

Wyre Forest Study Group

Gonatopus clavipes (Thunberg, 1827) Dryinidae, Hymenoptera. A tiny wasp recorded in Wyre Forest.

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On the 24 August 2021 at Postenplain, Wyre Forest I was looking for insects along a heathy ride when I spotted what I first took to be an ant moving in some oak leaf litter. It looked different so I collected the specimen for a closer examination. It proved to be a tiny wasp some 3mm long, but as to which species I had no idea. Closer examination revealed it was a DEB wasp (a grouping of three Families of tiny wasps) which I initially identified as being *Gonatopus clavipes* using Wasps of Surrey (Baldock 2010). I sent an image to Nigel Jones who agreed it was *Gonatopus* but needed the specimen to key to species, this was done and Nigel was able to confirm it was *G. clavipes*, a new record for Shropshire (Jones & Cheeseborough 2014).

Gonatopus clavipes is a solitary wasp in the family Dryinidae that superficially resembles an ant. It is a parasitoid of leafhoppers in the subfamily Deltocephalinae. There are 21 records on the NBN database but none in the West Midlands area.

The adult female *G. clavipes* searches around hunting for leafhoppers, when she locates one, she pounces on it and injects venom to paralyse the leafhopper. A single egg is inserted into the abdomen between the tergites with her ovipositor. The leafhopper recovers

and carries on as normal but the wasp larva starts developing inside the abdomen, eating the leafhopper. It takes about two or three weeks before the leafhopper is dead. The wasp then leaves and makes its cocoon on the ground, it can emerge as an adult in about five weeks but often overwinters in the cocoon, pupating during the following spring (O'Neill 2021).

Considering the size and secretive nature of this wasp it could be fairly common in Wyre Forest but nationally records are few, perhaps it may require a stable and quality habitat, such as an ancient forest, to maintain a viable population. Perhaps it is just overlooked which is hardly surprising.

Thanks to Nigel Jones for confirming the identification.

Note: Photo taken inside glass tube, specimen in Shropshire Hymenoptera collections.

References

- Baldock, D W. (2010) *Wasps of Surrey*. Surrey Wildlife Trust.
- Jones, N. and Cheeseborough, I. (2014) *Provisional Atlas of the Bees, Wasps and Ants of Shropshire*. Field Studies Council.
- O'Neill, K. (2001) *Solitary Wasps: Behaviour and Natural History*. Cornell University Press. pp. 16–18.



Gonatopus clavipes

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