

Monitoring the arrival and spread of Orthoptera and Allied Insects in Worcestershire.

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As with many groups of insects, the Orthoptera and allies are continuing to expand their ranges across Britain. Worcestershire is ideally situated, sitting on a line between the Severn estuary and the Wash, to notice these changes (Farmer 2018). In recent years we have seen the arrival of Long-winged Conehead from the south and Roesel's Bush-cricket from the south-east, with these two species now being found right across the county. We have recorded the local range expansion of species such as Speckled Bush-cricket, Slender Groundhopper and Lesne's Earwig. There are also a few species which are getting very close to colonising Worcestershire (if they aren't already) and these include Great Green Bush-cricket (still only known from Dave Scott's 2014 Record from Longdon Marsh), the Southern Oak Bush-cricket, Rufous Grasshopper and Woodland Grasshopper.

A recent article in *British Wildlife* (Sutton & Beckmann 2020) highlighted several species that have undergone range expansion in Britain and Europe and some that have recently become established in Britain. While we would encourage the continued recording of all Orthopterans and allies in Worcestershire, with things changing so rapidly there are a few species worth looking for over the next few years.

Lesne's Earwig *Forficula lesnei*



01. Lesne's Earwig female. G. Farmer.

Lesne's Earwig (01) is a flightless species with a stronghold in the Vale of Evesham and surrounding area. It is associated with river corridors especially the Worcestershire Avon. It has been found along the Severn in recent years and in 2020 an immature Lesne's Earwig was found in the Teme valley near Stoke Bliss. Searches along these rivers and smaller water-courses may locate further colonies of this species. It is also worth checking old connected hedges, especially elm.

Stripe-winged Grasshopper *Stenobothrus lineatus*



02. Stripe-winged Grasshopper. G. Farmer.

Stripe-winged Grasshopper (02) has not been recorded in Worcestershire since 1999 and only from single records at two locations on the Malvern Hills. Searches of these areas has failed to

find this species again but recent habitat management for butterflies on the Hills might offer an opportunity for this grasshopper.

Large Marsh Grasshopper *Stethophyma grossum*



03. Large Marsh Grasshopper. John Bingham

In Britain Large Marsh Grasshopper (03) is restricted to acid bogs and marshes, often associated with *Sphagnum* mosses. It was thought to be extinct in Somerset since 1995 but there have been new records from that county in recent years including over 1,000 individuals in areas of rush *Juncus* meadows in 2020 (Sutton & Beckmann 2020). The same *British Wildlife* article states that this species "no longer has the strict edge-of-range habitat requirements" across some European countries and this has led to a dramatic range expansion in those countries. This species may well start to expand its range in Britain, leaving its traditional habitats as has happened in Europe. Keep an eye open in waterside habitats in the future.

Rufous Grasshopper *Gomphocerippus rufus*

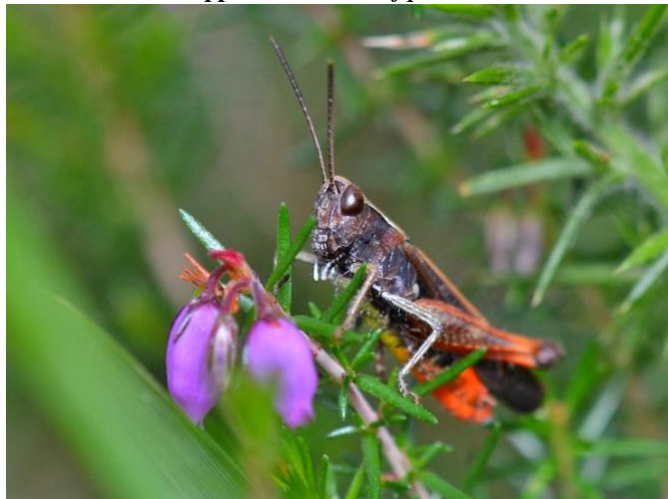


04. The distinctive antennae of Rufous Grasshopper. G. Farmer.

Rufous Grasshopper (04) is a species of calcareous grassland, with long grass and open areas providing basking sites. It occurs on landslips along the south coast and is known from inland sites including an area near Painswick, Gloucestershire. Check rough

(calcareous) grassland on south facing slopes possibly around Broadway or Bredon.

Woodland Grasshopper *Omocestus rufipes*



05. Woodland Grasshopper showing white palps. G. Farmer.

Woodland Grasshopper (05) is a species of sunny woodland edge, scrub and heath. Very similar in appearance (and sound) to the Common Green Grasshopper. It is most common in the south and east of England with the New Forest being a stronghold. Colonies occur further north with records just south east of Cheltenham at Chedworth Railway Cutting Nature Reserve.

Great Green Bush-cricket *Tettigonia viridissima*



06. Great Green Bush-cricket. G. Farmer.

Great Green Bush-cricket (06) is a very large species but some confusion occurred with several old records for Worcestershire which were dismissed, the reasons are discussed in Worcestershire's Orthoptera (Farmer 2018). In 2014 a juvenile Great Green Bush-cricket was seen at Longdon Marsh in the south of the county but searches later that year and in 2015 failed to find any others. Further searching in the south of Worcestershire may well turn up established colonies of this spectacular insect.

Southern Oak Bush-cricket *Meconema meridionale*

Southern Oak Bush-cricket has become established in Britain in recent times and being flightless is likely to be a hitchhiker, moving around on vehicles and garden plants. While I was writing this article in November 2020, I did some internet searches looking for more information and discovered to my surprise that an individual had been recorded with photographic evidence, near Worcester in 2019 (see article elsewhere in this publication). So we have Southern Oak Bush-cricket in the county, but how well established is

it? This is a wingless species and is a nocturnal predator. Evans & Edmondson (2007) suggest searching on the trunks of broadleaved trees at dusk. David Williams informed me that NBN Atlas shows that someone has got multiple records of southern oak from industrial estates in Nottingham & Northampton, along the roads where there are trees overhanging & parked lorries and the first Shropshire record came from a moth trap in 2020. This observation is interesting because its winged cousin the Oak Bush-cricket does not enter moth traps. Look for this flightless bush-cricket if you run a moth trap or check the tree trunks in your garden or local park at night, and don't forget to keep an eye open if you are loitering in an industrial estate at dusk.

Sickle-bearing Bush-cricket *Phaneroptera falcata*

This one is a bit of a long-shot but records are increasing in England with individual being found on the coast as far north as Yorkshire. Sickle-bearing Bush-cricket is another species spreading rapidly across Europe and favours scrub habitat with the main British colony located in a "substantial stand of Rosebay Willowherb" (Benton 2012).

References

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