

The Bilberry Bumblebee, *Bombus monticola*, in the Wyre

CAROL TAYLOR WITH COMMENTS FROM BRETT WESTWOOD



Bombus monticola, Button Oak Meadow 7/6/17 R. Winnall

As new members of the Wyre Forest Study Group, every meeting for us is a new site as we do not know the area. At the Wyre Forest Study Group meeting on Wednesday 7th June 2017, we visited Button Oak Meadow, a Worcestershire Wildlife Trust/Shropshire Wildlife Trust reserve, to look for insects in the flower-rich meadow. While looking over the meadow for anything else of interest, I saw an odd-looking bumblebee nectaring on Bird's-foot-trefoil (*Lotus* sp.), and managed to catch it.

It was a very new queen, and could only be *Bombus monticola*, the Bilberry Bumblebee, which John and I are familiar with on the Stiperstones. I showed it to Rosemary Winnall, and was amazed at her reaction - it was a Wyre Forest first! After showing it round, I looked around to see if there were any others, and caught another, more worn specimen, this time a worker, collecting pollen, also on Bird's-foot-trefoil.

Bombus monticola is a red-tailed bumblebee, but the red tail is far more extensive than on *B. lapidarius*, *B. rupestris* or *B. ruderarius*, extending two-thirds of the way up the abdomen. Falk describes it as a "very distinctive small, short-faced bumblebee with the abdomen red-haired from tergite 2 onwards, a conspicuous pale yellow collar and a yellow-grey fringe to the scutellum." It is usually associated with Bilberry (*Vaccinium myrtillus* L.) on moorland with heather, but needs a mixed habitat to provide a succession of nectar plants. It is a declining species and has been included on English Nature's Species Recovery Programme.

The new queens emerge from hibernation in April, with workers present from May onwards, and males and new females from July to September or even into early October. Nests are built underground, often in old mammal nests. Colonies are small, often with fewer than 50 workers and last for about 3-4 months. It is probably

parasitized by the 'cuckoo' bee, *B. sylvestris*, which is also associated with *B. pratorum* and *B. jonellus*.

Although bumblebees do not usually require particular flowers to survive, *B. monticola* is very rarely found away from areas with Bilberry (*Vaccinium myrtillus*). It has strong preferences for visiting bilberries (*Vaccinium* sp.) and willow (*Salix* sp.) in spring; Bird's-foot-trefoil (*Lotus* sp.), clovers (*Trifolium* sp.), Raspberry (*Rubus idaeus*) and bramble (*Rubus fruticosus* agg.) in early to mid summer and Bell Heather (*Erica cinerea*) in mid to late summer.

Sladen (1912), who knew the species as *B. lapponicus*, records it as only found in mountainous districts, with a few exceptions which include records from Herefordshire, Gloucestershire, and also Malvern.

Comments from Brett Westwood

Inspired by Carol's excellent find, on July 7 Harry Green, Rosemary Winnall and I spent a couple of hours searching for *B. monticola* in Button Oak Meadow, but without success. We headed into the Forest along one of the tracks through Longdon towards an area of Bell Heather and were delighted to spot a worker nectaring on White Clover (*Trifolium repens*) in the middle of the path. It was noticeably small and agile, but with a very large area of reddish-orange hair on its abdomen. Having netted and photographed it, we released the bee which fed immediately on Bell Heather, locally frequent here.



Bombus monticola, Button Oak trackside, 7/7/17 H. Green

Wyre has large areas of Bilberry, so it's possible that *B. monticola* could have existed here at low levels for some time. An intriguing recent report from naturalist Peter Creed of one nectaring on Bilberry along the railway line in Worcestershire (a vice-county in which there are no recent records) will guide our searches next spring when we will try to find out more about its distribution in Wyre.

However *B. monticola* is in decline nationally, so if it has arrived recently, where has it come from? A possibility is that it derived from upland Shropshire where it has strong colonies in the Long Mynd and Stiperstones areas. There are also records from Haughmond Hill near Shrewsbury and at Abdon Burf on Brown Clee Hill. Another potential origin of Wyre's *B. monticola* is Catherton Common on Titterstone Clee Hill, just a few kilometres from the Forest. Until this summer there were no known records (Jones and Cheeseborough). On July 30 I visited Catherton with Rosemary Winnall to photograph *Bombus jonellus* which I'd found to be locally frequent on Bell Heather there. We were delighted to find a single worker *B. monticola* clinging to a Common Heather (*Calluna vulgaris*) stem on the open common and were able to catch and photograph it to confirm its identity.

This area has been managed to encourage heathland species and following scrub and bracken control, is rich in late summer nectar sources, especially Bell Heather. Given that entomologists have searched in



Location of *Bombus monticola*, 7 July 2017 R. Winnall

vain for *B. monticola* here in recent years, it's possible that the Common has recently been colonised by the bee, attracted by the growth of heathers, and that has provided a stepping-stone to Wyre. If so, it's a good demonstration of the importance of linking suitable bee habitats across the landscape. Encouraging summer flowers in the Forest, especially clovers, trefoils and Bell Heather, should be a priority if we want to maintain this attractive bee's presence at what is probably its most south-easterly British site.

References

- Jones, N & Cheesebrough, I: A Provisional Atlas of the Bees, Wasps and Ants of Shropshire
- Sladen, F.W.L., The Humble-Bee Downloaded from BWARS website
- Steven Falk, Field Guide to Bees of Great Britain and Ireland



Wyre Forest Study Group, Button Oak Meadow, 7 June 2017

Rosemary Winnall