

British Arachnological Society



PETER HARVEY
32 Lodge Lane
Grays
Essex RM16 2YP
Tel/fax: 01375 371571

SPIDER RECORDING SCHEME

NEWSLETTER NUMBER 37 July 2000

Many thanks to those who have contributed articles, notes and information for this issue. Newsletter No. 37 will be published in November 2000. Please send contributions as soon as possible to Peter Harvey, SRS National Organiser, 32 Lodge Lane, Grays, Essex, RM16 2YP email: grays@peterharvey.freerve.co.uk

Data entry continues at BRC and text production by volunteer authors for the Provisional Atlas is proceeding well, with over 160 draft accounts already completed. Publishing of the atlas remains on line for 2001.

It will soon be the time of year for adult *Argiope bruennichi*. Please keep a look out and report finds, especially any in new parts of the country, to your Area Organiser and myself. We should continue to investigate and monitor its changing status, as well as be on the lookout for more new species!

Spirec users

Stan Dobson, Moor Edge, Birch Vale, High Peak, Derbyshire SK22 1BX email: stand@beeb.net

Users of Spirec who change to a faster machine may find that it won't run and get error message 200. If they contact me I can send them a version that will run. I am grateful to Dr Alan Morton for supplying the means to overcome the problem, and to Francis Farr-Cox for suggesting that I contact Alan for help.

Please note my new e-mail address for sending material to me. The Museum address is still available.

Wanted - Spiders from Garden Centres

Dr. Steve Hopkin, Division of Zoology, School of Animal & Microbial Sciences, University of Reading, PO Box 228, READING, RG6 6AJ, UK. Email : s.p.hopkin@reading.ac.uk

I am supervising a couple of undergraduate Zoology students who are studying the spiders of garden centres for their Part 3 research projects. One student is looking at overall diversity and attempting to relate this to the length of time that the businesses have been established. The other is focussing on the behaviour and taxonomy of *Uloborus plumipes* which is extremely common in garden centres and glasshouses in the Reading area. *U. plumipes* first turned up at several widely separate localities in the early 1990s (Liverpool, Southampton, Reading) and must have been imported in a batch of plants although their exact origin is still a mystery. It would be helpful to us if members of the Spider Recording Scheme could send us any records of *U. plumipes*, or indeed specimens. The species spins a cribellate orb web up to 30 cm across although this is often much smaller if space is restricted. At rest, *U. plumipes* resembles a small piece of dried vegetation. It is dark brown to pale cream in colour and the egg sac is characteristically star-shaped. The front legs bear tufts of hairs which aid in the camouflage (hence plumipes).

An unusual record of *Mymarachne formicaria* (Salticidae)

Gabriel Weyman, Zeneca Agrochemicals, Jealott's Hill Research Centre, Bracknell, Berks RG12 6EY

A male *Mymarachne formicaria* (Salticidae) was found in an office at Zeneca Agrochemicals, Jealott's Hill International Research Centre, Bracknell, UK (map ref. SU8773) on 6 April 2000. Identification was made by Zeneca ecologists Peter Kennedy and Gabe Weyman, and confirmed by Peter Harvey of the Spider Recording Scheme. The Zeneca site is grass and arable, with some woods, and would not normally be the habitat of this spider, especially indoors on an office noticeboard! None of this species have been found there before, despite many years of invertebrate sampling. It appears that a colleague, Julie Pickervance, had been collecting pond-edge sweep-net samples from a wooded heathy area near Woking on 28 March 2000 (site map ref. SU939581) and may have accidentally been the source of this find. She commented that there were lots of spiders in the samples (a point she noted as she is not fond of spiders). She works in the next office along the corridor from where the *Myrmarachne* was found a week later. Anyone wishing to visit the site where the spider may have originated should contact the authors first, as it is private land and permission must be sought.

A new Area Organiser

I am pleased to report that Heidi Cunningham has taken as Area Organiser for Berkshire. Please send records and record cards for Berkshire (VC22) to Heidi M. Cunningham, 5 Furzebank, Sunninghill, Berks SL5 7BP

Draft species accounts

Over 160 draft species accounts have now been written. For practical reasons, these will only be circulated to Area Organisers and interested arachnologists for comment and feedback. Even though the atlas will very much be a provisional publication, we still need as far as possible to 'get it right' before the text is published. Please let me know if you would like to have an input to this important process.

There are two draft accounts included here, for *Atypus affinis* and *Nigma puella*.

Atypus is included because, although it is not officially Nationally Scarce or Notable, its discovery always provokes excitement and even press coverage. In my experience, even though the spider is difficult to locate and may well be under-recorded, it is genuinely scarce in the modern agricultural landscape. *Atypus* is very likely to have suffered a serious decline during the last half of the 20th century and I would be very pleased to receive feedback from other arachnologists on their own experience and judgement.

Atypus affinis Eichwald, 1830

Distribution

The spider is widespread in Europe as far north as Denmark (Roberts 1995). It is widely distributed in southern Britain but with scattered records as far north as Scotland.

Status

Scarce and very local but more common in the south. Large populations have been recorded but it is likely that much of our modern landscape supports only small isolated colonies.

Habitat and Ecology

Atypus is typically found in unimproved open habitats such as heathland, chalk grassland or other old grasslands. Most of its tubular web is underground and a friable substrate will aid burrowing. In heathland the spider prefers loose sand with young heather hanging loosely over it, and fairly free from moss and other close vegetation (Dallas 1938) and gravelly banks covered with tufts of heather (Main 1921-23). In grassland the spider often makes its tubes in the ground in undisturbed areas around the edge of scrub and at the base of ant hills. The silk tube is well camouflaged with bits of earth and debris and the spider can be difficult to find.

The presence of grazing may be a factor explaining an association with the edge of scrub. There are presumably significant resource implications for the rebuilding of purse-webs after trampling. *Atypus* must therefore require relatively

undisturbed habitats. Dallas (1938) had already identified "wear and tear" due to increased trampling, as the cause of the probable loss of some colonies in the London district.

The life of the spider is long, possibly up to 7 or even 8 years (Bristowe, 1958) and it spends almost all this time inside its purseweb. The main prey seems to comprise beetles, bees, flies, earwigs and woodlice. Males can be trapped in pitfalls and may be numerous at favourable sites.

The Nationally Scarce (Notable A) spider hunting wasp *Aporus unicolor* uses *Atypus* as its host, which it locates and paralyzes within the spider's silken burrow (Edwards 1997).

Females are adult all year. Bristowe (1958) states that during the winter months from about November to early February *Atypus* is in a state of hibernation at the bottom of the tube, and the aerial portion remains in a collapsed condition. At one site with a large population odd males have been trapped in the winter, but there is a main peak for September-October with smaller numbers in April and May.

Threats

The association with old and undisturbed habitats and the dramatic loss of heathland and unimproved grasslands in much of southern England mean that many colonies are isolated and liable to local extinction. Intensive grazing and public amenity pressure will threaten the survival of colonies through the effects of trampling.

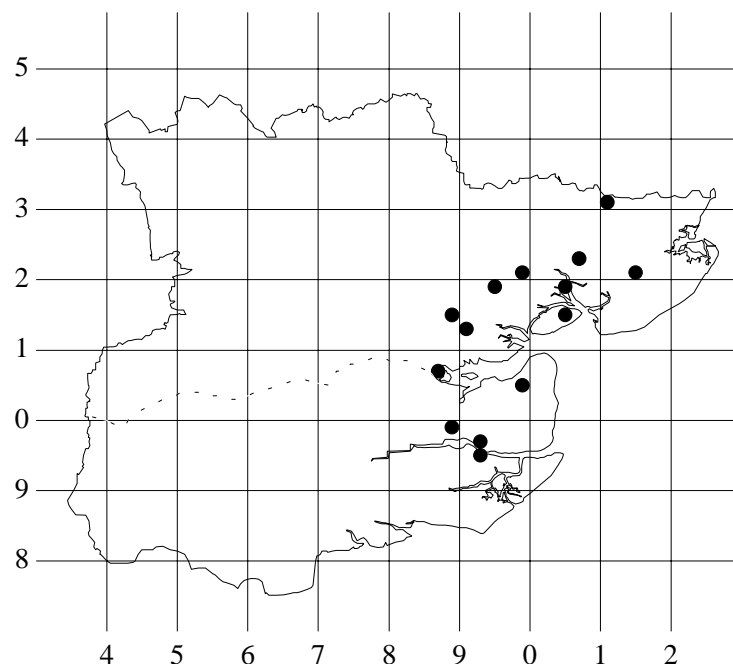
Management

The spider is vulnerable to inappropriate management. Without management to control scrub open habitat and open sandy or gravelly banks will disappear. On the other hand, trampling, intensive grazing and the cutting of grasslands is also likely to destroy colonies. Occasional management to control scrub would seem to be most appropriate.

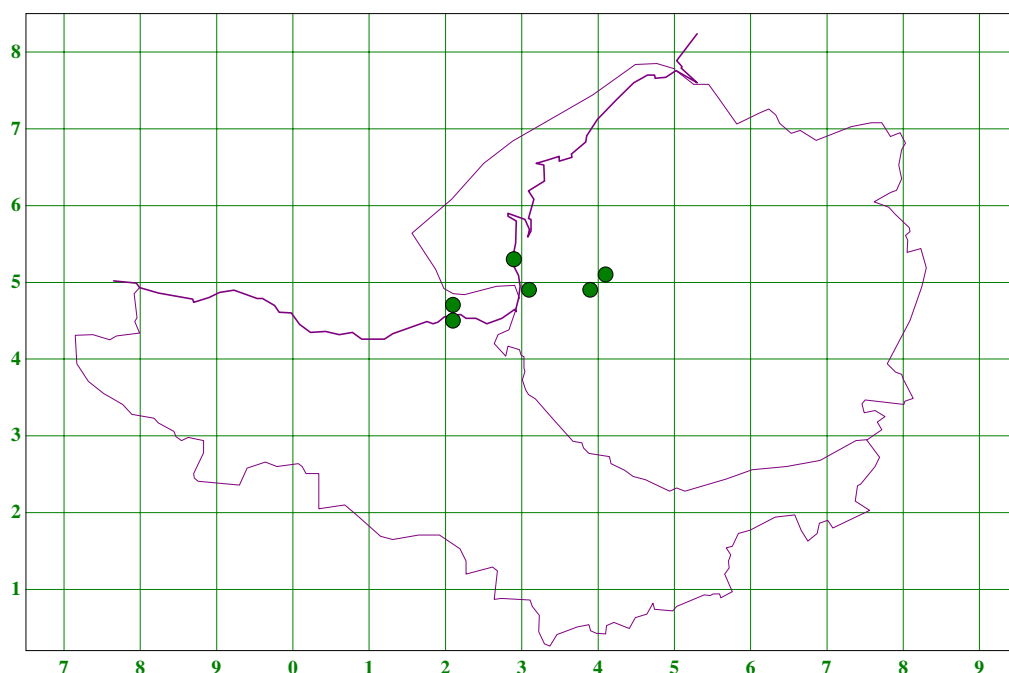
Author of profile P.R. Harvey

Nigma puella is presented here with two maps which show an unusual distribution pattern in both Essex and Somerset. I am very grateful to Francis Farr-Cox for making available the Somerset map. In Essex the spider is confined to an area near the coast in the east of the county where it is reasonably frequent. Extensive fieldwork has failed to locate it elsewhere in the county. The distribution in Somerset relative to the coast is so like the Essex one the national picture could be very interesting. It is almost as though the distribution has resulted from an initial point of introduction. Is the pattern repeated in other counties? Can anyone come up with other ideas to explain the distribution pattern?

Nigma puella distribution in Essex



Nigma puella distribution in Somerset (map by Francis Farr-Cox)



Nigma puella (Simon, 1870)

Distribution

The spider is restricted to south of a line from Suffolk to Glamorgan. It is widespread in western and southern Europe (Merrett 1990), but apparently rare or absent from the rest of northern Europe (Roberts 1995).

Status

Nationally Scarce (Notable B). The spider is very local and never abundant, but may be frequent in some areas.

Habitat and Ecology

The spider occurs on low broad-leaved bushes and shrubs in hedgerows and gardens, but also sometimes in scrub and open woodland. It spins a small web on the surface of leaves.

Both sexes are adult in May and June, with females until September. In North Essex females with egg sacs have been found in their webs on the under-surface of leaves in September but most records have been in June and July.

Threats

The excessive trimming and loss of hedgerows are likely to threaten this species. Where the species occurs on hedgerows between arable fields the spider and its potential prey are probably threatened by spray drift from pesticides.

Management

Open surroundings seem to be important. The retention of wide field edges and headlands should be encouraged to help maintain a diverse invertebrate fauna and reduce the effects of spray drift on hedgerows and at the edge of woodland. Management should prevent the closure of scrub and woodland.

Author of profile Peter Harvey, based on the species account in Merrett (1990).

References

- Bristowe, W.S. 1958. *The World of Spiders*. Collins New Naturalist series. London.
- Dallas, J. E. S., 1938. *Atypus affinis* Eichwald. in the London District. *London Naturalist*, **37**: 24-25
- Edwards, R. (Ed.) 1997. *Provisional atlas of the aculeate Hymenoptera of Britain and Ireland*. Part 1. NERC. Dorchester.
- Main, H. 1921-23. Notes on the Occurrence of the British Trap-door Spider, *Atypus affinis*, in Epping Forest. *Essex Naturalist*, **20**: 23-25
- Merrett, P. 1990. *A Review of the Nationally Notable Spiders of Great Britain*. No. 127. NCC. Peterborough
- Roberts, M.J. 1995. *Spiders of Britain and Northern Europe*. Collins Field Guide. HarperCollins. Bath.