017, SJ59556926, Lily Pool, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M 2F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax retusus</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Heliophanus flavipes</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2M 6i
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	1F

Table 111. 06/09/2017, SJ59566922, Lily Pool, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	2F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Opiliones	PHALANGIIDAE	<i>Paroligolophus agrestis</i>			1F

Table 112. 29/09/2017, SJ59586980, Brackenhurst Bog, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	2M
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	3F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	2F
Araneae	THERIIDAE	<i>Theonoe minutissima</i>		LC	1F

Table 113. 29/09/2017, SJ59586976, Brackenhurst Bog, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	1M 4F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus f. tuberosus</i>		LC	2M
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM 1iF
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i

Table 114. 29/09/2017, SJ59666982, Brackenhurst Bog, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	4F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Tenuiphantes mengei</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1iF
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1i

Table 115. 29/09/2017, SJ59566983, Brackenhurst Bog, sample point 4 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	THOMISIDAE	<i>Xysticus cristatus</i>		LC	1F

Table 116. 29/09/2017, SJ61116932, Snipe Island, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	2M
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Diplocephalus permixtus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Erigonella ignobilis</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Tenuiphantes menzei</i>		LC	2M 1F
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	1F
Araneae	MIMETIDAE	<i>Ero cambridgei</i>		LC	2M
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	TETRAGNATHIDAE	<i>Metellina segmentata</i>		LC	1F
Araneae	TETRAGNATHIDAE	<i>Pachygnatha clercki</i>		LC	1F
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	1F
Opiliones	PHALANGIIDAE	<i>Paroligolophus agrestis</i>			1F

Table 117. 06/09/2017, SJ58426952, Hogshead Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Bathyphantes setiger</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Lophomma punctatum</i>		LC	1F
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	4i
Opiliones	PHALANGIIDAE	<i>Oligolophus tridens</i>			1M

Table 118. 06/09/2017, SJ58456948, Hogshead Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	2M 2F
Araneae	LINYPHIIDAE	<i>Glyphesis cottonae</i>	NR	VU	1M
Araneae	LINYPHIIDAE	<i>Meioneta rurestris</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i

Table 119. 17/09/2017, SJ58766579, Little Budworth Common, Whitehall Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M 6F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	2F
Araneae	SALTICIDAE	<i>Evarcha</i>			5i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM 1i
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1i
Araneae	THOMISIDAE	<i>Xysticus cristatus</i>		LC	1F

Table 120. 17/09/2017, SJ58616572, Little Budworth Common, East Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M 2F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1F
Araneae	SALTICIDAE	<i>Evarcha</i>			2i
Araneae	SALTICIDAE	<i>Heliophanus</i>			1iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1M 1F 1iF 4i

Table 121. 17/09/2017, SJ58536574, Little Budworth Common, Central Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	1M 1F
Araneae	LINYPHIIDAE	<i>Walckenaeria atrotibialis</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F

Table 122. 17/09/2017, SJ58486572, Little Budworth Common, Central Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M
Araneae	PISAURIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1iM
Araneae	SALTICIDAE	<i>Evarcha</i>			3i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i
Araneae	TETRAGNATHIDAE	<i>Metellina segmentata</i>		LC	1M
Araneae	THERIIDAE	<i>Robertus lividus</i>		LC	1F
Araneae	THOMISIDAE	<i>Ozyptila atomaria</i>		LC	1M
Araneae	THOMISIDAE	<i>Xysticus cristatus</i>		LC	1F

Table 123. 17/09/2017, SJ58426584, Little Budworth Common, North Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Drepanotylus uncatus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Hypselistes jacksoni</i>	NS	LC	2M 1F
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	1F
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	1iM 6i
Araneae	THOMISIDAE	<i>Ozyptila atomaria</i>		LC	1F

Table 124. 17/09/2017, SJ58486579, Little Budworth Common, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	ARANEIDAE	<i>Zygiella atrica</i>		LC	1F
Araneae	CLUBIONIDAE	<i>Clubiona trivialis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Linyphia triangularis</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Peponocranium ludicrum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	2M 2F
Araneae	LIOCRANIDAE	<i>Agroeca proxima</i>		LC	1M
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1iF
Araneae	THERIIDAE	<i>Neottiura bimaculata</i>		LC	1F
Opiliones	PHALANGIIDAE	<i>Paroligolophus agrestis</i>			1F

Table 125. 27/09/2017, SJ69655021, Wybunbury Moss, sample point 1 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	5F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	1M 1F
Araneae	LINYPHIIDAE	<i>Oedothorax fuscus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	7F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes mengei</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	3M 2F
Araneae	LIOCRANIDAE	<i>Scotina gracilipes</i>	NS	LC	3F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	2F
Araneae	LYCOSIDAE	<i>Pirata uliginosus</i>		LC	1F
Araneae	SALTICIDAE	<i>Heliophanus</i>			1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1F 4iM 1i
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	2F
Araneae	THERIIDAE	<i>Robertus arundineti</i>		LC	1M
Araneae	THOMISIDAE	<i>Ozyptila trux</i>		LC	2F
Chilopoda	LITHOBIIDAE	<i>Lithobius calcaratus</i>			1M

Table 126. 27/09/2017, SJ69605023, Wybunbury Moss, sample point 2 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	CLUBIONIDAE	<i>Clubiona trivialis</i>		LC	1F
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	1i
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	4F
Araneae	LINYPHIIDAE	<i>Centromerus arcanus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	3M 1F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Erigone dentipalpis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Meioneta rurestris</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Micrargus herbigradus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Microlinyphia pusilla</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	5M 3F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	4F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Taranucus setosus</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes mengei</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	2M 1F
Araneae	LINYPHIIDAE	<i>Walckenaeria furcillata</i>	NS	LC	1F
Araneae	LINYPHIIDAE	<i>Walckenaeria nudipalpis</i>		LC	1F
Araneae	LIOCRANIDAE	<i>Agroeca proxima</i>		LC	1F
Araneae	LIOCRANIDAE	<i>Scotina gracilipes</i>	NS	LC	2F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1iM
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM 1F
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 1F

Table 127. 27/09/2017, SJ69585021, Wybunbury Moss, schwingmoor, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	6i
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	1M 6F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Cnephalocotes obscurus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Oedothorax fuscus</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	1M 2F
Araneae	SALTICIDAE	<i>Heliophanus flavipes</i>		LC	1F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i

Table 128. 27/09/2017, SJ69585021, Wybunbury Moss, *Sphagnum* lawn, sample point 3 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	3i
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	2M 9F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	2M
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	2M 1F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Lophomma punctatum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	3M 2F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tallusia experta</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M 1F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	5i

Table 129. 27/09/2017, SJ69735018, Wybunbury Moss, sample point 4 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	1i
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	3F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Erigone dentipalpis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	3M
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes mengei</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M 2F
Araneae	LIOCRANIDAE	<i>Scotina gracilipes</i>	NS	LC	1M
Araneae	LYCOSIDAE	<i>Pardosa pullata</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata uliginosus</i>		LC	1F
Araneae	PISAUROIDAE	<i>Pisaura mirabilis</i>		LC	1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM 1iF
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 1F

Table 130. 27/09/2017, SJ69685021, Wybunbury Moss, sample point 5 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	6i
Araneae	LINYPHIIDAE	<i>Bathyphantes gracilis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	4F
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	9M
Araneae	LINYPHIIDAE	<i>Oedothorax fuscus</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	2F
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	2iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	4i

Table 131. 27/09/2017, SJ69515023, Wybunbury Moss, sample point 6 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	1F 1i
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	6F
Araneae	LINYPHIIDAE	<i>Ceratinella brevipes</i>		LC	3M
Araneae	LINYPHIIDAE	<i>Ceratinella brevis</i>		LC	2F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	2M 2F
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	9M 4F
Araneae	LINYPHIIDAE	<i>Palliduphantes ericaeus</i>		LC	1M 1F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Porrhomma pygmaeum</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Savignia frontata</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes mengei</i>		LC	2F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	4F
Araneae	SALTICIDAE	<i>Euophrys frontalis</i>		LC	1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	5iM
Araneae	SALTICIDAE	<i>Sitticus floricola</i>	NR	NT	2i
Araneae	THERIIDAE	<i>Robertus lividus</i>		LC	1F
Araneae	ZORIDAE	<i>Zora spinimana</i>		LC	1M

Table 132. 27/09/2017, SJ69615015, Wybunbury Moss, sample point 7 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	GNAPHOSIDAE	<i>Gnaphosa nigerrima</i>	NR	VU	1F
Araneae	LINYPHIIDAE	<i>Aphileta misera</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Carorita limnaea</i>	NR	VU	1M 3F
Araneae	LINYPHIIDAE	<i>Erigone atra</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Gonatium rubens</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Notioscopus sarcinatus</i>	NS	LC	10M 4F
Araneae	LINYPHIIDAE	<i>Oedothorax gibbosus</i>		LC	3F
Araneae	LINYPHIIDAE	<i>Pocadicnemis pumila</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Tenuiphantes tenuis</i>		LC	1M
Araneae	LINYPHIIDAE	<i>Walckenaeria antica</i>		LC	1F
Araneae	LYCOSIDAE	<i>Pirata hygrophilus</i>		LC	1F
Araneae	SALTICIDAE	<i>Heliophanus</i>			1i
Araneae	SALTICIDAE	<i>Neon reticulatus</i>		LC	1iM 1iF
Araneae	THERIIDAE	<i>Crustulina guttata</i>		LC	1M 2F
Araneae	THOMISIDAE	<i>Xysticus ulmi</i>		LC	1F

Table 133. 27/09/2017, SJ69605016, Wybunbury Moss, sample point 8 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	AMAUROBIIDAE	<i>Amaurobius fenestralis</i>		LC	1M
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	ARANEIDAE	<i>Nuctenea umbratica</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Linyphia triangularis</i>		LC	1F
Araneae	LINYPHIIDAE	<i>Walckenaeria acuminata</i>		LC	1M
Araneae	SALTICIDAE	<i>Salticus cingulatus</i>		LC	1iF
Araneae	TETRAGNATHIDAE	<i>Metellina segmentata</i>		LC	1M 1F

Table 134. 27/09/2017, SJ69645016, Wybunbury Moss, sample point 9 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	ARANEIDAE	<i>Araneus quadratus</i>		LC	1F

Table 135. 27/09/2017, SJ69665022, Wybunbury Moss, sample point 10 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Araneus diadematus</i>		LC	1F
Araneae	ARANEIDAE	<i>Zygiella atrica</i>		LC	1F

Table 136. 27/09/2017, SJ69685025, Wybunbury Moss, sample point 11 records.

Group	Family	Species	GB National Rarity Status	IUCN Status	Sex
Araneae	ARANEIDAE	<i>Larinioides cornutus</i>		LC	1F