

# SPIDER RECORDING SCHEME NEWS

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## EDITORIAL

Trial forms are available for recording some 'easily recognisable spiders' on the Essex Field Club website at HYPERLINK "http://www.essexfieldclub.org.uk". These are well used by all sorts of people, including many not Essex-based and some from as far away as the USA and Canada. Seventy-one internet based forms have been sent in between March and September: 29 for *Dysdera crocata* (18 from the USA!); two for *Salticus scenicus*, one for the UK; two for *Uloborus plumipes* in Sweden; one for *Araneus diadematus*; 31 for *Argiope bruennichi*, including one each from Belgium, Denmark and Spain, and two from the USA (!); one for *Scytodes thoracica* from the USA; five for *Misumena vatia* including two from Canada and one from the USA. Although there obviously are potential problems, not least that the forms are not intended for use in other countries, virtually all the British responses appear to constitute good records, often supported by digital images that confirm the record. The system generates interest and information from people who would otherwise not input to recording schemes.

I have received many records this year for *Argiope bruennichi*. Whilst these do not extend the known range, the number of records from non-arachnologists suggests that the spider has had a good year, probably due to the long warm summer and autumn. Other discoveries of interest from members of the public include *Segestria florentina* at Tiptree in Essex and new locations for *Steatoda grossa* and *Meta bourneti*.

Short-term objectives are to complete a review of national spider statuses based on the latest IUCN criteria, and to produce guidance on the identification of difficult species—a 'spider crib'.

**My thanks go to all those who have contributed to this issue. S.R.S. News No. 48 will be published in March 2004. Please send contributions by the end of January at the very latest to Peter Harvey at 32, Lodge Lane, GRAYS, Essex, RM16 2YP; e-mail: grays@peterharvey.freereserve.co.uk.**

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## *Frontinellina frutetorum* (C. L. Koch, 1834): A New British Record

by Olwen Williams

I have to confess, we worked from back to front and started with the web. It was a fine evening, my son had come for supper and we had about twenty minutes cooking time to go. My new garden, bigger than the old one, has some shrubs and a small apple tree. In the honeysuckle, there was a muss of fine strands, a flattish web underneath and a small spider waiting to be identified. No spi-pot? No problem, soon constructed. That web—*Linyphia*? *Neriene*? Plate 31 or 32 in Roberts. 'That's the one', says Huw, who knows nothing about spiders: '*Frontinellin*. Markings are exactly right. And the shape.' 'Hang on', I protest, 'You can't do it like that. You have to look at all the features, including the genitalia. Anyway, that can't be right. The book says it is absent from Britain.'



Figure 1. *Frontinellina frutetorum*, female. Photograph by Ian Dawson.

'I bet it is, though,' says he, 'and here is another one in the apple tree'. *Frontinellina frutetorum* (C. L. Koch, 1834) is described as a 3.5–5.6 mm spider, which builds a bowl-shaped web, with a flat web about 10–20 mm below (hence the 'doily'). Webs are typically in bushes and lower branches of trees. The spider hangs from the underside of the bowl. My specimen did not move much on disturbance and obligingly dropped off into the pot when approached.

*F. frutetorum* is the only known European *Frontinellina* species, occurring in France, Germany and Belgium, southwards and eastwards through continental Europe, and as far north as Finland. The black and white abdominal markings are characteristic and the abdomen is highest at the posterior end (Fig. 1). The first femur lacks spines and legs are not annulated. The epigyne is dark and protrudes slightly. All these features being present, I sent one of the pair off for confirmation, firstly by Ian Dawson and then Peter Merrett. Huw was dead right—a couple of female *Frontinellina frutetorum*, with typical bowl and doily webs, were sitting in my garden at Newnham, Cambridge (TL443572). They were first found on 16th September 2003, both on the tips of branches at about head height.

This seemed a great opportunity to meet my new neighbours. 'Excuse me, but do you mind if I check your bushes for a very rare spider?', is a great introduction, but sadly there were no more to be found. *Linyphia triangularis* and *Neriene montana* lurk in the innards of their bushes. Sudden enlightenment—my predecessors in the house had, for the last five years, imported pot plants of all types from Italy. Are they established and breeding here? That remains to be seen next spring. I guess I'd better rejoin the B.A.S.!

I am a mostly retired medical doctor. Indulging a passion for natural history, I have just finished a B.A. in Natural Sciences (Zoology and Geology) at Cambridge University and will start an M.Phil. in Biological Anthropology shortly. I remain to be convinced that I prefer primates to invertebrates, however!

My thanks go to Huw Williams for his part in the plot, and to Ian Dawson for his help in confirmation and for the photos.

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## Spiders of Artificial Subterranean Habitats in Leicestershire

by Jon Daws

Within Leicestershire there are few natural caves or potholes. So the search for subterranean spider species has focused on the thousands of miles of man-made structures that provide moist and dark places for spiders to live. These places have included: service tunnels for reservoir dams, old blocked-up pillboxes, disused railway tunnels, the county sewer system, and telephone and television cable holes. The initial investigation into subterranean habitats within Leicestershire concentrated on the sewer system, but this had its drawbacks as most sewer manhole-covers are situated on residential private property. Another problem with the older metal sewer manhole-covers is that many of their lifting handles have rusted through or broken off completely, making them difficult or impossible to lift. The solution for a more comprehensive look into subterranean habitats has been solved by the legacy of the infrastructure of the major telephone and cable television companies, which provide thousands of cable holes throughout our communities; from one-street villages to city centres.

The initial survey of sewer systems concentrated on open-plan council housing estates built during the 1970s and 80s, where access could be gained to a number of sewer manhole-covers that were on public/communal land. Even access to a single sewer manhole could produce useful records, with most records away from cities being from rural churchyards. The depth of these sewers sometimes came as a bit of a surprise, with some having drops of over seven metres, but most were only up to two metres deep. A natural extension to this survey work of subterranean habitats evolved to include the cable holes owned by the cable and telephone companies. This expansion allowed collecting trips to be organised to target subterranean habitats, rather than just occasionally delving into them when opportunities arose.

The results were quite fascinating with a small number of species soon characterising the species composition of this subterranean habitat. Some of these species are not restricted to this habitat and are found quite commonly in and around our houses, such as *Tegenaria gigantea* and *T. domestica*. Other species, including *Lessertia dentichelis* and *Nesticus cellulanus* could be considered resident cave spider, never or only occasionally found in other habitats within the county. A third group of spiders that are collected as occasional aeronauts (sometimes in numbers) use this and other subterranean habitats as breeding chambers, and include *Lepthyphantes insignis* and *Lepthyphantes pallidus*. A fourth group of spiders are common aeronauts which have occasionally found their way into this habitat through cracks and holes in or around their covers, specimens of which have occasionally been found with egg cases. A fifth group of spiders are either nationally or locally rare and have only been found in this habitat occasionally, but would naturally either live beneath stones or in dark damp habitats such as rotting trees, and include *Mastigusa macrophthalma* and *Cicurina cicur*.

When collecting spiders of subterranean habitats top of the list of species one seeks are the pale money spiders, since it is almost impossible to identify them to species in the field. This group includes *Lessertia dentichelis*, *Porrhomma convexum*, *Lepthyphantes pallidus* and *L. insignis*, with the possibility that other species of subterranean habitats may be found.

Although the sewer system and cable hole systems are both subterranean habitats, there are definite differences in the make-up of their respective spider faunas. This could partly be because the sewer system is older than the cable system and deals with waste water products, including hot water, making this subterranean habitat warmer than the cable system (but it should be noted that the cable holes often hold a

few centimetres of water). The sewer system is more likely to flood in stormy weather. The main differences in spider faunas between the two subterranean habitats is that *Lepthyphantes insignis* and *Pholcus phalangioides* are mainly confined to the telephone and cable systems, whereas the more unusual species are mostly restricted to the sewer system.

*Cicurina cicur*: has only been found in subterranean habitats on a single occasion on the 7th May 2003, when a female was found in a web in the sewer system of Ryhall village in east Rutland (TF035105).

*Mastigusa macrophthalma*: has its national stronghold in the Charnwood Forest of NW Leicestershire, where it is found in association with ants on remnant heath/moor land. This species was found in the sewer system at Whetstone churchyard (SP558974), which is just south of Leicester, when a female and two immatures were collected from the underside of a manhole-cover on the 16th February 2002. A second visit on the 26th July 2002 produced a male, a sub-adult male, a sub-adult female, 4 immature females, and egg sacs attached to the concrete sides of the manhole. The eyes of these specimens were not reduced. Previously immature specimens of this genus had been found within the Leicester sewer system in 1997 and had been thrown away since without an adult specimen species identification was impossible. Since 1997 this species has been looked for within the Leicester sewer system without success.

*Pholcus phalangioides*: is occasionally found within cable/telephone systems around the city and county. They are found from individuals to mixed groups of all ages and sexes distributed throughout a system, which must indicate their ability either to successfully breed and survive our winters within this habitat or to be able to re-colonise from surrounding buildings. There is also some circumstantial evidence that this species may be in competition with *Nesticus cellulanus* and may even prey on this species, since the two species are not usually found together.

*Steatoda grossa*: was found, new to the county, in the sewer system in east Leicester at two sites (SK619036, SK621036) on the 6th April 1997: one female and a sub-adult female at the former location and a sub-adult at the latter. The site was re-surveyed on the 2nd August 2002 when females and eggsacs were noted at both sites; as yet no males have been seen.

*Nesticus cellulanus*: is the commonest species found within our cable/telephone/sewer systems throughout the city and county. It commonly breeds in this subterranean habitat, with individuals of all ages and sexes often found in close proximity. There have been occasions where this species has been absent from a whole village's cable/telephone system or confined to individual manholes; in such instances *P. phalangioides* is usually present.

*Lessertia dentichelis*: is found in small numbers within the cable/telephone/sewer systems around the city and county, throughout the year. This species is slightly more common within the sewer system, but even then can be elusive with occasions when only an individual is collected in an hour of searching.

*Porrhomma convexum*: is rarely collected within the county, and then usually as an aeronaut. There is a single record from telephone manholes at Burbage in the south-west of the county.

*Lepthyphantes pallidus*: is an infrequent inhabitant of the cable/telephone/sewer systems around the city and county.

*Lepthyphantes insignis*: is an infrequent spider of usually the cable/telephone systems around the city and county, where it can breed in small colonies. Since this species was first found in a subterranean habitat in Leicestershire, it has been collected from both urban and rural situations:

07/05/01	2m/5f/e	SK564067	Gilroes Cemetery, L, drainage system
26/07/02	1f	SP557975	Whetstone Church, Ls, sewer hole
04/08/02	2f	SK621045	Rowlettes Hill E, L, tel/cable holes
15/08/02	1f	SK515205	Loughborough, Ls, tel/cable holes
20/08/02	1m	SP648935	Fleckney, Ls, tel/cable holes
24/09/02	1m/2f/e	SK842112	Langham, Rutland, telephone hole
19/11/02	1m/1f	SK799392	Bottesford, Ls, tel/cable holes
15/04/03	2f	SP745887	Great Bowden, Ls, cable hole
30/04/03	2f	SP536841	Lutterworth, Ls, telephone hole

m = male, f = female, e = eggs, L = Leicester (city), Ls = Leicestershire

On the 24th September 2002 at Langham beneath a manhole cover attached to roots growing through the side of the manhole were over thirty white egg cases with one male and two females in attendance. There were obviously too many egg sacs present for the number of spiders found, so could this have been a particularly good spot where females that were attracted by pheromones would lay their eggs and then depart.

The national distribution of some of the species that have been found to be common or not infrequent within the vice county of Leicestershire are likely to be rather under-recorded. This applies in particular to *Nesticus cellulanus* and *Lessertia dentichelis* and to a lesser extent to *Lepthyphantes insignis*, which most arachnologists must come within feet of on a daily walk around their neighbourhoods. The rarer species so far found in this habitat and other species may also be found to be more common within these subterranean worlds.

This survey has only scratched the surface of our knowledge of the species that inhabit this dark world beneath our feet and the lives they lead. Further survey work is needed not only within this county, but also across the country. My own survey work will continue, with an emphasis on the limestone area of Rutland and north-east Leicestershire, in the hope of finding further subterranean species that inhabit the cracks and fissures that naturally occur in the ground, and which may find their way into the local cable or sewer systems.

Peter Merrett holds a single female *Porrhomma* specimen with reduced eyes, so far unidentified, which was collected from a telephone manhole in north-east Leicestershire. Unfortunately it has taken six years to find a single specimen, so it may take a further decade to find a male, but finding the right time and place for peak activity of the more unusual species will probably just be the beginning

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### *Hyptiotes paradoxus* (C. L. Koch, 1834): New Record for Nottinghamshire

by Howard Williams

In August of this year I decided to beat some yews in Carlton Wood near Worksop in N. Notts, partly to reconfirm the presence of *Diaea dorsata*, partly in the hope of finding *Gibbaranea gibbosa* which, in my early days of recording there, I thought I had once found. It was, however, immature and I lacked the confidence at that time to 'claim' it for the wood. I never found it since in repeated searches.

The upshot of this particular search far exceeded expectations: among various species, including *Diaea*, I found I had taken two adult female *Hyptiotes paradoxus* (C. L. Koch, 1834), an RDB3 species which, according to the *Provisional Atlas*, has not been found in eastern or central England. The nearest counties would seem to be Cheshire in the west and Staffordshire to the south-west.

County Organiser Tom Faulds confirmed the specimens and we decided to search the same patch of yews a week later, when two other females were found. All but one of the four were returned to the trees, a fourth being retained as a voucher. We also found two new records for the wood in these yews: *Gibbaranea gibbosa* at last, and *Achaearenea lunata*.

Two other yew-beating expeditions elsewhere in the wood produced no more *Hyptiotes*, so perhaps a core colony has recently set up in this small area of the 40 acre wood. I believe them to be recent arrivals because I have recorded here for many years, though I cannot swear to having beaten this

particular area of yews in that time. If this is so, where they have appeared from is a bit of a mystery as this is a small wood unvisited by tourists from other regions who might have carried the spiders with them. On the other hand, Center Parcs Sherwood and Sherwood Forest Country Park are only some dozen miles away as the crow flies; and visitors from other areas do converge there.

Carlton Wood, according to Laurence Bee's description in the *Provisional Atlas*, is ideal habitat for the species: broad-leaved woodland (mainly ash-elm with some oak, sweet chestnut, sycamore and holly) interspersed with much yew, some in fairly dense patches. Perhaps, after all, it has always been here in small numbers. Other Midlands recorders may be encouraged to go out and explore their yew spider populations.

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### The Crab Spider *Synema globosum* (Fabricius, 1775) in Britain

by Tony Irwin

On 26th July 2003, I spotted a hoverfly, *Episyrphus balteatus*, sitting very still on a Cotton Thistle, *Ornopordum acanthium*, flower in my garden in Norwich (TG211082). At first I suspected that the crab spider *Misumena vatia* was at work, but then noticed that the culprit was shiny black and yellow. A quick check of the books and several on-line sites confirmed that it was a female *Synema globosum* (Fabricius, 1775).



Figure 1. *Synema globosum*, female, lateral and posterior views.

Its known distribution includes France, Netherlands, Belgium, Bulgaria, Germany, Switzerland, Austria, Czech Republic, Hungary, Italy, Romania, Poland, Portugal, Sicily and Spain. To my knowledge, this species has not been recorded in Britain before. No further specimens have been found during searches throughout August and September.

How it turned up in a garden in Norwich remains a matter for speculation, but my wife did receive a bouquet of cut flowers some weeks previously, and that might have been the source. Nearly 250 tonnes of cut flowers are imported to Britain every day (figure derived from Hansard written answers), so it is perhaps inevitable that *Synema* might be imported with them sooner or later.

The specimen is preserved in the collections of Norwich Castle Museum (accession no. 2003.100).

I thank Peter Harvey for information about the distribution of this species in Europe

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## ***Theridion hemerobium* Simon, 1914: Are You Looking in the Right Places?**

by Jon Daws

In 1996 *Theridion hemerobium* Simon, 1914 was found in a fishing complex at Wanlip, north of Leicester, a first record for the county. Situated on the River Soar flood-plain, the area had been used for gravel extraction. At the time this species was thought to be restricted to a small area of the fishing complex, with its epicentre at a fishing platform and duck nesting-box in a large area of shallow marsh at one end of one of the many fishing lakes. The species was recorded over a number of years, usually from man-made structures except on one occasion when I found it in reedmace standing in 15 cm of water whilst looking for *Tetragnatha striata*.



Figure 1. *Theridion hemerobium* Simon, 1914. Image by P. Harvey.

**Table 1. Records of *Theridion hemerobium* from Wanlip.**

06/09/96	1f	SK606115	on fence, 30 m to ditch, 100 m lake & river
27/04/97	1m	SK605117	in empty plastic barrel at side of fishing lake
01/06/97	2f	SK604115	on duck nesting box in marsh; in reedmace*
24/08/97	1f	SK604115	under fishing platform in marsh
06/06/99	4m5f	SK604116	under fishing platform in marsh

\* = more details in text above, m = male, f = female

*Theridion hemerobium* was forgotten for several years; then I moved house and started to collect in my new locality. About 200 m from my home, the Grand Union Canal runs alongside an area of rough open space with a minor sewage pumping station close to the canal. On 24th July 2003 two female specimens were collected from the steel barred fence surrounding the pumping station. They remained in the boot of my car for the following two weeks; they were then identified as *T. hemerobium*.

This find suggested that the species might be a lot commoner than previously suspected, so a series of collecting trips were organised aimed at finding this species in as many new 10 x 10 km squares within the county as possible. Ordnance Survey maps were consulted and the Rivers Soar and Trent, and the Grand Union Canal were selected to be visited. It soon became apparent that *T. hemerobium* was not being found on brick and concrete structures, but was present on wood and metal ones. So looking for this species on the many brick and concrete bridges that cross the Leicestershire waterways proved futile. This species did occur on the wooden railings of one bridge at Thurmaston (18th August 2003). I have no idea why this is the case, but suggest that competition from other *Theridion* species (*T. tinctum*, *T. mystaceum*, *T. melanurum* and *T. varians*) for breeding areas and possible threats from other spider species such as *Amaurobius* may be contributory factors.

This species is probably quite mobile and able to colonise new, relatively temporary structures such as fishing platforms, fences and signs. So far the specimens that have been collected all seem to be found in slightly shaded/sheltered areas and all seem to need to be either hanging/concealed under something (stiles, fishing platforms and signs) or in a small retreat on bare metal surfaces.

A further factor seems to be that in the county *T. hemerobium* is restricted to the canal and river systems, with the few lakes visited away from these producing no specimens.

In Leicestershire this species has been found on the Nottinghamshire border, in the north, on the River Trent; to the Northamptonshire border in the south, along the Grand Union Canal. At several places this species has only been found as singletons after an hour or so of searching; while at other sites (such as at Foxton 26/08/03) 6 specimens were collected in 15 minutes from a 50 metre stretch of the canal, with only a twentieth of the potential habitat being surveyed.

**Table 2. Leicestershire records of *Theridion hemerobium*.**

24/07/03	2f	SP574984	Leicester: on metal fence 20 m from Grand Union Canal
10/08/03	1m,5f	SP636966	Newton Harcourt: on lock gates, fence, and lock sign
11/08/03	2f	SK596128	Rothley: under fishing platform over lake on fence 40 m from river
13/08/03	1f	SK470309	Sawley Cut: on temporary 'footpath closed' sign at side of canal
15/08/03	1f	SK578016	Leicester: under wooden walk-way at side of canal
18/08/03	1f	SK608094	Thurmaston: on wooden bridge over the River Soar
26/08/03	8f*	SP699899	Foxton:*six on metal pilings at side of canal, 2 on metal sign board
26/08/03	1m,3f	SP701897	Foxton: on metal pilings at side of canal
26/08/03	1f	SP720901	Market Harborough: on metal sign-post, 5 m from canal
27/08/03	1f	SK518222	Loughborough: under top step of a stile, 5 m from the River Soar

Abbreviations as previous table

It is obvious from this small survey that this species has been vastly overlooked and is quite likely to be found to be commonplace along most of our canal and river systems throughout southern Britain.

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