

Solitary cuckoo-bee *Stelis phaeoptera* (Kirby,1802), new to Worcestershire.

Denise and John Bingham

On the 9th June 2020 Denise Bingham collected a black bee (01) found in our Kidderminster garden (grid ref; SO 8477). It was resting on our ‘bee hotel’ fence post (a wooded post with various holes drilled for nesting bees). On examination I determined it as *Stelis phaeoptera*, a cuckoo-bee species I had not encountered before. The bee was photographed and the specimen kept as a voucher (02). I emailed an image to Geoff Trevis as county recorder for Aculeate Hymenoptera who kindly confirmed my identification was correct and added that this was a new species of bee for Worcestershire.



01. *Stelis phaeoptera*, Kidderminster garden. John Bingham



02. *Stelis phaeoptera* specimen from Kidderminster. John Bingham.

Information on the BWARS web site states that the species was formerly widely distributed in England, mainly south of a line extending from the Severn to the Wash, with additional records from Monmouthshire (Hallett, 1956). Recent records are only from a few scattered localities in England (especially in Devon) and south Wales. The reason for the decline is unknown. Also, the *Provisional Atlas of Bees, Wasp and Ants of Shropshire* (Jones & Cheeseborough 2014) has 19 records for five sites in the county, the nearest site to Kidderminster being near Ironbridge. They state that Shropshire and the Welsh Marches area can probably be regarded as a stronghold for the species. It is provisionally listed as Vulnerable (pRDB2) by Falk (1991) but more records are appearing and the species now seems to be expanding its range, recently into Staffordshire (reported from Highgate Common).

The host species of this *Stelis* have not been confirmed but Megachilinae bee species may be hosts of this cleptoparasite in Britain (BWARS web site). However, Steven Falk states that the main host is *Osmia leaiana* and it occurs in a similar range of habitats, especially gardens.

Both *Osmia* and *Megachile* species were nesting within the fence post where it was recorded, including *O. leaiana*, the most likely host. The flight period appears to be quite short, from 8th June to 12th July in Shropshire and may be a factor in why the bee is not recorded more often. This suggests it could be overlooked in north-west Worcestershire although still likely to be very rare. A further two *S. phaeoptera* bees were noted in the garden during the following week, all around the ‘bee hotel’ area.

Acknowledgements

Thanks to Geoff Trevis for kindly confirming my identification.

References.

- BWARS web page. Available at: <https://www.bwars.com/index.php?q=bee/megachilidae/stelis-phaeoptera>
- Steven Falk web page. Available at: <https://www.flickr.com/photos/63075200@N07/sets/72157633239443741/>
- Jones, N. P. & Cheeseborough, I. 2014 *A Provisional Atlas of the bees, wasps and ants of Shropshire*. Field Studies Council.

Images

- 01. *Stelis phaeoptera*, Kidderminster garden. John Bingham
- 02. *Stelis phaeoptera* specimen from Kidderminster. John Bingham.