

The Gloucester Mecopteran

Celebrating Scorpionflies

and enthusing entomologists

Vol 1, No 5: October 2015

Editorial:

All good things must come to an end, and with this edition Volume 1 of *The Gloucester Mecopteran* draws to a close.

In the few short months since its inception *The Gloucester Mecopteran* can claim to have raised the profile locally of one of our most fascinating, yet least known, groups of insects, and to have made a creditable start on exploring the role of scorpionflies in the environment and their distribution within the county of Gloucestershire.

Rather than risk becoming repetitive and dull *The Gloucester Mecopteran* will now enter a dormant phase. Volume 2 may appear in due course, but only if and when there is more to say.

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The editor hopes that you enjoy reading *The Gloucester Mecopteran* and that you will always treat our trio of winged scorpionflies with courtesy and respect, now that you have been properly introduced.

Page One Girl



A female Alpine Scorpionfly (*Panorpa alpina*), posing in a Romanian hay meadow at the foot of the Carpathian Mountains.

Mapping progress

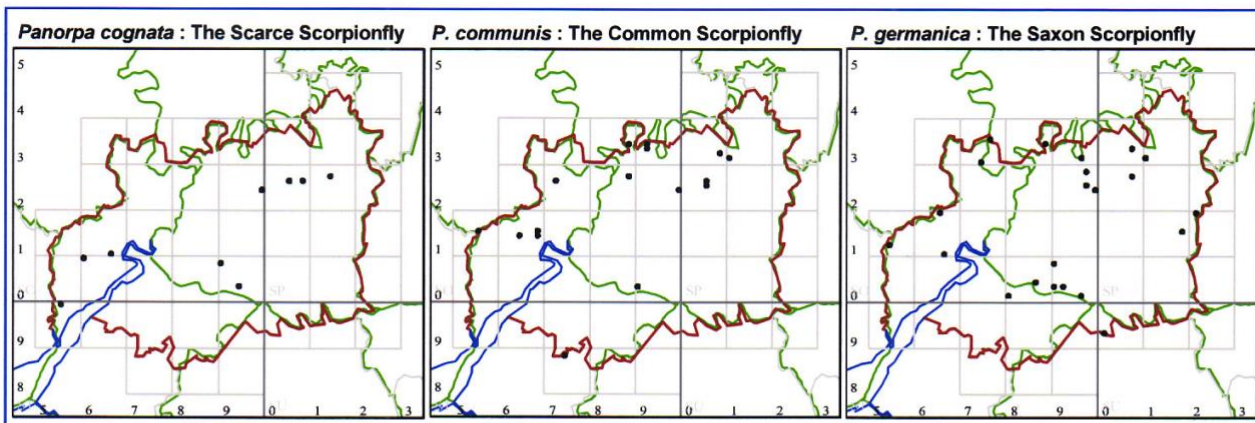
The set of maps you can see on page 2 updates the distribution of Gloucestershire's winged scorpionflies, as known currently to *The Gloucester Mecopteran*, compiled from records of identified male adults. The maps can be compared with those previously published in Vol 1, No 2 (March 2014); although there are additional records, parts of the county have not been surveyed at all, and coverage is obviously incomplete for all three species.

It seems that the **Saxon Scorpionfly** (*Panorpa germanica*) is the most widespread species in Gloucestershire.

The Gloucester Mecopteran is aware of 22 recent 1km square site records scattered across 14 of the county's 10 km grid squares. Rough grassland sites in the Cotswolds, particularly where woodland edge habitat or spreading bramble patches provide some cover, seem to provide ideal conditions, but it is likely that this species occurs throughout the county, wherever a wild or neglected corner can be found. The larger empty spaces on this map almost certainly reflect an absence of recording effort rather than an absence of this scorpionfly. Adults have been found from May through to September, remaining relatively easy to find later in the summer when the other two species have more or less disappeared.

The **Scarce Scorpionfly** (*P. cognata*) seems to be genuinely local in occurrence, with only 9 records scattered across 7 of our 10km squares. Adults have been recorded in June and July. Although the first few records of this species came from Cotswold grassland sites, it has also been found at damp woodlands in Tidenham Chase, The Forest of Dean, and the Windrush catchment. *The Gloucester Mecopteran* has no explanation for this oddly bimodal choice of habitats.

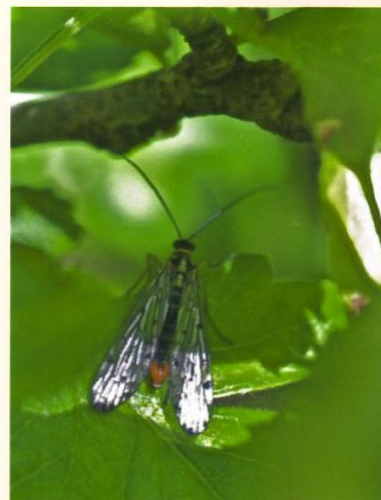
The distribution of the **Common Scorpionfly** (*P. communis*) as currently known (16 site records from 12 of the county's 10km grid squares) is probably understated as only records of males are mapped. Probable females of this species seem to be seen more often than males, but whether this reflects a real numerical or behavioural difference between the sexes isn't clear. The species can be found in a range of habitats, but it possibly avoids entering woodland except where there is some grassy ground vegetation in a glade or ride. It may be most at home where lush herbage abuts the cover of a tangled hedgerow.



A word about wings and things

Earlier keys to our native winged scorpionflies encouraged observers to identify species by their wing markings, Common Scorpionfly being the most heavily marked, Saxon Scorpionfly intermediate, and Scarce Scorpionfly the most sparsely marked. *The Gloucester Mecopteran* believes that, with a little practice, it is possible to make an intelligent assessment of the identity of a glimpsed specimen on this basis, but for formal recording it is sensible to require a proper sighting of the genitalia. In the field this necessarily means finding males (see page 2 of *The Gloucester Mecopteran* Vol 1 No 1; October 2013).

The central photograph below shows a typical male Saxon Scorpionfly, with a pattern of clear, separated wing spots. But what of the other two images? The specimen on the left has a similar appearance which suggests that it also is a Saxon Scorpionfly (the spots are usually more connected on the Common Scorpionfly): the one on the right appears to have the sparse markings of a Scarce Scorpionfly. In fact, checking the shape of their calipers shows that the specimen on the left is a lightly marked Common Scorpionfly and the one on the right is a lightly marked Saxon Scorpionfly.



Mecopterists peering closely at their favourite insects in secluded corners of the countryside may attract the attention of curious passers-by. In these troubled times The Gloucester Mecopteran strongly recommends "I'm looking at these fascinating bugs" as a suitable response to any interrogation, rather than "I'm making a study of male genitalia", which could lead to an unfortunate misunderstanding and an embarrassing interview with the county constabulary.

Readers in need of an activity for wet Sunday afternoons might consider identifying female specimens by dissection of their genitalia. According to a correspondent in Gwent who has had a go at this, the illustrations in 'A key to the adults of British lacewings and their allies' by Colin W. Plant (an AIDGAP publication) are satisfactory, but the key itself could have been better constructed. He also advises that it is possible to carry out the dissection in alcohol or water (rather than hot caustic potash) using a couple of hooked fine pins (he adapted size C entomological pins). Plant advises against making microscope slides, but our correspondent suggests that dimethyl hydantoin formaldehyde (DMHF) could be used for mounting reference specimens (apparently Gloucestershire moth genitalia have been preserved in this way).