

***Stelis phaeoptera* (Kirby, 1802) in Shropshire – a noteworthy concentration of recent records and confirmation of *Osmia leaiana* (Kirby, 1802) as a host species in Britain.**

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*Stelis phaeoptera* has never been considered a common species in Britain, the BWARS database holding only 90 records for the 189 year period since 1823. These records arise from just 48 localities restricted to southern England from Kent to Cornwall, Gwent, mid Glamorgan, the England/Wales border country and Suffolk. In addition to the records held by BWARS, there are a few others for Cambridgeshire and Suffolk (mainly from the Natural England Invertebrate Site Register). Finally, the BWARS database contains a single record from Borth on the mid Wales coast of unknown date, but collected by C. H. Mortimer who recorded this bee from two other localities between 1903 and 1930 (including eight records from Holmwood, Surrey).

The post 1970 period has seen a serious decline of *S. phaeoptera*. Falk (1991) could only account for seven records between 1970 and 1991. Seven years later the 1998 aculeate Hymenoptera Atlas (Edwards, 1998) states that “Recent records are only from a few scattered localities in England (especially in Devon) and south Wales”. Else (in prep.) considers the species to be “A very rare and decreasing species in Britain”. Baldock (2008) considered the species extinct in Surrey having noted that it was considered relatively common in the county until 1930. In the intervening twenty years since the publication of Falk’s Review, there have been further records from only twelve sites. These are scattered across the vice counties of Cambridgeshire, South Hampshire, South Devon, North Devon, Glamorganshire, Denbighshire and Shropshire. Of these recent records three sites are in Glamorganshire, where there appears to be an established population, and four sites are in Shropshire.

All the Shropshire records are post 2003, with the first encounter occurring in June 2003 when a single female was taken by Ian Cheeseborough from a wall in a churchyard at Ruyton XI Towns in north Shropshire. Four years later, on 8 June 2007 Nigel Jones took a single male specimen in his garden in suburban Shrewsbury, since when, both sexes of the bee have occurred annually in the garden in low numbers. Males and females were frequently seen investigating trap-nests used by various aculeate species. Females were searching for host nests, whilst males were presumably searching for emerging females. A female has also been seen searching a wall of the house for suitable host nests. Very soon after the Shrewsbury discovery, Ian Cheeseborough took a single male at Craven Arms in south Shropshire on 12 June. This was investigating nests in a timber fencepost. Finally, an acquaintance passed some trap-nests, made from dried hogweed *Heracleum sphondylium* stems, which had been placed during 2007 in a garden at Bayston Hill, a settlement a few miles south of Shrewsbury. From these stems, on 11 June 2008, two male *S. phaeoptera* emerged. By 14 June, four males and two females emerged, and from the same stems specimens of *Osmia leaiana* (Kirby, 1802) also emerged, confirming that species as a host of *S. phaeoptera* in Britain.

The trap-nests searched by *S. phaeoptera* in the Shrewsbury garden include oak fence posts and blocks of softwood that have had various sized borings drilled into them, sections of bamboo canes, hogweed stems and commercially acquired cardboard tubes. The latter are designed to

attract *Osmia bicornis* (Linnaeus, 1758).

During 2011 the authors plan to pass trap-nests to residents around the Shropshire area, with a view to retrieving the trap nests in late summer and recording which species emerge the following season. It is hoped that further sites for *S. phaeoptera* will be discovered in this way. Also this may help to establish which, if any, other species are hosts for *S. phaeoptera*. We will report the results of this investigation in a future BWARS newsletter.

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