# A third site in Britain for the small rove beetle *Gyrophaena tranversalis* (Staphylinidae: Aleocarinae): Wildgoose Rural Training & Nature Reserve.

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During the Worcestershire Recorders field visit to the Wildgoose Rural Training & Nature Reserve, Grimley, on 3rd August 2019 one of us (DB) found a large Dryad's Saddle bracket fungus *Cerioporus squamosus* on a log beside a track at SO834613. She tapped the fungus over a sweep net and was rewarded with a shower of hundreds of tiny rove beetles (01). MBS, who was standing nearby, offered to attempt identification, albeit with little confidence, so he collected about 20 beetles with a pooter.



01. *Gyrophaena* species from Dryad's Saddle fungus. Martin Skirrow.

Microscopic examination of the beetles confirmed that they were staphylinids averaging 1.8 to 2.0 mm in length. On consulting Harde's book on beetles (Harde, 1999) a good match was found with an illustration of *Gyrophaena affinis*, and the text stated that species of this genus were associated with fungi. Getting warm! A search for *Gyrophaena* on the internet revealed a website by Mark Telfer with a photo of *Gyrophaena joyi*, which looked very like the Grimley beetles. Contact was made with Mark Telfer who pointed out that there were 20 British species of *Gyrophaena*, all looking similar, and that dissection of males was the most reliable way to identify the species.

Accordingly MBS dissected a male and the aedeagus was successfully extracted. A photograph (02) was sent to Mark Telfer who provisionally identified it as *G. transversalis*, apparently only the second record of this species in Britain. His identification was confirmed by Roger Booth of the Natural History Museum, who was the first to find *G. transversalis* in Britain — in Laleham, Middlesex in June 2005 (Booth & Galsworthy, 2008). It was then found that *G. transversalis* had been found in Cheshire by Clive Washington in January 2019 and that a report on this was in preparation.

MBS subsequently sent five more Grimley specimens to Mark Telfer who identified four as *G. transversalis* and one as *G. fasciata*. Mark Telfer and a colleague visited the Wildgoose Nature Reserve with MBS three weeks after the original discovery, but despite a thorough search, the original bracket fungus could not be found. A general search for fungi was largely unproductive, although a few large bracket fungi of a different species were found but without any associated beetles.



02. Aedeagus from *Gyrophaena transversalis* from Dryad's Saddle. Martin Skirrow.

## G. transversalis habitat

It is evident that all three sites where *G. transversalis* has been found in Britain have features in common. The first specimens were taken in flight interception traps in an area of marsh that adjoined an old flooded gravel pit. The Cheshire specimens were from the Anderton Nature Reserve, adjacent to the River Weaver, where there is recent birch (*Betula*) woodland with fallen trunks and attached fungal growth. One such fungus with a brown cap fruiting body (unidentified) was the source of the species there. Our Grimley site also has flooded gravel pits where there is woodland and fallen trees of several species: several *Salix* spp., oak (*Quercus*), birch (*Betula*), hazel (*Corylus*). It would be worth looking for the species at other similar sites in Worcestershire, and indeed elsewhere. At least we have access to experts who can help with identification of this difficult group.

## A note on identification

The shape of the 6th visible tergite of male *Gyrophaena* is a helpful feature in identification and this can usually be seen without the need for dissection. However, in the case of *G. transversalis*, there is some confusion. Some specimens have one or more small central tubercles along the hind margin in addition to the large outer projections, whereas others, as in our specimens, have none (03). This variation is discussed in a recent paper summarising the status of *G. transversalis* in Britain, which includes our Worcestershire records (Washington & Booth, 2019). A key for the identification of European *Gyrophaena* species is available on-line (Lompe, 2019).



03. 6th tergite from male *Gyrophaena transversalis* from Dryad's Saddle. Martin Skirrow.

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#### References

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Images

01. *Gyrophaena* species from Dryad's Saddle fungus. Martin Skirrow.

02. Aedeagus from *Gyrophaena transversalis* from Dryad's Saddle. Martin Skirrow.

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