

Few and far between: a history of women in British arachnology 1800–2000

Danniella Sherwood

Arachnology Research Association
email: danni.sherwood@hotmail.com

Abstract

A history of the women who contributed to research of arachnids in Britain during the nineteenth and twentieth centuries is presented. Publication trends, notable achievements, and membership of the British Arachnological Society (BAS) and its Council are all discussed. A checklist of all published work by female arachnologists in publications of the British Arachnological Society from its inception (as the Flatford Mill Spider Group) in 1958 to the year 2000 is given.

Keywords: BAS • British Arachnological Society • history of science • Murphy • Staveley

Introduction

It is well known that, across all fields of science, women have long been under-represented (Reskin, Koretz & Francis 1996), underpaid (Momani, Dreher & Williams 2019) and discriminated against (Gupta 2020). In arachnology, little to no research has been published to date specifically addressing this inequality. Even basic historical and biographical accounts of women in arachnology are sparing, usually limited to obituaries of outstanding female arachnologists who contributed widely to the field (e.g. Deichmann 1958; Viana 1978; Marusik & Otto 2008; Prószyński 2008; Harvey 2019).

Whilst co-organizing the symposium in memory of John A. Murphy (1922–2021) and Michael J. Roberts (1945–2020), the author felt it important that the contributions of John's wife, Frances M. Murphy (1926–1995), were also emphasized. Frances predeceased John by 25 years but was, in her own right, an arachnologist of worldwide repute. This also led the author to investigate the history of other women in British arachnology, eventually leading to the impetus to write this article. Significant work must continue in the present day to ensure women in 21st century arachnology have better opportunities and to move closer to equity in arachnology. This said, the current work should hopefully demonstrate that we have come a long way since 1951 where only two women were mentioned, briefly and rather dismissively, in Bristowe's essay on British arachnological history (Bristowe in Lockett & Millidge, 1951)—one of whom was Miss Muffet!

In this work, the history of women in British arachnology in the nineteenth and twentieth centuries is chronicled.

Material and methods

A comprehensive literature review of all periodicals published by the British Arachnological Society (BAS) from 1959–2000 was undertaken. All articles, peer-reviewed or

not, that could be determined to be authored or co-authored by women, were identified and noted. This was then expanded, by searching the World Spider Catalog (2021) to locate any potential missing taxonomic references authored by any of the individual researchers identified in the initial evaluation. Full membership lists published from 1959–1968 mentioning women in the contexts of Society membership were consulted. Also considered was data on appointment of female Area Organisers of the Spider Recording Scheme in the period 1987–2000. Supplements to the *Newsletter of the British Arachnological Society* were interpreted alongside the Newsletter issues with which they were dispatched. Two appendices (Appendix 1 and Appendix 2) show a checklist of all publications by women in BAS publications and a checklist of non-BAS publications by Frances Murphy, respectively. In all cases of bibliographic reference, names were recorded as they were found in print. It was not uncommon to see articles by the same author where a middle initial is present and others where it is absent. Other slight differences can relate to instances where authors published one or more articles using their first given name and others using their middle name only. In some cases, surnames changed or varied due to marriage. The full names of some early female members of the BAS were not found written in the examined literature, in such cases their initials and (where applicable) title are given together for completeness. Unfortunately, more complete biographical information for some early members (such as, but not limited to, birth and death dates) was also unable to be elucidated with the available data.

Results and Discussion

A Victorian trailblazer: Eliza F. Staveley (1831–1903)

The history of female arachnologists in Britain starts with Eliza Fanny Staveley (1831–1903) who was born in Kensington, London, and whose life until the 1860s is only sparingly documented, as outlined by Farr-Cox (2019). However, it was during the year 1866 that Staveley made her two important contributions to British arachnology. First, she authored her book (under the non-explicitly gendered authorship of E. F. Staveley rather than Eliza Fanny Staveley or Eliza F. Staveley) *British Spiders: An Introduction to the Study of the Araneidae of Great Britain and Ireland*, which was intended to be a more simplified and beginner-friendly book inspired by the more technical work *A History of the Spiders of Great Britain and Ireland* by John Blackwall (1790–1881). The illustrations in Staveley (1866a) were produced by the same illustrator and printer (the brothers Tuffen West (1823–1891) and William West (1828–1870), respectively) who produced many of the plates for the work of Blackwall (1861, 1864). However, they are not identical, with some of the spiders drawn in different positions. Thus, they likely had been specially commissioned for her work. In the same year, Staveley (1866b) produced another work which was communicated to the *Annals and Magazine of Natural History* by the zoologist



Fig. 1: Frances Mary Murphy (1926–1995) during field work in September 1988. Photo by and courtesy of Rowley Snazell.

John Edward Gray (1800–1875). In that work, Staveley (1866b) described discovering teeth on the maxillæ (= serula) in six species of British spider and illustrated this in *Agelena labyrinthica* (Clerck, 1757), a common species of spider in southern England (Sherwood & Gabriel 2020; Spider Recording Scheme 2021). Staveley was the first woman to contribute significantly to arachnology in Britain, and no comprehensive contributions appear to have been made by women prior to her work in the 1860s. Indeed, well-recorded contributions by female arachnologists in



Fig. 2: Frances Mary Murphy (1926–1995). **A** Frances and her husband John Alan Murphy (1922–2021) during a field meeting on Thursley Common in August 1968 (photographer unknown, courtesy of Francis Farr-Cox and Dmitri Logunov); **B** David Watson Mackie (1902–1984) and Frances Murphy in conversation during the 1971 BAS annual general meeting at the Leicester Museum (from the Ted Locket archive at the Manchester Museum, courtesy of Dmitri Logunov).

Britain did not reappear for nearly one hundred years after Staveley's work. The genus *Staveleya* Sherwood, 2021 is named in her honour (Sherwood, 2021).

The passing of the baton: the women of the Flatford Mill Spider Group and British Spider Study Group

The Flatford Mill Spider Group was formed in 1958 by a small group of arachnologists interested in collaborating on the study of British spiders. They often met at the Flatford Mill field study centre (the origin of their name) and were initially headed by David Watson Mackie (1902–1984) and George Hazelwood (Ted) Locket (1900–1991). Whilst its membership was dominated by men, in the very first volume of the *Bulletin of the Flatford Mill Spider Group*, published in January 1959, Miss Una Dalton is listed as a member, showing that a female arachnologist was amongst the group which founded the organization in 1958. Miss Dalton attended several meetings and events but, by 1960, was no longer listed as a member. However, in that same year, Elizabeth Anne Crowson (1928–2006), the notable Scottish naturalist, joined the group, and soon published several articles in 1961 (see Appendix 1). She also published more widely on British spiders over the coming decade (e.g. Crowson 1961; Crowson, Crowson & Brock 1996; see also Appendix 1). The following year was arguably one of the most important in terms of the history of women in British arachnology because, in October 1962, Frances Mary Murphy was first listed as a member of the group; her future contributions to arachnology in the next 33 years are dealt with separately due to their immense significance (see below).

Change came for the Flatford Mill Spider Group in 1963 when it was renamed the British Spider Study Group, to reflect its ever-growing membership across Britain. In April 1965, the fourth woman to join the Society, and the first during its tenure as the British Spider Study Group, was the naturalist and gardener Joy O. I. Spoczynska. Shortly afterwards, in July 1965, a fifth member was admitted: Miss M. Macarthur. The final woman admitted in 1965 was Mrs E. S. Cannam.

The year 1966 saw the admission of two more women, Ann C. Finlay and Miss J. Ridgeway. Finlay later went on to author one article for the group (see Appendix 1). In the same year, Frances Murphy also published her first article (Appendix 1). In 1967, the memberships of Glynis M. Hassel, Barbara B. Rouse, and Annette M. Kessler started, and the those of Ann Finlay and Joy Spoczynska came to an end. Glynis Hassel (née Everett) was one of the individuals who helped to catalogue the collection of the eminent arachnologist Octavius Pickard-Cambridge (1828–1917) at Oxford University Museum of Natural History during the late 1950s and early 1960s (Zoë Simmons pers. comm.), thus making a very important contribution to British arachnological research for future generations.

The British Spider Study Group was formally renamed, as a newly registered charity, as the British Arachnological Society in 1968 and, in this year, Celia Furness joined the Society. In total, twelve women had joined the Society under its prior iterations as the Flatford Mill Spider Group and British Spider Study Group, several of whom contributed articles (see below; also see Appendix 1) which continued the legacy left by Eliza F. Staveley during the Victorian era.

An arachnological pioneer: Frances Mary Murphy (1926–1995)

Before the history of women in the British Arachnological Society during the last three decades of the twentieth century can be chronicled in more detail, special attention must be given to Frances Mary Murphy (née Wrangham) (Figs. 1–2) who had the distinction of being the only woman to have been involved with, and a member of, all three iterations of what is now the BAS. Frances was on the Council an Ordinary Member from 1989–1992, the third woman to be elected (Table 2). Details of her early life and career as a mathematician were detailed by Jones (1996) and, here, the focus is instead on her considerable arachnological achievements. It is perhaps of interest to note briefly that she was a direct descendent of the politician and slave abolitionist William Wilberforce (1759–1833) (Jones 1996; Wilberforce 2006).

Frances, with support from her husband John Alan Murphy (see Fig. 2A), started collecting spiders in the early 1950s (see Smith, 1992) and Frances officially joined the Flatford Mill Spider Group in 1962 (Table 1; also see above). Indeed, Frances showed an interest in spiders for much longer than John, who did not officially join the Society, or publish on spiders, until a number of years later. In her career, Frances produced 44 publications, including two books (one as senior author, with work completed after her death by John), nine book reviews, seven articles co-authored with John (one as senior author), two articles as junior co-author with authors other than John, one as senior author with a co-author other than John, and 24 sole-authored articles (Appendices 1 and 2). She also generously assisted other colleagues with her time and experience, including (but not limited to): providing Eric Duffey (1922–2019) with observations on the ecology and colouration of two species of *Dolomedes* Latreille, 1804 (see Duffey 1995) and providing Fred Wanless (1940–2017) with both specimens and ecology data for one of his salticid revisions (see Wanless 1978). Notes by Frances on araneophagy and discussion of a teratological specimen collected by John and Frances were cited in Coddington & Levi (1991) and Kaston (1982), respectively. She also had her photographs featured in many arachnological publications, including one of the most important spider identification guides of recent times (Jocqué & Dippenaar-Schoeman 2006). The Murphys jointly described three species of spider: *Acusilas gentinensis* Murphy & Murphy, 1983, *A. malaccensis* Murphy &

| Name | Society | First Year of Membership |
|------------------------|----------------------------|--------------------------|
| Una Dalton | Flatford Mill Spider Group | 1958 |
| Elizabeth Anne Crowson | Flatford Mill Spider Group | 1960 |
| Frances Mary Murphy | Flatford Mill Spider Group | 1962 |
| Joy O. I. Spoczynska | Flatford Mill Spider Group | 1965 |
| M. Macarthur | British Spider Study Group | 1965 |
| E. S. Cannam | British Spider Study Group | 1965 |
| Ann C. Finlay | British Spider Study Group | 1966 |
| J. Ridgeway | British Spider Study Group | 1966 |
| Glynis M. Hassel | British Spider Study Group | 1967 |
| Annette M. Kessler | British Spider Study Group | 1967 |
| Barbara B. Rouse | British Spider Study Group | 1967 |
| Celia Furness | British Spider Study Group | 1968 |

Table 1: First twelve women to join prior iterations (Flatford Mill Spider Group 1958–1962, then British Spider Study Group 1963–1968), of what eventually became the British Arachnological Society.

Murphy, 1983, and *Portia orientalis* Murphy & Murphy, 1983. Of these, *A. malaccensis* and *P. orientalis* remain valid taxa (World Spider Catalog 2022), whereas *A. gentinensis* is a junior synonym of *Acusilas coccineus* Simon, 1895 (Schmidt & Scharf 2008). Both books written by Frances: *Keeping Spiders, Insects and other Land Invertebrates* (Murphy 1980) and *An Introduction to the Spiders of South East Asia* (Murphy & Murphy 2000) were reviewed favourably by other arachnologists (Parker 1980; Platnick 2001; Snazell 2001).

Frances has many arachnids named in her honour: one matronymic species, fifteen combined honorific species and two combined honorific genera (Table 3). All combined honorifics were shared with her beloved husband, who did much to support her work, whilst also later making important contributions to arachnology himself. The aforementioned taxa clearly show how the wider arachnological community recognised and celebrated Frances's achievements both during and after her life. The sheer number of general announcements and full obituaries published after her death well demonstrate how she was held in high esteem by so many (e.g. Anon. 1995a,b; Dalingwater 1995a,b; Johnson 1995; Nellist 1995; O'Neil 1995; Jones 1996; Smith 1996). Frances was remembered fondly for her personality, kindness to beginners, and razor-sharp wit. At her funeral, the presiding David Agassiz commented that all attending remembered “Her strength of character, her out-

| Name | Role | Period of Service |
|-------------------|----------------------|---|
| Cynthia Merrett | Ordinary Member | 1977–1981, 1987–1990 |
| Kate M. Hawkins | Ordinary Member | 1986–1989 |
| | Sales Manager | 1989–1996 (exc. half of 1989 and all of 1990) |
| Frances M. Murphy | Ordinary Member | 1989–1992 |
| Deborah Procter | Ordinary Member | 1990–1993, 1995–1998, 1999–2006 |
| | Conservation Officer | 1999–2006 |
| Isobel Baldwin | Ordinary Member | 1992–1995 |
| Helen Read | Ordinary Member | 1992–1995, 1996–1997 |
| | Secretary | 1997–2002 |

Table 2: Women appointed Council members and Trustees of the British Arachnological Society in the 20th century

| Order: Family | Taxon |
|-------------------------------|---|
| Araneae: Agelenidae | <i>Lycosoides murphyorum</i> Bosmans, Lecigne, Benhalima & Abrous-Kherbouche, 2022 ¹ |
| Araneae: Dysderidae | <i>Dysdera murphyorum</i> Deeleman-Reinhold, 1988 |
| Araneae: Gnaphosidae | <i>Zelotes murphyorum</i> FitzPatrick, 2007 |
| Araneae: Linyphiidae | <i>Locketina murphyorum</i> Tanasevitch, 2022 ¹ |
| Araneae: Linyphiidae | <i>Murphydium</i> Jocqué, 1996 |
| Araneae: Liphistiidae | <i>Liphistius murphyorum</i> Platnick & Sedgwick, 1984 |
| Araneae: Lycosidae | <i>Alopecosa murphyorum</i> Zamani, Nadolny, Esyunin & Marusik, 2022 ¹ |
| Araneae: Oonopidae | <i>Costarina murphyorum</i> Platnick & Berniker, 2014 |
| Araneae: Oonopidae | <i>Heteroonops murphyorum</i> Platnick & Dupérré, 2009 |
| Araneae: Oonopidae | <i>Pescennina murphyorum</i> Platnick & Dupérré, 2011 |
| Araneae: Oonopidae | <i>Stenoonops murphyorum</i> Platnick & Dupérré, 2010 |
| Araneae: Palpimanidae | <i>Sceliraptor murphyorum</i> Zonstein & Marusik, 2022 ¹ |
| Araneae: Salticidae | <i>Aelurillus murphyorum</i> Azarkina, 2022 ¹ |
| Araneae: Salticidae | <i>Asemonea murphyae</i> Wanless, 1980 |
| Araneae: Salticidae | <i>Neaetha murphyorum</i> Prószyński, 2000 ² |
| Araneae: Theraphosidae | <i>Eumenophorus murphyorum</i> Smith, 1990 |
| Araneae: Theraphosidae | <i>Murphyarachne</i> Sherwood & Gabriel, 2022 ¹ |
| Araneae: Trachelidae | <i>Patelloceeto murphyorum</i> Pett, 2022 ¹ |
| Araneae: Zodariidae | <i>Diores murphyorum</i> Jocqué, 1990 |
| Araneae: Zodariidae | <i>Mallinella murphyorum</i> Dankittipakul, Jocqué & Singtripop, 2012 |
| Araneae: Zodariidae | <i>Murphydrela francescae</i> Jocqué & Russell-Smith, 2022 ¹ |
| Araneae: Zodariidae | <i>Tropizodium murphyorum</i> Dankittipakul, Jocqué & Singtripop, 2012 |
| Araneae: Zodariidae | <i>Zodarion murphyorum</i> Bosmans, 1994 |
| Pseudoscorpiones: Neobisiidae | <i>Roncocreagris murphyorum</i> Judson, 1992 |

Table 3: Arachnid taxa dedicated to Frances Mary Murphy (1926–1995), including both matronyms and combined honorifics. Notes: ¹ described in this *Festschrift*; ² junior synonym of *Neaetha oculata* (O. Pickard-Cambridge, 1876) (see Wesolowska & Harten 2010).

spokenness, her cutting remarks and her continual sense of humour and fun” (Dalingwater 1995a: 4). Frances’s sense of humour is evident in a quote given by O’Neil (1995: 3): “Remember, you can identify anything in the field with absolute certainty, as long as you don’t take it home for checking!”

The Murphys’ spider collection, encompassing more than 45,000 specimens, is now housed at the Manchester Museum and is of international importance (Arzuza Buelvas 2018). It is already being used in taxonomic works (e.g. Zonstein 2017) and family catalogues (Sherwood, Logunov & Gabriel 2022), showing the value of its holdings and assuring the legacies of Frances and John will continue into the future.

A mighty few: other women in twentieth century British arachnology

Whilst Frances Murphy was without doubt the most prolific and well-known female arachnologist in Britain in the twentieth century, many other women played important roles, especially within the British Arachnological Society. For instance, it is important to recognise the contributions of

women who were not arachnologists themselves but selflessly supported arachnology through their support of their husbands (often giving their free time to the British Arachnological Society and its earlier iterations, for activities such as fieldwork and the typesetting of Society publications). Gertrude Mackie, Eleanor Parker, Marcene Crocker, Shelagh Wanless, and Jean Clark all supported British arachnology during the 1960s and 1970s (and some into the 1980s) in various ways behind the scenes, no doubt due to the intense involvement of their respective husbands in arachnological research. Eleanor (Nan) Parker (1909–1987) was particularly active in assisting her husband John Rowland Parker (1912–2017) in fieldwork, attended all the BAS Annual General Meetings during her lifetime, and accompanied John on at least 27 field courses (Dalingwater 1987). Collyer (2017: 3) remembered her “sweeping the trunks of trees with a dustpan and brush!”.

These are just the women who are thanked in print in at least one in one of the Society’s publications, and it is highly likely other women also gave time and effort to British arachnology in similar circumstances but whom are sadly not recorded in the literature. In the later 20th century, Deborah J. Roberts contributed to arachnology along with her husband at the time, Michael (Mike) J. Roberts (1945–2020), authoring several works equally with Mike (Roberts & Roberts 1985a,b; see also Appendix 1).

Another contribution made to arachnology more indirectly was the packing of BAS publications to be sent to members by students at the University of Manchester, including several women, during the time (1987–2004, see Selden 2018) that John Dalingwater was editor of the *Newsletter of the British Arachnological Society*. John would encourage many of his female students to undertake arachnological research, through field courses for the University of Manchester, also mentoring several women who then later undertook MSc degrees under his supervision (Helen Read pers. comm.). This included Isobel Howe, Helen Read, and Jane Carruthers, two of whom later contributed to the BAS and, more specifically, to the Spider Recording Scheme (see below). Another important woman from this period, who started assisting with the mailing of BAS publications and membership packs in 1986 (and for a remarkable 31 years thereafter), was Elaine Snazell. Her contribution to the BAS was instrumental in ensuring that members got their publications and other membership correspondence on time and was a task shared with her husband, Rowley Snazell.

Cynthia M. Merrett, formerly of the National Museum of Wales, Cardiff, and 112th President of the Cardiff Naturalists’ Society, made history as the first woman elected to the BAS Council. She served as Ordinary Member from 1977–1981 and again 1987–1991, and contributed numerous articles to the BAS (Appendix 1) and other publications (e.g. Merrett 1983). Kate M. Hawkins (née Rowland) was the second woman to be appointed to the Council, in 1986, and she served in two roles. Kate served as Ordinary Member (1986–1989), subsequently becoming Sales Manager in 1989 (but holding this latter position as a non-Coun-

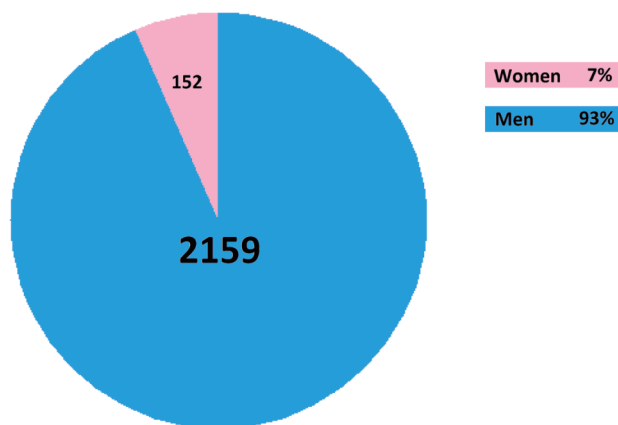


Fig. 3: Total percentage share of articles authored or co-authored by women in all British Arachnological Society publications between the years 1959–2000. A total of 2311 articles were published during this period, of which 152 were authored or co-authored by women.

cil member from the second half of 1989 and all of 1990, returning as a Council member in the same role from 1991–1996). She also authored several works for both BAS publications (Appendix 1) and non-BAS publications (Hawkins 1980, 1981), making important contributions to the understanding of arachnids within Britain.

Following the founding of the Spider Recording Scheme in 1987, at least 20 women were involved in some way during the first 13 years, as recorders and/or as Area Organizers. At the time of its founding, Frances Murphy was the first woman to be an Area Organizer, managing Surrey (VC17) until 1989. In the same year that Frances resigned (due to ill health), Deborah Procter became the Area Organizer for Norfolk (VC27 and VC28) a role she continued with into the new millennium, also becoming the fourth woman to serve on the Council of the British Arachnological Society, including as the Society's first Conservation Officer (Table 2). In 1996, she became Area Organizer of a third vice county, Cambridgeshire (VC29). In 1990, several women were appointed Area Organizers, including (but not limited to): Cynthia Merrett managing Monmouthshire (VC35) and Glamorganshire (VC41), and Isobel Baldwin who initially managed records for an impressive total of 16 Scottish vice counties (VC72, VC78, VC79, VC80, VC81, VC82, VC83, VC84, VC85, VC86, VC87, VC88, VC89, VC90, VC98, VC102). Later, Isobel relinquished some of these vice counties in 1991, but remained as Area Organizer for Dumfriesshire (VC72), Peeblesshire (VC78), Selkirkshire (VC79), Roxburghshire (VC80), and Berwickshire (VC81) for many years. In the same year, Isobel had also been elected to Council as an Ordinary Member (Table 2). Helen Read became the Area Organizer for Buckinghamshire (VC24) in 1991 and shortly thereafter joined the British Arachnological Society Council in 1992 as Ordinary Member (Table 2) and, later, was the first female Secretary of the BAS.

Another important milestone came in 1998. Jennifer Newton (1937–2013) became Area Organizer for Yorkshire (VC64 and VC65), a role which she held until 2010. Jen-

nifer was also Area Organizer for North Lancashire (VC60) from 2003–2013, and Westmorland (VC69) and Cumberland (VC70) for an undetermined number of years until 2013. Sadly, the start dates for her appointment as Area Organizer for these last two Vice Counties is not recorded in print (pers. obs.) nor is there any other apparent record of this information (Peter Harvey pers. comm.). She was considered by others in the Spider Recording Scheme to be an exemplary Area Organizer (Harvey 2013) and was greatly involved in and passionate about recording spiders, especially in Lancashire, Cumbria, and Northumberland. In addition to some articles published in BAS publications between 1997–2000 (Appendix 1) and a work produced outside of the BAS in 2000 (Newton 2000), Jennifer also later contributed another 11 articles to BAS publications during the period of 2003–2010. Priestley (2013) provided an obituary for Jennifer and, amongst many praises, noted: “she gave so much of her time to promoting conservation and protecting wildlife and sites.” (Priestley 2013: 5). The final women to join the Spider Recording Scheme as Area Organizers in the twentieth century were Heidi Cunningham, as Area Organizer for Berkshire (VC22), and Annette Binding, as Area Organizer for Lincolnshire (VC53 and VC54), in the year 2000. Annette remained in her role until 2020, likely making her the longest-serving female Area Organizer of the Spider Recording Scheme. She did not publish during the twentieth century but authored 30 articles in BAS publications between 2004–2017.

During the 1980s and 1990s, other women in the BAS, namely Ms H. Corrigan and Isobel Howe (who were Spider Recording Scheme recorders but neither Area Organizers nor Council members) also contributed articles on spiders to both BAS publications (Appendix 1) and to other publications (e.g. Howe & Dalingwater 1983, 1986; Curtis & Corrigan 1990). The aforementioned Area Organizers Isobel Baldwin, Cynthia Merrett, and Helen Read also published papers covering spiders in other publications during the latter two decades twentieth century (e.g. Merrett, 1983; Wheeler & Read 1992; Baldwin 1996; Read, Martin & Rayner 1998).

British arachnology owes much to all the above-named women, whose combined efforts in the twentieth century resulted in thousands of high quality records of British spiders to be entered into the Spider Recording Scheme during this period. Furthermore, almost all of them contributed articles to BAS publications (Appendix 1). Many also continued their contributions into the twenty-first century, providing additional records to the Spider Recording Scheme, publishing more articles, and some joining (or continuing on) the BAS council (see below).

Statistics and Conclusions for the data from 1800–2000

A total of 2311 articles were published in BAS publications between 1959–2000, of which only 152 (7%) were authored by women (Fig. 3). Out of the 231 articles published in the *Bulletin of the Flatford Mill Spider Group* and

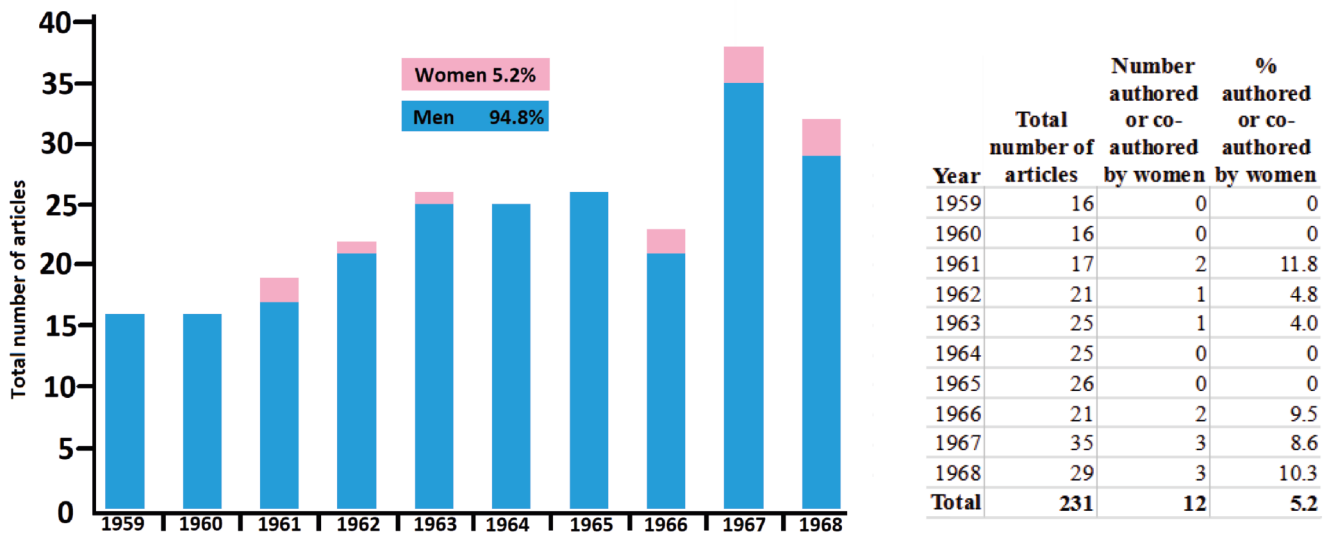


Fig. 4: Percentage share of articles authored or co-authored by women published in the *Bulletin of the Flatford Mill Spider Group* and the *Bulletin of the British Spider Study Group* per each year within the period 1959–1968. A total of 231 articles were published during this period, of which 12 were authored or co-authored by women.

the *Bulletin of the British Spider Study Group*, only 12 were authored by women (see Appendix 1), accounting for just 5.2% of publications (Fig. 4). Women were sole authors or co-authors of 13.2% of publications in the *Bulletin of the British Arachnological Society* during the twentieth century, the highest percentage (and number of articles) for any BAS publication (Fig. 5). The *Newsletter of the British Arachnological Society*, founded in 1971, printed fewer such publications with only 5.1% being authored or co-authored by women (Fig. 6). The lowest numbers are in the *Spider Recording Scheme Newsletter*, where just 1.8% of publications were authored or co-authored by women. However, the *Spider Recording Scheme Newsletter* is a special case

because this publication was frequently dominated by articles authored the National Organizer at the respective time (who would also simultaneously serve as the newsletter’s editor), all of whom during this period (and up to the present day) have been men. Nonetheless, the general trend remains the same across all three publications: conspicuously fewer of the papers published were by women than by men.

Of the 2311 articles written across all BAS publications from 1959–2000, 86 were authored solely by one woman (including short notes and announcements); 61 articles were co-authored with men only; a mere 5 were co-authored by at least two women; and only a single article was co-authored solely by women. There was no consistent rising

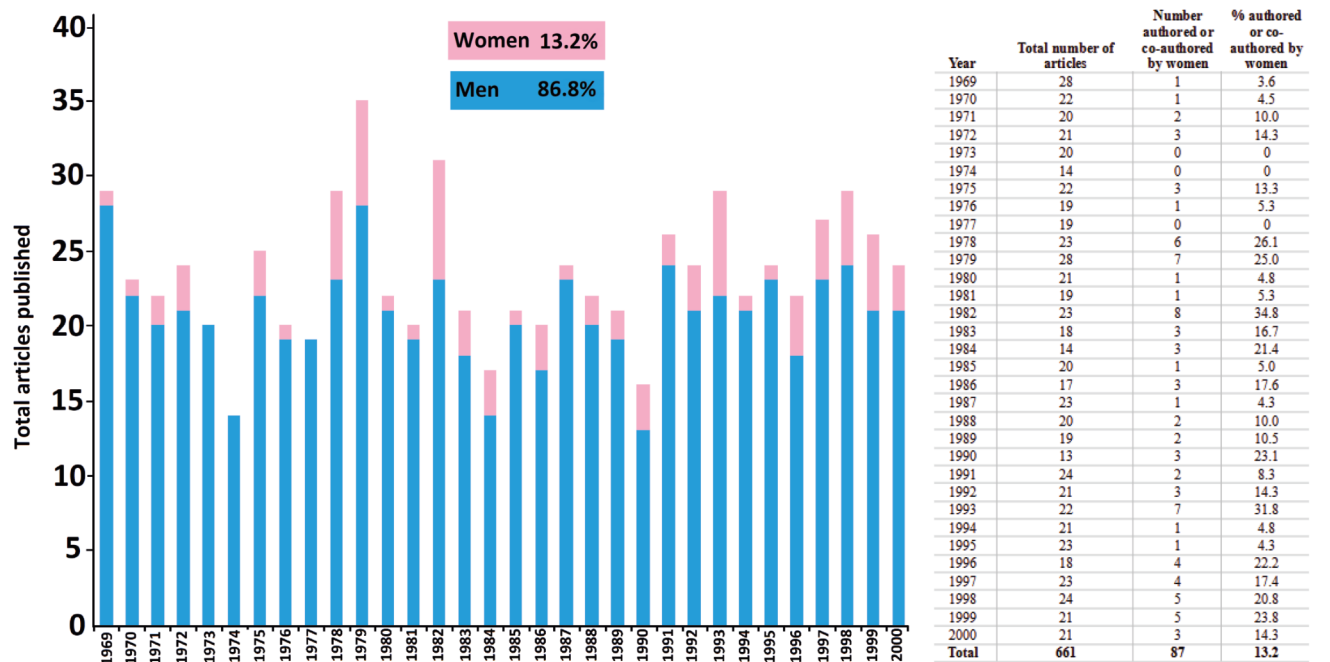


Fig. 5: Percentage share of articles authored or co-authored by women published in the *Bulletin of the British Arachnological Society* each year within the period 1969–2000. A total of 661 articles were published overall during this period, of which 87 were authored or co-authored by women.

trend in the proportion of publications authored or co-authored by women from 1959–2000, some years featured no articles by female arachnologists in certain BAS publications, whereas some others, e.g. 1978, 1979, and 1993 for the *Bulletin of the British Arachnological Society* peaked at 6, 7, and 8, respectively. Indeed, with the exception of 1991 (Fig. 6) no other year from 1959–2000 featured a total number of articles authored or co-authored by women in any BAS publication that consisted of a two-digit number. These statistics take into account female authors of all nationalities, not just British arachnologists.

The majority of contributions by British women in arachnology during the twentieth century related to the distribution of British spiders or to ecological and biological aspects of British arachnids generally (but mostly on spiders). Some important biological and ecological articles on foreign taxa (again, mostly, but not exclusively, on spiders) were also contributed by some of these women, especially by Frances Murphy (Appendices 1–2). Almost all the women detailed in this contribution published their findings as an aside to their jobs, either in the academic sector (holding positions not explicitly dedicated to arachnology), or in non-academic sectors. This is not unusual, as British arachnology has foundations established by [male] amateur arachnologists such as John Blackwall (1790–1881), Octavius Pickard Cambridge, and John Edward (J. E.) Hull (1863–1960).

The disparities detailed herein are not unique to arachnology, nor Britain. These trends probably extend to many, if not most, other fields of zoology on a global scale. Even in botany, usually considered to have been more hospitable to women during the nineteenth and early twentieth centuries, there are significant disparities, such as (but certainly not limited to) the numbers of taxa described by women in comparison to men worldwide (Linden *et al.* 2015). That

particular comparison however, in British arachnology, is strikingly grim, from 1800–2000 only 4 species of spider were described by British women (all as co-authors): 3 by Frances Murphy (see above) and the fourth by Grasshoff & Edmunds (1979), namely *Araneus legonensis* Grasshoff & Edmunds, 1979. One further publication describing a new species featured a female co-author (Merrett, Powell & Maher 1993) but she did not feature as one of the authors of the species name.

Contributions by foreign arachnologists to British Arachnological Society publications

One of the most notable contributors to the *Bulletin of the British Arachnological Society* during the 1980s and 1990s was the renowned Argentinian salticid taxonomist María Elena Galiano (1928–2000) who authored 12 taxonomic papers in the journal. She also contributed two articles to the *Newsletter of the British Arachnological Society*, including an important article on the life history of a theraphosid spider (Galiano 1992). Her life and achievements in academia are chronicled by Ferraro *et al.* (2021), also encompassing the biographies and considerable achievements of the doyennes of mygalomorph taxonomy in the 20th century: Rita Delia Esther Schiapelli (1906–1976) and Berta Sofia Gerschman de Pikelín (1905–1977). Schiapelli and Gerschman de Pikelín travelled to what was then known as the British Museum of Natural History (now Natural History Museum, London) in May 1968 to examine historical type specimens, which enabled their publications during the 1970s to be the best of the time period. Whilst the main focus of this article is on British women in arachnology, it was also important when considering the history of arachnology in Britain more broadly, to recognise here (albeit

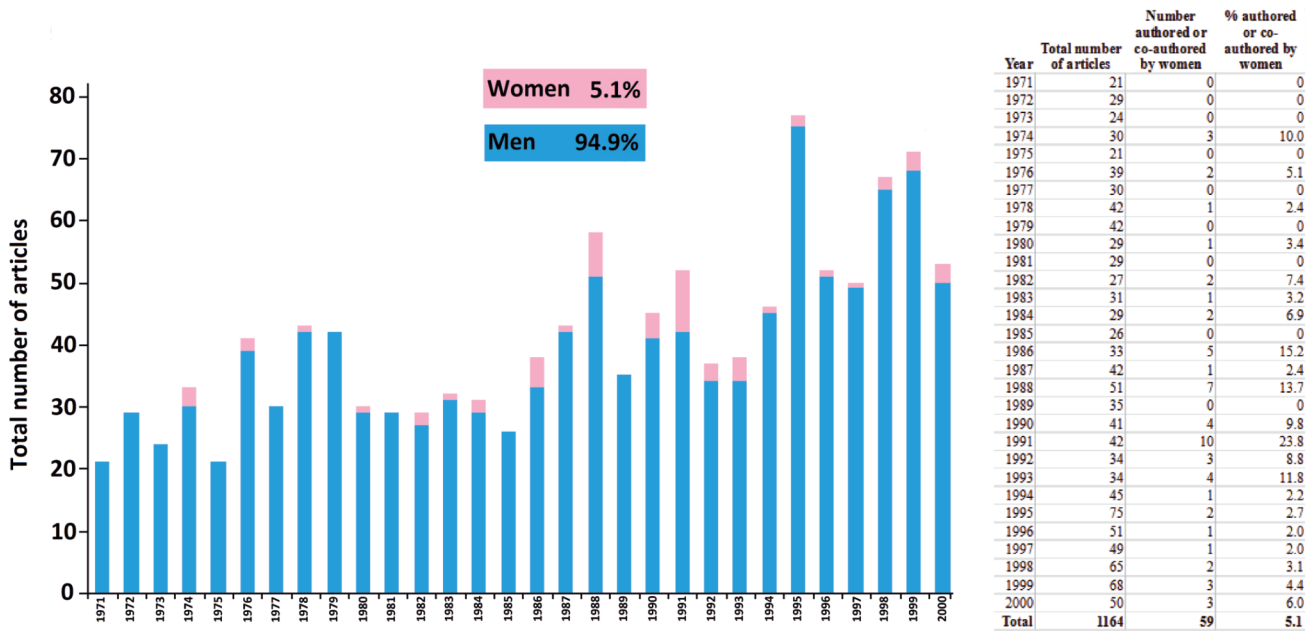


Fig. 6: Percentage share of articles authored or co-authored by women published in the *Newsletter of the British Arachnological Society* per year within the period 1971–2000. A total of 1164 articles were published overall during this period, of which 59 were authored or co-authored by women.

briefly) the contributions of women of other nationalities like Galiano, Schiapelli, and Gerschman de Pikelin, who supported British arachnology through their painstaking taxonomic work on specimens from the BMNH (including recuration of historical material—an often thankless task necessary both for specimen preservation and also ease of reference to the given specimens by future workers) and, in the case of Galiano, submitting many important articles on spiders to BAS publications.

Galiano was the most prolific foreign female contributor to BAS publications during the twentieth century, but not the only one; many other women from outside of Britain also contributed important taxonomic, ecological, and behavioural works on arachnids to BAS publications and their contributions must also be remembered (see Appendix 1).

Hope for the future

It would be appropriate to make some brief references to more recent advances, though a comprehensive analysis, such as that applied here with the twentieth century, was unfortunately not feasible given the deadlines required of this work. The last two decades have seen significant advances for British women in arachnology. First, an additional 11 women have served/are serving on the BAS Council: Imogen Wilde (Ordinary Member 2002–2005 and 2014–2017), Emma M. Shaw (Ordinary Member 2003–2006 and 2008–2011), Jan Beccaloni (Conservation Officer 2006–2011, Meetings Secretary 2011–present), Sara L. Goodacre (Ordinary Member 2007–2010), Helen Smith (Ordinary Member 2008–2011, Vice President 2011–2013 and 2016–2017, President 2013–2016, Conservation Officer, 2011–2012 and 2017–present), Katty Baird (Ordinary Member 2014–2015, Membership Officer 2015–2017), Hilary Grant (Ordinary Member 2017–2020), Leah Fitzpatrick (Ordinary Member 2021–present), Michelle Reeve (Ordinary Member 2021–present), Meg Skinner (Ordinary Member 2021–present), and the author (Ordinary Member 2021–2022, Newsletter Editor 2022–present). Second, female participation in BAS publications has remained relatively steady (although work still needs to be done to make the gender balance truly equal). Third, two of the above women hold prestigious academic postings: Jan Beccaloni is Senior Curator of Chelicerata at the Natural History Museum, London and Sara Goodacre is Professor of Evolutionary Biology and Genetics at the University of Nottingham, and are internationally recognised experts in their fields. Fourth, Helen Smith made history as the first female President and Vice President of the British Arachnological Society and is a leading figure in the conservation of British spiders. Fifth, in a continuation of the tradition of women outside of Britain contributing to BAS publications, Moira FitzPatrick, a renowned expert on African spiders, is so far the only arachnologist to ever have an entire issue of the *Bulletin of the British Arachnological Society* dedicated to their singular work (see FitzPatrick 2007).

It is clear that women continue to advance and excel in arachnology, but women across all branches in science still face many challenges. It is sincerely hoped that further progress will be made in the coming years to make arachnology more equitable, and that the present work goes some way to document and celebrate the achievements of women during the nineteenth and twentieth centuries. Future research should seek to chronicle the history that will be made in the twenty first century. There are still some areas of the 20th century that also should be further explored. For instance, the field of behavioural ecology was starting to see an increase in the number of women entering the field in the 1970s and early 1980s and this included the ecologist Barbara C. Robinson, who contributed several important articles on the behaviour and ecology of spiders, co-authored with her husband at that time, Michael H. Robinson. Some of her contributions were published in BAS publications (Appendix 1) and were thus able to be documented here but more general information on her life and a complete list of her published academic works outside of BAS publications could not be definitively located. No doubt, other British women contributed to arachnology through non-taxonomic fields outside of BAS publications – this should be further explored and celebrated. It would also be informative to see the methodology herein applied to other countries and regions to enable a more comprehensive assessment of the contributions of female arachnologists on a worldwide scale.

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References

- ANON. 1995a: Frances Murphy. *Friends of the British Museum [Natural History] Newsletter* **5**(3): 4.
- ANON. 1995b: Frances Murphy. *Daily Telegraph*, 25 August 1995.
- ARZUZA BUELVAS, D. 2018: The Murphy spider collection at the Manchester Museum: a valuable research resource for arachnologists. *Journal of Natural Science Collections* **6**: 48–59.
- AZARKINA, G. N. 2022: A new species of *Aelurillus* Simon, 1885 (Araneae: Salticidae) from Kenya. *Arachnology* **19**: 220–223.

- BALDWIN, S. I. 1996: An annotated inventory of Scotland's spiders: Part 1, Linyphiidae. *Scottish Natural Heritage Review* **72**: 1–38.
- BLACKWALL, J. 1861: *A history of the spiders of Great Britain and Ireland, volume 1*. London: Ray Society.
- BLACKWALL, J. 1864: *A history of the spiders of Great Britain and Ireland, volume 2*. London: Ray Society.
- BOSMANS, R. 1994: Revision of the genus *Zodarion* Walckenaer, 1833 in the Iberian Peninsula and Balearic Islands (Araneae, Zodariidae). *Eos* **69**: 115–142.
- CLERCK, C. 1757: *Svenska spindlar, uti sina hufvud-slägter indelte samt under några och sextio särskildte arter beskrefne och med illuminerade figurer uplyste*. Stockholm: L. Salvii.
- CODDINGTON, J. A. & LEVI, H. W. 1991: Systematics and evolution of spiders (Araneae). *Annual Review of Ecology & Systematics* **22**: 565–592.
- COLLYER, P. 2017: Thoughts of an armchair arachnologist. *Newsletter of the British Arachnological Society* **138**: 3–4.
- CROWSON, R. A., CROWSON, E. A. & BROCK, J. 1966: Some records of insects and spiders from a locality in central Ayrshire. *Entomologist's Monthly Magazine* **102**: 70–72.
- CROWSON, E. A. 1961: The oak woods of Scotland and their spiders: with notes on two rare spiders of the pine woods. *The Glasgow Naturalist* **18**: 148–159.
- CURTIS, D. J. & CORRIGAN, H. 1990: Peatland spider communities and land management on a Scottish island. *Bulletin of the European Society of Arachnology* **1**: 97–102.
- DALINGWATER, J. E. 1987: Eleanor Parker – notification of her death. *Newsletter of the British Arachnological Society* **49**: 8.
- DALINGWATER, J. E. 1995a: Extracts from the address given by David Agassiz at Frances's funeral service, 28th July 1995. *Newsletter of the British Arachnological Society* **74**: 4–5.
- DALINGWATER, J. E. 1995b: Frances Murphy: societies and publications. *Newsletter of the British Arachnological Society* **74**: 5.
- DANKITTIPAKUL, P., JOCQUÉ, R. & SINGTRIPOP, T. 2012a: Two new species of the spider genus *Tropizodius* Jocqué & Churchill, 2005 with notes on the femoral organ clade from Southeast Asia (Araneae, Zodariidae, Zodariinae). *Zootaxa* **3327**: 62–68.
- DANKITTIPAKUL, P., JOCQUÉ, R. & SINGTRIPOP, T. 2012b: Systematics and biogeography of the spider genus *Mallinella* Strand, 1906, with descriptions of new species and new genera from Southeast Asia (Araneae, Zodariidae). *Zootaxa* **3369**: 1–327.
- DEELEMANN-REINHOLD, C. L. & DEELEMANN, P. R. 1988: Revision des Dysderinae (Araneae, Dysderidae), les espèces méditerranéennes occidentales exceptées. *Tijdschrift voor Entomologie* **131**: 141–269.
- DEICHMANN, E. 1958: Elizabeth Bangs Bryant – obituary and bibliography. *Psyche* **65**: 1–10.
- DUFFEY, E. 1995: The distribution, status and habitats of *Dolomedes fimbriatus* (Clerck) and *D. plantarius* (Clerck) in Europe. *Proceedings of the 15th European Colloquium of Arachnology* **1995**: 54–65.
- FARR-COX, F. 2019: Miss E. F. Staveley author of British Spiders 1866. *Newsletter of the British Arachnological Society* **145**: 16–17.
- FERRARO, D. P., PANTI, C., TANCOFF, S., CABO, L. I. DE, CHORNOGUBSKY, L., dHIRIART, S., GRISMADO, C. J., RAMÍREZ, M. J., SCIOSCIA, C. L. & CRUZ, L. E. 2021: Mujeres científicas del Museo Argentino de Ciencias Naturales: las primeras arcnólogas. *Revista del Museo Argentino de Ciencias Naturales* **23**: 147–166.
- FITZPATRICK, M. J. 2007: A taxonomic revision of the Afrotropical species of *Zelotes* (Arachnida: Araneae: Gnaphosidae). *Bulletin of the British Arachnological Society* **14**: 97–172.
- GALIANO, M. E. 1992: Supplementary information on the life history of *Acanthoscurria sternalis* Pocock, 1903 (Araneae, Theraphosidae). *Newsletter of the British Arachnological Society* **64**: 3.
- GRASSHOFF, M. & EDMUNDS, J. 1979: *Araneus legonensis* n.sp. (Araneidae: Araneae) from Ghana, West Africa, and its free sector web. *Bulletin of the British Arachnological Society* **4**: 303–309.
- GUPTA, N. 2020: *Women in science and technology: Confronting inequalities*. New Delhi: Sage Publishing.
- HARVEY, P. 2013: Editorial. *Spider Recording Scheme News* **75**: 16.
- HARVEY, M. 2019: Professor Barbara York Main. *Journal of the Royal Society of Western Australia* **102**: 28–29.
- HAWKINS, K. 1980: Nature in north east Essex – *Scytodes thoracica* – a new record for Essex and no ordinary spider. *Annual Report and Records of the Colchester District Natural History Society Field Club* **1980**: 20–24.
- HAWKINS, K. 1981: Nature in north east Essex – spiders in Essex. *Annual Report and Records of the Colchester District Natural History Society Field Club* **1981**: 56–63.
- HOWE, I. M. & DALINGWATER, J. E. 1983: Observations on the fine structure of the calamistrum in the three British amaurobiid spider species. *Proceedings of the 9th International Congress of Arachnology, Panama 1983*: 135–138.
- HOWE, I. M. & DALINGWATER, J. E. 1986: Further observations on the structure of the spinning apparatus in the British amaurobiid spider species. *Actas X Congreso Internacional de Aracnología, Jaca (España), Septiembre 1986*: 58–59.
- JOCQUÉ, R. 1990: A revision of the Afrotropical genus *Diores* (Araneae, Zodariidae). *Annales de la Musée Royal de l'Afrique Centrale, Sciences zoologiques* **260**: 1–81.
- JOCQUÉ, R. 1996: Notes on African Linyphiidae (Araneae) V. *Murphydium*, a new genus from East-Africa. *Bulletin & Annales de la Société Entomologique de Belgique* **132**: 235–243.
- JOCQUÉ, R. & DIPPENAAR-SCHOEMAN, A. S. 2006: *Spider families of the world*. Tervuren: Musée Royal de l'Afrique Centrale.
- JOCQUÉ, R. & RUSSELL-SMITH, A. 2022: *Murphydrela*, a new genus of ant spider from East & Central Africa (Araneae: Zodariidae). *Arachnology* **19**: 238–246.
- JOHNSON, J. 1995: Frances Murphy, Pictures of a worldwide web. *The Guardian*, 9 September 1995.
- JONES, R. A. 1996: Obituary: Francis Mary Murphy 1926–1995. *British Journal of Entomology and Natural History* **9**: 120–124.
- JUDSON, M. L. I. 1992: *Roncoceagris murphyorum* n.sp. and *Occitanobisium nanum* (Beier) n.comb. (Neobisiidae) from Iberia, with notes on the sternal glands of pseudoscorpions (Chelonethi). *Bulletin of the British Arachnological Society* **9**: 26–30.
- KASTON, B. J. 1982: Additional ocular anomalies in spiders. *Journal of Arachnology* **10**: 279–281.
- LATREILLE, P. A. 1804: Tableau methodique des Insectes. *Nouveau Dictionnaire d'Histoire Naturelle, Paris* **24**: 129–295.
- LINDON, H. L., GARDINER, L. M., BRADY, A. & VORONTSOVA, M. S. 2015: Fewer than three percent of land plant species named by women: Author gender over 260 years. *Taxon* **64**: 209–215.
- LOCKET, G. H. & MILLIDGE, A. F. 1951: *British spiders, volume 1*. London: Ray Society.
- MARUSIK, Y. M. & OTTO, S. 2008: 70 years of arachnology in Georgia: Tamara S. Mkhedize (1915–2007). *Newsletter of the British Arachnological Society* **112**: 6–8.
- MERRETT, C. 1983: The spiders of Kenfig Nature Reserve, Mid Glamorgan. *Nature in Wales* **2**: 63–69.
- MERRETT, P., POWELL, D. F. & MAHER, H. 1993: A new species of *Centromerus* (Araneae: Linyphiidae) from arable farmland in eastern England. *Bulletin of the British Arachnological Society* **9**: 203–204.
- MOMANI, B., DREHER, E. & WILLIAMS, K. 2019: More than a pipeline problem: evaluating the gender pay gap in Canadian academia from 1996 to 2016. *Canadian Journal of Higher Education* **49**: 1–21.
- MURPHY, F. 1980: *Keeping spiders, insects and other land invertebrates*. Edinburgh: Bartholomew.
- MURPHY, F. & MURPHY, J. 2000: *An introduction to the spiders of South-East Asia with notes on all the genera*. Kuala Lumpur: Malaysian Nature Society.
- MURPHY, J. & MURPHY, F. 1983a: More about *Portia* (Araneae: Salticidae). *Bulletin of the British Arachnological Society* **6**: 37–45.
- MURPHY, J. & MURPHY, F. 1983b: The orb weaver genus *Acusilas* (Araneae, Araneidae). *Bulletin of the British Arachnological Society* **6**: 115–123.
- NELLIST, D. R. 1995: Frances Murphy. *Spider Recording Scheme Newsletter* **23**: 1.
- NEWTON, J. 2000: *Spiders of the Morecambe Bay area*.
- O'NEILL, G. 1995: Frances Mary Murphy (1926–1995). *Newsletter of the British Arachnological Society* **74**: 3–4.
- PARKER, J. R. 1980: Literature review: *Keeping spiders and other land invertebrates in captivity* by F. Murphy. *Newsletter of the British Arachnological Society* **29**: 10–11.
- PICKARD-CAMBRIDGE, O. 1876: Catalogue of a collection of spiders made in Egypt, with descriptions of new species and characters of a new genus. *Proceedings of the Zoological Society of London* **44**: 541–630, pl. 58–60.
- PLATNICK, N. I. & DUPÉRRÉ, N. 2009: The goblin spider genus *Heteroonops* (Araneae, Oonopidae), with notes on *Oonops*. *American Museum Novitates* **3672**: 1–72.
- PLATNICK, N. I. & DUPÉRRÉ, N. 2010: The goblin spider genera *Stenoonops* and *Australoonops* (Araneae, Oonopidae), with notes on related taxa. *Bulletin of the American Museum of Natural History* **340**: 1–111.
- PLATNICK, N. I. & DUPÉRRÉ, N. 2011: The goblin spider genus *Pescennina* (Araneae, Oonopidae). *American Museum Novitates* **3716**: 1–64.

- PLATNICK, N. I. & SEDGWICK, W. C. 1984: A revision of the spider genus *Liphistius* (Araneae, Mesothelae). *American Museum Novitates* **2781**: 1–31.
- PLATNICK, N. I. 2001: Book review: *An introduction to the spiders of South East Asia, with notes on all the genera* [by F. Murphy and J. Murphy]. *Journal of Arachnology* **29**: 281–282.
- PLATNICK, N. I., BERNIKER, L. & VÍQUEZ, C. 2014: The goblin spider genus *Costarina* (Araneae, Oonopidae), part 2: the Costa Rican fauna. *American Museum Novitates* **3794**: 1–75.
- PRIESTLEY, S. 2013: Dr Jennifer Newton MBE (1937–2013) – Obituary. *Newsletter of the British Arachnological Society* **127**: 3–4.
- PRÓSZYŃSKI, J. 2000: On mostly new species of Salticidae (Aranei) from Levant. *Arthropoda Selecta* **8**: 231–262.
- PRÓSZYŃSKI, J. 2008: Obituary – In memory of Ekaterina Mikhailovna Andreeva (Katarzyna Andrejewa-Proszynska). *Arthropoda Selecta* **17**: 215–224.
- READ, H. J., MARTIN, M. H. & RAYNER, J. M. V. 1998: Invertebrates in woodlands polluted by heavy metals – an evaluation using canonical correspondence analysis. *Water, Air and Soil Pollution* **106**: 17–42.
- RESKIN, B. F., KORETZ, J. F. & FRANCIS, L. L. 1996: Women in science: a report of Committee W. *Academe* **82**: 57–65.
- ROBERTS, D. J. & ROBERTS, M. J. 1985a: *Aulonia albimana* (Walckenaer) (Araneae: Lycosidae) found again in Britain. *Newsletter of the British Arachnological Society* **44**: 7.
- ROBERTS, D. J. & ROBERTS, M. J. 1985b: Spiders. In D. Whiteley (ed.), *The natural history of the Sheffield area and the Peak District*. Sheffield: Sorby Natural History Society: 210–221.
- SCHMIDT, J. B. & SCHARFF, N. 2008: A taxonomic revision of the orb-weaving spider genus *Acusilas* Simon, 1895 (Araneae, Araneidae). *Insect Systematics & Evolution* **39**: 1–38.
- SELDEN, P. A. 2018: John Dalingwater 1944–2018. *Newsletter of the British Arachnological Society* **142**: 6–7.
- SHERWOOD, D. 2021: A replacement name for *Hypsocephalus* Millidge, 1978 (Araneae: Linyphiidae). *Serket* **18**: 64–66.
- SHERWOOD, D. & GABRIEL, R. 2020: *Agelena labyrinthica* (Clerck, 1757) in an elevated web retreat on *Prunus* sp. (Araneae: Agelenidae). *Nieuwsbrief SPINED* **39**: 26–27.
- SHERWOOD, D. & GABRIEL, R. 2022: A new species and two new genera of theraphosine from Peru (Araneae: Theraphosidae). *Arachnology* **19**: 246–256.
- SHERWOOD, D., LOGUNOV, D. V. & GABRIEL, R. & 2022: An annotated catalogue of the theraphosid spiders held in the collections of the Manchester Museum (Araneae: Theraphosidae). *Arachnology* **19**: 209–219.
- SIMON, E. 1895: *Histoire naturelle des araignées. Deuxième édition, tome premier*. Paris: Roret: 761–1084.
- SMITH, A. M. 1990: *Baboon spiders: Tarantulas of Africa and the Middle East*. London: Fitzgerald Publishing.
- SMITH, A. M. 1996: Frances Murphy 29th April 1926–20th July 1995. *Journal of the British Tarantula Society* **11**: 39–42.
- SMITH, C. J. 1992: [Editorial]. *Spider Recording Scheme Newsletter* **13**: 1.
- SNAZELL, R. 2001: Literature review: *An introduction to the spiders of South East Asia by Frances and John Murphy*. *Newsletter of the British Arachnological Society* **91**: 14–15.
- SPIDER RECORDING SCHEME 2021: *Spider recording scheme*, online at: <http://srs.britishspiders.org.uk>
- STAVELEY, E. F. 1866a: *British spiders: an introduction to the study of the Araneidae of Great Britain and Ireland*. London: L. Reeve.
- STAVELEY, Miss. [E. F.] 1866b: Note on the presence of teeth on the maxillae of Spiders [communicated by J. E. Gray]. *Annals and Magazine of Natural History, decade 3* **17**: 399–400.
- TANASEVITCH, A. V. 2022: Revision of the Murphy's collection of Linyphiidae (Araneae) from south-east Asia. *Arachnology* **19**: 199–208.
- VIANA, M. J. 1978: Rita Delia Schiapelli (1906–1976) [and] Berta S. Gerschman de Pikelin (1905–1977). *Revista de la Sociedad Entomológica Argentina* **37**: 84.
- WANLESS, F. R. 1978: A revision of the spider genus *Portia* (Araneae: Salticidae). *Bulletin of the British Museum of Natural History (Zoology)* **34**: 83–124.
- WANLESS, F. R. 1980: A revision of the spider genera *Asemonea* and *Pandisus* (Araneae: Salticidae). *Bulletin of the British Museum of Natural History (Zoology)* **39**: 213–257.
- WESOŁOWSKA, W. & HARTEN, A. VAN 2010: Order Araneae, family Salticidae. In A. van Harten (ed.), *Dar Al Ummah, Abu Dhabi* **3**: 27–69.
- WHEATER, C. P. & READ, H. J. 1996: *Animals under logs and stones. Naturalists' Handbook* **22**: 1–90.
- WILBERFORCE, S. 2006: *Narrative report of the descendants of William Wilberforce*. Published online by the author.
- WORLD SPIDER CATALOG 2021: *World spider catalog, version 22.0*. Bern: Natural History Museum, online at <http://wsc.nmbe.ch>
- ZONSTEIN, S. L. 2017: Notes on *Nemesia* and *Iberesia* in the J. Murphy spider collection of the Manchester Museum (Araneae: Nemesiidae). *Israel Journal of Entomology* **47**: 141–158.
- ZONSTEIN, S. L. & MARUSIK, YU. M. 2022: Descriptions of *Sceliraptor* gen. n. and two new species from Kenya (Araneae, Palpimanidae). *Arachnology* **19**: 257–264.

Appendix 1

Checklist of articles published by women in BAS publications 1958–2000 (female authors in **bold**), in chronological order of publication.

- CROWSON, E. A. 1961a: Notes on spiders. *Bulletin of the Flatford Mill Spider Group* **11**: 1–2.
- CROWSON, E. A. 1961b: Notes on linyphiid spiders. *Bulletin of the Flatford Mill Spider Group* **12**: 3–5.
- CROWSON, E. A. 1962: The raft spider in Scotland. *Bulletin of the Flatford Mill Spider Group* **15**: 1.
- CROWSON, E. A. 1963: Spiders from the Scottish south coast. *Bulletin of the Flatford Mill Spider Group* **20**: 4–5.
- MURPHY, F. M. 1966: *Dictyna viridissima* (Walck.) and *Tegenaria agrestis* (Walck.) in Middlesex. *Bulletin of the British Spider Study Group* **30**: 9.
- FINLAY, A. C. 1966: Spider species from Inishawk, County Galway. *Bulletin of the British Spider Study Group* **31**: 7–8.
- MURPHY, F. M. 1967: Spider course at Monks Wood, Huntingdon in 1966. *Bulletin of the British Spider Study Group* **34**: 7–8.
- HASSELL, G. 1967: *Pirata uliginosus* (Thorell): some early material in the Pickard-Cambridge collection. *Bulletin of the British Spider Study Group* **36**: 4.
- MURPHY, F. M. 1967: Field meeting at Box Hill, Surrey. *Bulletin of the British Spider Study Group* **36**: 7–8.
- MURPHY, F. M. 1968: Notes on interesting spider species. *Bulletin of the British Spider Study Group* **37**: 4.
- MATTHEWS, J. R. 1968: Eugene Louis Simon, the life and works of France's greatest arachnologist. *Bulletin of the British Spider Study Group* **38**: 1–6.
- LUCZAK, J. & DĄBROWSKA-PROT, E. 1968: Studies on *Tetragnatha montana*, Simon. *Bulletin of the British Spider Study Group* **38**: 7–9.
- MURPHY, F. 1969: Two unusual spiders. *Bulletin of the British Arachnological Society* **1**: 21.
- MIKULSKA, I. 1970: Some observations on the biology of the spider *Tibellus oblongus* (Walckenaer) (Araneae). *Bulletin of the British Arachnological Society* **1**: 113–116.
- MARPLES, B. J. & MARPLES, M. J. 1971: Notes on the behaviour of spiders in the genus *Zygiella*. *Bulletin of the British Arachnological Society* **2**: 16–17.
- LUBIN, Y. D. 1971: Social phenomena in spiders. *Bulletin of the British Arachnological Society* **2**: 32.
- ROBINSON, M. H. & ROBINSON, B. C. 1972a: Techniques for the observation of spider behaviour. *Bulletin of the British Arachnological Society* **2**: 58–59.
- SALMON, S. J. 1972: Recent records of British pseudoscorpions. *Bulletin of the British Arachnological Society* **2**: 66–67.
- ROBINSON, M. H. & ROBINSON, B. C. 1972b: The evolution of courtship behaviour in spiders. *Bulletin of the British Arachnological Society* **2**: 116. [Letter to the Editor]
- MURPHY, F. 1974: Occurrence of Tm4 on *Erigone longipalpis* (Sundevall). *Newsletter of the British Arachnological Society* **9**: 9.
- MURPHY, F. 1974: Two field meetings at Hackhurst Downs, Surrey. *Newsletter of the British Arachnological Society* **9**: 9–10.
- MERRETT, C. M. 1974: Spiders and the Biological Recording Group for Wales. *Newsletter of the British Arachnological Society* **9**: 10.
- SWANN, P. H. & ROBESY, C. 1975: A redescription of the North American jumping spider *Chalcoscirtus carbonarius* Emerton 1917. *Bulletin of the British Arachnological Society* **3**: 101–103.
- HIGASHI, G. A. & ROVNER, J. S. 1975: Post-emergent behaviour of juvenile lycosid spiders. *Bulletin of the British Arachnological Society* **3**: 113–119.

- ROBINSON, M. H. & ROBINSON, B. C. 1975: Techniques in field studies of spiders. *Bulletin of the British Arachnological Society* **3**: 160–165.
- GODDARD, S. J. 1976: Feeding in *Neobisium muscorum* (Leach) (Arachnida, Pseudoscorpiones). *Bulletin of the British Arachnological Society* **3**: 232–234.
- MURPHY, J. & MURPHY, F. 1976: Spider hunting in the United States of America. *Newsletter of the British Arachnological Society* **16**: 6–8.
- BALDWIN, S. 1976: Museum Records: *Erigone capra* Simon. *Newsletter of the British Arachnological Society* **16**: 12.
- ALBERT, A. M. & ALBERT, R. 1978: Abundance and biomass of *Paradosa agricola* (Thorell) (Araneae, Lycosidae) on a shingle bank of the River Lune (Lancashire). *Bulletin of the British Arachnological Society* **3**: 237–242.
- MAIN, B. Y. 1978: Biology of the arid-adapted Australian trapdoor spider *Anidiops villosus* (Rainbow). *Bulletin of the British Arachnological Society* **4**: 161–175.
- EDMUNDS, J. 1978: The web of *Paraneus cyrtoscapus* (Pocock, 1899) (Araneae: Araneidae) in Ghana. *Bulletin of the British Arachnological Society* **4**: 191–196.
- PARVIOUR-SMITH, K. & ELBOURN, C. A. 1978: Some spiders of dead wood in living trees in Wytham Woods, near Oxford. *Bulletin of the British Arachnological Society* **4**: 213–220.
- DELLE CAVE, L. 1978: On *Biton monodentatus*, a new species of the family Daesiidae (Solifuga, Arachnida). *Bulletin of the British Arachnological Society* **4**: 238–240.
- MURPHY, J. A. & MURPHY, F. 1978: The male of *Lycosoides crassivulva* (Denis) (Araneae: Agelenidae). *Bulletin of the British Arachnological Society* **4**: 254–257.
- MERRETT, C. 1978: *Arctosa cinerea* in South Wales. *Newsletter of the British Arachnological Society* **23**: 10.
- GRASSHOFF, M. & EDMUNDS, J. 1979: *Araneus legonensis* n.sp. (Araneidae: Araneae) from Ghana, West Africa, and its free sector web. *Bulletin of the British Arachnological Society* **4**: 303–309.
- MURPHY, J. A. & MURPHY, F. 1979: *Theridion pinastri* L. Koch, newly found in Britain. *Bulletin of the British Arachnological Society* **4**: 314–335.
- GALIANO, M. E. 1979a: Note on *Dendryphantes mordax* (C.L.Koch, 1846) (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **4**: 342–344.
- GALIANO, M. E. 1979b: Revision of the genus *Phiale* C.L.Koch, 1846 (Araneae, Salticidae). II. *Phiale guttata* (C.L.Koch, 1846) new combination. *Bulletin of the British Arachnological Society* **4**: 345–348.
- DIPPENAAR-SCHOEMAN, A. S. 1979: A simple technique for studying feeding behaviour of spiders on mites. *Bulletin of the British Arachnological Society* **4**: 349.
- DELLE CAVE, L. 1979: On a remarkable *Galeodes barbarus* (Lucas) from Ethiopia (Arachnida, Remifugae). *Bulletin of the British Arachnological Society* **4**: 396–397.
- MURPHY, F. & TONGIORGI, P. 1979: *Arctosa villica* (Lucas) 1846: drawings and observations. *Bulletin of the British Arachnological Society* **4**: 402–406.
- FOELIX, R. F., MÜLLER-VORHOLT, G. & JUNG, H. 1980: Organisation of sensory leg nerves in the spider *Zygiella x-notata* (Clerck) (Araneae, Araneidae). *Bulletin of the British Arachnological Society* **5**: 20–28.
- MURPHY, F. & MURPHY, J. 1980: A spider hunting trip to Malaya and Borneo. *Newsletter of the British Arachnological Society* **28**: 9–11.
- GALIANO, M. E. 1981: Revision of the genus *Phiale* C.L. Koch, 1846 (Araneae, Salticidae). IV. The polymorphic species of the *gratiosa* group. *Bulletin of the British Arachnological Society* **5**: 205–216.
- EDMUNDS, J. 1982a: The species of *Argiope* (Araneae: Araneida) found in Ghana, West Africa, with a description of the male of *Argiope flavipalpis* (Lucas). *Bulletin of the British Arachnological Society* **5**: 285–293.
- EDMUNDS, J. 1982b: The number of instars occurring during the development of *Argiope flavipalpis* and *Argiope trifasciata* (Araneae: Araneidae) in Ghana, West Africa. *Bulletin of the British Arachnological Society* **5**: 294–302.
- WALOFF, N. & HASSELL, G. M. 1982: Spiders of acidic grassland at Silwood Park. *Bulletin of the British Arachnological Society* **5**: 309–318.
- RAJASHEKHAR, K. P. & BALI, G. 1982: Sexual dimorphism in a whip-scorpion, *Thelyphonus indicus* Stoliczka (Arachnida, Uropygi). *Bulletin of the British Arachnological Society* **5**: 330–331.
- HILL, E. M., BROWN, S. G. & CHRISTENSON, T. E. 1982: Size differences in predatory responses of *Nephila clavipes* (L.) spiderlings. *Bulletin of the British Arachnological Society* **5**: 385–392.
- LUBIN, Y. D. & DORUGL, S. 1982: Effectiveness of single-thread webs as insect traps: sticky trap models. *Bulletin of the British Arachnological Society* **5**: 399–407.
- GALIANO, M. E. 1982: New combinations and synonymies in Salticidae (Araneae). *Bulletin of the British Arachnological Society* **5**: 423–424.
- MAIN, B. Y. 1982: Notes on the reduced web, behaviour and prey of *Arcys nitidiceps* Simon (Araneidae) in south western Australia. *Bulletin of the British Arachnological Society* **5**: 425–432.
- HAWKINS, K. M. 1982: Another record of *Euscopus flavicaudis* (De Geer) in Essex. *Newsletter of the British Arachnological Society* **34**: 6–7.
- MURPHY, F. in PARKER, J. R. 1982: The B.A.S. meeting at Mas Forge field centre in France 5th–12th June, 1982. *Newsletter of the British Arachnological Society* **35**: 1–2.
- MURPHY, J. A. & MURPHY, F. 1983a: More about *Portia* (Araneae: Salticidae). *Bulletin of the British Arachnological Society* **6**: 37–45.
- FOELIX, R. F. & MÜLLER-VORHOLT, G. 1983: The fine structure of scorpion sensory organs. II. Pecten sensilla. *Bulletin of the British Arachnological Society* **6**: 68–74.
- MURPHY, J. A. & MURPHY, F. 1983b: The orb weaver genus *Acusilas* (Araneae, Araneidae). *Bulletin of the British Arachnological Society* **6**: 115–123.
- BARHAM JOHNSON, M. 1983: An octogenarian harpist's spider and Radio 3. *Newsletter of the British Arachnological Society* **36**: 7.
- ROTH, V. D. & ROTH, B. M. 1984: A review of appendotomy in spiders and other arachnids. *Bulletin of the British Arachnological Society* **6**: 137–146.
- STRATTON, G. E. 1984: Differences in maturation rates of *Schizocosa ocreata*, *Schizocosa rovnieri*, their F1 and F2 hybrids and backcross progeny (Araneae: Lycosidae). *Bulletin of the British Arachnological Society* **6**: 193–199.
- GALIANO, M. E. 1984: New species of *Lyssomanes* Hentz, 1845 (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **6**: 268–276.
- MERRETT, C. M. 1984: A further discovery of the harvestman *Sabacon* in Glamorgan. *Newsletter of the British Arachnological Society* **40**: 2.
- BALDWIN, I. 1984: *Bianor aenescens* (Simon): the first Scottish record. *Newsletter of the British Arachnological Society* **42**: 6.
- BROWN, S. G., HILL, E. M., GOIST, K. E., WENZL, P. A. & CHRISTENSON, T. E. 1985: Ecological and seasonal variations in a free-moving population of the golden-web spider, *Nephila clavipes*. *Bulletin of the British Arachnological Society* **6**: 313–319.
- BOSMANS, R. & VAN HOVE, M. 1986: A revision of the afro-tropical representatives of the genus *Langbiana* Hogg (Araneae: Zodariidae). *Bulletin of the British Arachnological Society* **7**: 17–28.
- DEELEMEN-REINHOLD, C. L. 1986: A new cribellate amaurobioid spider from Sumatra (Araneae: Agelenidae). *Bulletin of the British Arachnological Society* **7**: 34–36.
- CELERIER, M. L. 1986: Energy cost of exuviae production of spiders. *Bulletin of the British Arachnological Society* **7**: 77–82.
- ROTH, V. & ROTH, B. 1986: Comments and questions. *Newsletter of the British Arachnological Society* **45**: 5.
- FARR-COX, F. L. & FARR-COX, P. M. 1986: Notes from the Somerset moors and levels. *Newsletter of the British Arachnological Society* **46**: 4–5.
- CHICK, D. & CHICK, M. 1986: Another way. *Newsletter of the British Arachnological Society* **47**: 5.
- HAMBLER, C. & GODFREY, T. 1986: Three rare *Philodromus* species from Oxfordshire. *Newsletter of the British Arachnological Society* **47**: 6.
- DEELEMEN-REINHOLD, C. 1986: Remarks on identification of spiders of the genus *Dysdera*. *Newsletter of the British Arachnological Society* **47**: 7–8.
- GALIANO, M. E. 1987: Description of *Aillutticus*, new genus (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **7**: 157–164.
- BALDWIN, I. 1987: *Cicurina cicur* (Fabricius): First Scottish record. *Newsletter of the British Arachnological Society* **49**: 3.
- MILLER, G. L., MILLER, P. R. & BRADY, A. R. 1988: Adhesive hairs in lycosid spiders of various life styles, including the occurrence of claw tufts in *Lycosa hentzi* Banks. *Bulletin of the British Arachnological Society* **7**: 213–216.
- HALLAS, S. E. A. 1988: Hatching and early post-embryonic development in the Salticidae (Araneae). *Bulletin of the British Arachnological Society* **7**: 231–236.
- GALIANO, M. E. 1988: Question box. *Newsletter of the British Arachnological Society* **51**: 7.
- HEARD, P. 1988: Spider-killing wasp and baboon spider. *Newsletter of the British Arachnological Society* **51**(Supplement): 4.

- MURPHY, F. M. 1988: Literature review: *How to Begin the Study of Spiders* by J. L. Cloudsley-Thompson. *Newsletter of the British Arachnological Society* **52**: 6–7.
- SOARES, H. E. M. 1988: Professor Benedicto A. M. Soares: in memoriam. *Newsletter of the British Arachnological Society* **52**: 7.
- ROBERTS, D. J. & ROBERTS, M. J. 1988: Don't forget those trees!. *Newsletter of the British Arachnological Society* **52**: 8.
- MURPHY, F. 1988a: British tarantula society. *Newsletter of the British Arachnological Society* **52**(Supplement): 2.
- MURPHY, F. 1988b: Orb web spiders: two interesting observations in the literature. *Newsletter of the British Arachnological Society* **53**(Supplement): 4.
- RAVEN, R. J. & CHURCHILL, T. B. 1989: A new species of *Migas* (Araneae, Migidae), with notes on *Heteromigas* in Tasmania. *Bulletin of the British Arachnological Society* **8**: 5–8.
- GALIANO, M. E. 1989: Note on the genera *Admestina* and *Akela* (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **8**: 49–50.
- COYLE, F. A. & KETNER, N. D. 1990: Observations on the prey and prey capture behaviour of the funnel-web mygalomorph spider genus *Ischnothele* (Araneae, Dipluridae). *Bulletin of the British Arachnological Society* **8**: 97–104.
- HEURTAULT, J. 1990a: *Chamberlinarius*, new name for *Chamberlinius* Heurtault, 1983 (Arachnida, Pseudoscorpionida, Cheliferidae). *Bulletin of the British Arachnological Society* **8**: 128.
- HEURTAULT, J. 1990b: *Neobisium* (*N.*) *maxvachoni*, new name for *Neobisium* (*N.*) *vachoni* Heurtault, 1968 (Arachnida, Pseudoscorpionida, Neobisiidae). *Bulletin of the British Arachnological Society* **8**: 128.
- PROCTER, D. 1990a: *Robertus insignis* O. P.-Cambridge (Theridiidae) rediscovered in Britain at Catfield Fen in Norfolk. *Newsletter of the British Arachnological Society* **57**: 2.
- PROCTER, D. 1990b: How to fool a salticid. *Newsletter of the British Arachnological Society* **57**: 6.
- BALDWIN, S. I. 1990: *Pityohyphantes phrygianus* (C. L. Koch): new data suggests an extension of range and habitat. *Newsletter of the British Arachnological Society* **59**: 5.
- MURPHY, F. 1990: Literature review: *Sex Determination of Immature Theraphosid Spiders From Their Cast Skins* by K. & J. Hancock. *Newsletter of the British Arachnological Society* **59**: 8.
- GEDDES, C. 1990: A report on two north of Scotland field/lab. meetings: 1990. *Spider Recording Scheme Newsletter* **8**: 4.
- GALIANO, M. E. 1991: Postembryonic development in ten species of neotropical Salticidae (Araneae). *Bulletin of the British Arachnological Society* **8**: 209–218.
- BAKER, A. 1991: A new species of the mite genus *Androlaelaps* Berlese (Parasitiformes: Laelapidae) found in association with the spider *Macrothele calpeiana* (Walckenaer) (Mygalomorphae: Hexathelidae). *Bulletin of the British Arachnological Society* **8**: 219–223.
- BALDWIN, I. 1991: Spiders, tuning-forks and an eminent Victorian physicist. *Newsletter of the British Arachnological Society* **60**: 1–2.
- WALLACE, B. & WALLACE, I. 1991: Some records and observations on *Sitticus floricola* (C. L. Koch). *Newsletter of the British Arachnological Society* **60**: 3–4.
- PROCTER, D. 1991a: Pitfall trapping made easier. *Newsletter of the British Arachnological Society* **60**: 4.
- PROCTER, D. 1991b: Catch spiders the easy way! *Newsletter of the British Arachnological Society* **60**: 4.
- MURPHY, F. 1991: Literature review: *How to Begin the Study of Spiders* by D.W. Mackie. *Newsletter of the British Arachnological Society* **60**: 8.
- GEDDES, C. & HORSFIELD, D. 1991: Further records of *Tricca alpigena* (Doleschall) from the Scottish Highlands and other montane spiders from Beinn Dearg. *Newsletter of the British Arachnological Society* **62**: 2–3.
- PROCTER, D. 1991c: Spiders of Henderson Island, a World Heritage site. *Newsletter of the British Arachnological Society* **62**: 6.
- MURPHY, F. 1991: Literature review: *Baboon Spiders, Tarantulas of Africa and the Middle East* by A.M. Smith. *Newsletter of the British Arachnological Society* **62**: 7–8.
- MURPHY, F. 1991: Projected B.A.S. spider meeting in Brittany: 25–30 May 1992. *Newsletter of the British Arachnological Society* **62**(Supplement): 1.
- OXFORD, R. 1991: Wanted - live spiders. *Newsletter of the British Arachnological Society* **62**(Supplement): 2.
- ZEH, D. W. & ZEH, J. A. 1992: Emergence of a giant fly triggers phoretic dispersal in the neotropical pseudoscorpion, *Semeiochernes armiger* (Balzan) (Pseudoscorpionida: Chernetidae). *Bulletin of the British Arachnological Society* **9**: 43–46.
- ZEH, J. A. & ZEH, D. W. 1992: Are sexually-selected traits reliable species characters? Implications of intra-brood variability in *Semeiochernes armiger* (Balzan) (Pseudoscorpionida: Chernetidae). *Bulletin of the British Arachnological Society* **9**: 61–64.
- BOSMANS, R. & ABROUS, O. 1992: Studies on north African Linyphiidae VI. The genera *Pelecopsis* Simon, *Trichoptera* Kulczynski and *Ouedia* gen.n. (Araneae: Linyphiidae). *Bulletin of the British Arachnological Society* **9**: 65–85.
- GREGORY, L. 1992: Two-eyed *Trochosa*. *Newsletter of the British Arachnological Society* **63**: 3.
- MURPHY, F. 1992: Literature review: *British Red Data Books 3. Invertebrates Other than Insects*, edited by J. Bratton. *Newsletter of the British Arachnological Society* **63**: 7.
- GALIANO, M. E. 1992: Supplementary information on the life history of *Acanthoscurria sternalis* Pocock, 1903 (Araneae, Theraphosidae). *Newsletter of the British Arachnological Society* **64**: 3.
- BALDWIN, I. 1992: Kindrogan memories. *Spider Recording Scheme Newsletter* **15**: 3–4.
- PROCTER, D. 1992: Computerisation and the SRS. Part II. *Spider Recording Scheme Newsletter* **15**: 5–6.
- ANAVA, A. & LUBIN, Y. 1993: Presence of gender cues in the web of a widow spider, *Latrodectus revivensis*, and a description of courtship behaviour. *Bulletin of the British Arachnological Society* **9**: 119–122.
- SCIOSCIA, C. L. 1993: Description of *Mburuvicha galianoae*, new genus and species (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **9**: 123–125.
- THALER, K. & KNOFLACH, B. 1993: Two new *Amaurobius* species (Araneae: Amaurobiidae) from Greece. *Bulletin of the British Arachnological Society* **9**: 132–136.
- ROUSH, R. S. & RADABAUGH, D. C. 1993: Web density is related to prey abundance in cellar spiders, *Pholcus phalangioides* (Fuesslin) (Araneae: Pholcidae). *Bulletin of the British Arachnological Society* **9**: 142–144.
- MERRETT, P., POWELL, D. F. & MAHER, H. 1993: A new species of *Centromerus* (Araneae: Linyphiidae) from arable farmland in eastern England. *Bulletin of the British Arachnological Society* **9**: 203–204.
- KNOFLACH, B. 1993: *Theridion conigerum* Simon – rediscovered in Austria (Araneida: Theridiidae). *Bulletin of the British Arachnological Society* **9**: 205–208.
- GALIANO, M. E. 1993: Revision of the genus *Pachomius* (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **9**: 214–220.
- MURPHY, F. 1993: Points of view. *Newsletter of the British Arachnological Society* **66**: 3–4.
- OXFORD, G. & ROSS, H. 1993: Three *Tegenaria* species newly recorded from Northern Ireland. *Newsletter of the British Arachnological Society* **66**: 5–6.
- POWELL, D. & MAHER, H. 1993: *Thanatus vulgaris* Simon, first record in Britain. *Newsletter of the British Arachnological Society* **67**: 4.
- HARVEY, P., CARR, D. & READ, H. 1993: Further records of *Theridion pinastri* L. Koch, 1872. *Newsletter of the British Arachnological Society* **67**: 4–5.
- ROBERTSON, M. W., ADLER, P. H. & MCCREADIE, J. W. 1994: Colour change in the green lynx spider, *Peucetia viridans* (Araneae: Oxyopidae). *Bulletin of the British Arachnological Society* **9**: 290–292.
- OXFORD, G. & OXFORD, R. 1994: Another example of a spider eating its own eggs – *Heteropoda venatoria*. *Newsletter of the British Arachnological Society* **69**: 6–7.
- UHL, G., HUBER, B. A. & ROSE, W. 1995: Male pedipalp morphology and copulatory mechanism in *Pholcus phalangioides* (Fuesslin, 1775) (Araneae, Pholcidae). *Bulletin of the British Arachnological Society* **10**: 1–9.
- MURPHY, F. 1995: More about Aussie rules. *Newsletter of the British Arachnological Society* **72**: 16.
- BELL, J. & HAUGHTON, A. 1995: Notes on the autecology of some sand dune spiders. *Newsletter of the British Arachnological Society* **73**: 3–4.
- GALIANO, M. E. & GOLOBOFF, P. A. 1996: Postembryonic development of *Actinopus* cf. *insignis* and *Diplura paraguayensis* (Araneae, Mygalomorphae). *Bulletin of the British Arachnological Society* **10**: 121–126.
- GONZALEZ, A. & DEL CARMEN CASTRO, D. 1996: Neotropical spiders of the genus *Argyrodes* Simon (Araneae, Theridiidae). *Bulletin of the British Arachnological Society* **10**: 127–137.
- KNOFLACH, B. 1996: *Steatoda incomposita* (Denis) from southern Europe, a close relative of *Steatoda albomaculata* (Degeer) (Araneae: Theridiidae). *Bulletin of the British Arachnological Society* **10**: 141–145.
- THIRUNAVUKARASU, P., NICOLSON, M. & ELGAR, M. A. 1996: Leaf selection by the leaf-curling spider *Phonognatha graeffei*

- (Keyserling) (Araneoidea: Araneae). *Bulletin of the British Arachnological Society* **10**: 187–189.
- PROCTER, D. & FOSTER, A. 1996: *Walckenaeria stylifrons* (O. P.-Cambridge, 1875) at Weeting Heath N.N.R., Norfolk. *Newsletter of the British Arachnological Society* **77**: 14.
- HERBERSTEIN, M. E. 1997: Niche partitioning in three sympatric web-building spiders (Araneae: Linyphiidae). *Bulletin of the British Arachnological Society* **10**: 233–238.
- DI FRANCO, F. 1997: New considerations about the gnaphosid fauna of Italy (Araneae: Gnaphosidae). *Bulletin of the British Arachnological Society* **10**: 242–246.
- STRATTON, G. E. 1997: Investigation of species divergence and reproductive isolation of *Schizocosa stridulans* (Araneae: Lycosidae) from Illinois. *Bulletin of the British Arachnological Society* **10**: 313–321.
- SCHÜTT, K. 1997: Web-site selection in *Drapetisca socialis* (Araneae: Linyphiidae). *Bulletin of the British Arachnological Society* **10**: 333–336.
- KNOFLACH-THALER, B. 1997: 17th European Colloquium of Arachnology Edinburgh, 14–18th July 1997. *Newsletter of the British Arachnological Society* **80**: 1–3.
- NEWTON, J. 1997: *Rugathodes bellicosus* new to west Lancs, VC60. *Spider Recording Scheme Newsletter* **27**: 3–4.
- GALIANO, M. E. 1998: Revision of the genus *Chinoscopus* (Araneae, Salticidae, Lyssomaninae). *Bulletin of the British Arachnological Society* **11**: 1–9.
- PENG, X. J. & YIN, C.-M. 1998: Four new species of the genus *Coelotes* (Araneae, Agelenidae) from China. *Bulletin of the British Arachnological Society* **11**: 26–28.
- THALER, K. & KNOFLACH, B. 1998: *Phyxelida anatolica* Griswold, new to Cyprus (Arachnida, Araneae: Amaurobiidae, Phyxelidinae). *Bulletin of the British Arachnological Society* **11**: 36–40.
- RINALDI, I. M. P. & STROPA, A. A. 1998: Sexual behaviour in *Loxosceles gaucho* Gertsch (Araneae, Sicariidae). *Bulletin of the British Arachnological Society* **11**: 57–61.
- WEISSMANN, M. & VOLLRATH, F. 1998: The effect of leg loss on orb-weaver spider growth. *Bulletin of the British Arachnological Society* **11**: 92–94.
- WRIGHT, J. & PELLING, J. 1998: Spider squadron: some answers. *Newsletter of the British Arachnological Society* **82**: 6.
- GARDZINSKA, J. 1998: Anomalous leg structure in a salticid. *Newsletter of the British Arachnological Society* **83**: 9.
- PUNZO, F. & HENDERSON, L. 1999: Aspects of the natural history and behavioural ecology of the tarantula spider *Aphonopelma hentzi* (Girard, 1854) (Orthognatha, Theraphosidae). *Bulletin of the British Arachnological Society* **11**: 121–128.
- GALIANO, M. E. 1999: Description of *Yacuitella*, new genus (Araneae, Salticidae). *Bulletin of the British Arachnological Society* **11**: 158–160.
- FUREY, R. E. & REICHERT, S. E. 1999: The role of volatile pheromones in aggregation behaviour in the African social spider *Agelena consociata* Denis. *Bulletin of the British Arachnological Society* **11**: 191–192.
- WEISSMANN, M. & VOLLRATH, F. 1999: The effect of leg loss on prey capture in *Nephila clavipes*. *Bulletin of the British Arachnological Society* **11**: 198–203.
- WESOŁOWSKA, W. & CUMMING, M. S. 1999: The first termitivorous jumping spider (Araneae: Salticidae). *Bulletin of the British Arachnological Society* **11**: 204–208.
- HOWE, I. 1999: John Blackwall's use of the microscope. *Newsletter of the British Arachnological Society* **85**: 8–9.
- NEWTON, J. 1999: Spiders of grazed and ungrazed turf on Warton Crag, North Lancashire. *Newsletter of the British Arachnological Society* **85**: 12–13.
- BELL, J. R., HAUGHTON, A. J. & BOATMANN, N. D. 1999: Population structure of the pseudoscorpion *Chthonius ischnocheles* (Hermann, 1804) in field margins and the effects of the herbicide glyphosate. *Newsletter of the British Arachnological Society* **86**: 6–7.
- TOPFER-HOFMANN, G., CORDES, D. & VON HELBERSEN, O. 2000: Cryptic species and behavioural isolation in the *Pardosa lugubris* group (Araneae, Lycosidae), with description of two new species. *Bulletin of the British Arachnological Society* **11**: 257–274.
- BLEHER, B. 2000: Development of web-building and spinning apparatus in the early ontogeny of *Nephila madagascariensis* (Vinson, 1863) (Araneae: Tetragnathidae). *Bulletin of the British Arachnological Society* **11**: 275–283.
- BRESCOVIT, A. D. & RHEIMS, C. A. 2000: On the synanthropic species of the genus *Scytodes* Latreille (Araneae, Scytodidae) of Brazil, with synonymies and records of these species in other Neotropical countries. *Bulletin of the British Arachnological Society* **11**: 320–330.
- SNAZELL, E. 2000: An associate's-eye view of the 18th European Colloquium of Arachnology. *Newsletter of the British Arachnological Society* **87**: 6–7.
- UHL, G. & RASA, O. A. E. 2000: Notes on moulting, courtship behaviour and brood care of the 'Buckspoor Spider' *Seothyra fasciata* Purcell, 1903 (Eresidae). *Newsletter of the British Arachnological Society* **88**: 2–3.
- KNOFLACH, B. 2000: Acrobatic copulation in the theridiid spider *Dipoena melanogaster* (C. L. Koch, 1837). *Newsletter of the British Arachnological Society* **89**: 8–10.
- KIRK, H. 2000: The field meeting to Hatfield Moors Saturday 20th November. *Spider Recording Scheme Newsletter* **36**: 2.
- NEWTON, J. 2000: *Dictyna* species. *Spider Recording Scheme Newsletter* **36**: 8.

Appendix 2

Checklist of articles published by Frances Murphy (1926–1995) in non-BAS publications

- MURPHY, F. 1971: *Callilepis nocturna* (Linnaeus) (Araneae, Gnaphosidae) newly found in Britain. *Entomologist's Gazette* **22**: 269–271.
- MURPHY, J. A. & MURPHY, F. 1973: The spiders of Chobham Common. *The Surrey Naturalist Annual Report* **1973**: 23–32.
- MURPHY, F. 1980: *Keeping spiders, insects and other land invertebrates*. Edinburgh: Bartholomew.
- MURPHY, J. A. & MURPHY, F. 1984: An English collection of Tyrolean spiders (Arachnida: Aranei). *Berichte des naturwissenschaftlichen-medizinischen Verein Innsbruck* **71**: 83–96.
- MURPHY, F. M. 1984: Book review: *Biology of Spiders*, by R. Foelix. *Proceedings and Transactions of the British Entomological and Natural History Society* **17**: 86.
- FORSTER, L. M. & MURPHY, F. M. 1986: Ecology and behaviour in *Portia schultzei*, with notes on related species (Araneae, Salticidae). *Journal of Arachnology* **14**: 29–42.
- ROBINSON, M. H., ROBINSON, B. C., MURPHY, F. M. & CORLEY, W. S. 1986: Egg-sac burying behaviour in *Nephila maculata*: a specialized adaptation. *Proceedings of the 9th International Congress of Arachnology, Panama 1983*: 245–254.
- MURPHY, F. M. 1989: Book review: *Pseudoscorpions*, by G. Legg & R. E. Jones. *British Journal of Entomology and Natural History* **2**: 64.
- MURPHY, F. 1989: *Desis martensi* at A.E.S. Exhibition. *Journal of the British Tarantula Society* **4**(4): 6.
- MURPHY, F. 1989: The British Arachnological Society. *Journal of the British Tarantula Society* **4**(4): 9.
- MURPHY, F. M. 1991: The 1989 Presidential Address – Part 1. Report. *British Journal of Entomology and Natural History* **4**: 67–68.
- MURPHY, F. M. 1991: The 1989 Presidential Address – Part 2. Some interesting European spiders. *British Journal of Entomology and Natural History* **4**: 69–82, pl. III.
- MURPHY, F. 1992: The care of spiders in captivity. *Arachnida: Proceedings of a One Day Symposium on Spiders and their Allies 1992*: 47–51.
- MILES, S. & MURPHY, F. 1992: The Joint Committee for the Conservation of British Insects. *British Journal of Entomology and Natural History* **5**: 24.
- MURPHY, F. M. 1992: Staffhurst Wood, Surrey, 19 May 1991. BENHS Field Meeting. *British Journal of Entomology and Natural History* **5**: 40.
- MURPHY, F. M. 1992: Book review: *Stick Insects of Britain, Europe and the Mediterranean*, by P. Brock. *British Journal of Entomology and Natural History* **5**: 91–92.
- MURPHY, F. 1992: Move from the Alpine Club. *British Journal of Entomology and Natural History* **5**: 129–132.
- MURPHY, F. M. 1992: Keeping spiders in captivity. In S. Dobson (ed.). *Members' Handbook*. British Arachnological Society.
- MURPHY, F. 1993: Book review: *Martin Lister's English Spiders (1678)*, edited by J. R. Parker & B. Harley. *British Journal of Entomology and Natural History* **6**: 47.
- MURPHY, F. & MURPHY, J. 2000: *An introduction to the spiders of South-East Asia with notes on all the genera*. Kuala Lumpur: Malaysian Nature Society.