

# South Cheshire Rare Moths Project

## Summary Report December 2019

Tom Hayek and Charlie Bell

### Scoping Day

A scoping visit was carried out on 21<sup>st</sup> March 2019. This involved meeting with the site managers at Bickley Hall Farm (managed by Cheshire Wildlife Trust) and the Cholmondeley Estate (privately owned) and walking the sites to identify suitable sampling locations for the target species (Fig. 1).

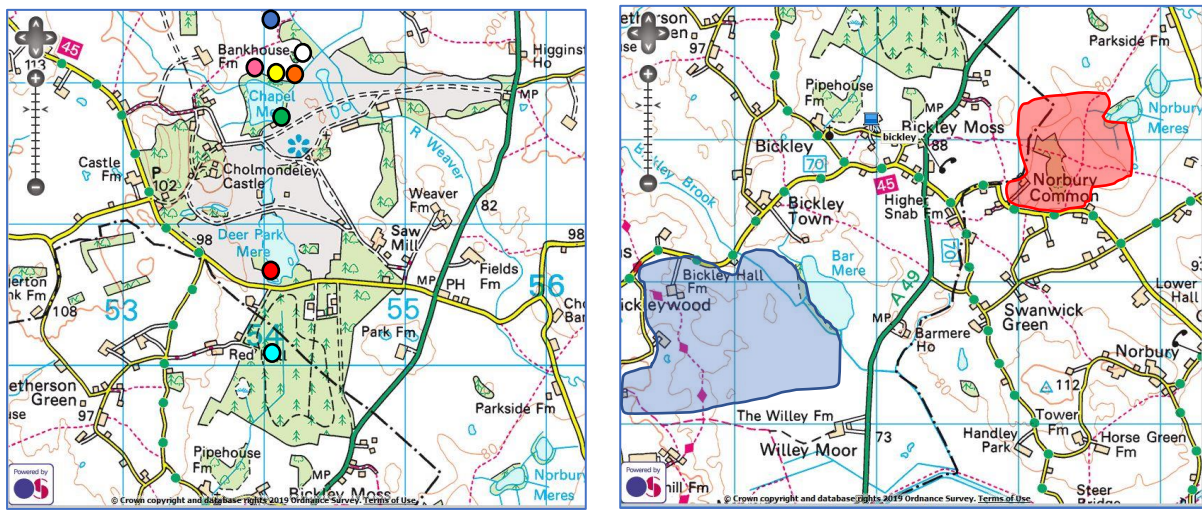











Figure 1: Locations for all sampling sites.

Above right: Bickley Hall Farm (blue) and Common Farm (red). Shading shows approximate area within which hedgerows were searched.

Above left: Site locations of pheromone and light traps

Symbol	Site	Symbol	Site
	L1		L5
	L2		L6
	L3		L7
	L4		L8
			L9

### Target species

#### Goat Moth (*Cossus cossus*)

Visit 1: 19<sup>th</sup>-20<sup>th</sup> May 2019

During the scoping visit we identified areas of suitable goat moth habitat (old rotting trees in low-lying wetland with poplar, oak and willow) and found several rotting logs with large exit holes. We visited these on Visit 1 and searched for goat moth larvae but without success.



Potential goat moth larvae habitat, Chapel Mere, May 2019 © Tom Hayek

Two goat moth pheromone lures were hung overnight on 19<sup>th</sup> May on trees in suitable habitat, one at Deer Park Mere (L1) and one at Chapel Mere (L2). Although out of the main flight season, we still decided to try this method on Visit 1. The traps were checked in the morning of the 20<sup>th</sup> and no goat moths were found.



Goat moth pheromone trap at Deer Park Mere, May 2019 (left) and light trap at Chapel Mere (right), July 2019 © Tom Hayek

It was our intention to run light traps overnight on 19<sup>th</sup> May at two locations in suitable goat moth habitat on the Cholmondeley estate. Unfortunately, on setting up the traps the generator failed and so we were unable to run the light traps as planned. We spent some time netting moths using our headtorches and recorded the species we caught – no goat moths were found.

#### Visit 2: 1<sup>st</sup>-2<sup>nd</sup> July 2019

Two goat moth pheromone lures were hung in suitable habitat at Chapel Mere (L3 and L4) overnight on 1<sup>st</sup> July and checked in the morning. No goat moths were found.

Two light traps (Robinson MV and Skinner MV) were run at Chapel Mere (L5 and L6) overnight on 1<sup>st</sup> July and checked in the morning of 2<sup>nd</sup> July. No goat moths were found.

## Large Red-belted Clearwing (*Synanthedon culiciformis*)

Visit 1: 19<sup>th</sup>-20<sup>th</sup> May 2019

On 19<sup>th</sup> May pheromone lures were placed in a clearing within birch woodland (Moss Wood, L7) and in alder woodland on the edge of a wetland (Deer Park Mere, L1) between 11:00 and 17:00. Unfortunately the target species was not found.



Clearwing pheromone trap set at Moss Wood (L7), May 2019 © Tom Hayek

On 20<sup>th</sup> May these lures were placed in clearings at Chapel Mere (L8 and L9), again without success.

Visit 2: 1<sup>st</sup> – 2<sup>nd</sup> July 2019

This visit was outside the flight season so the clearwing pheromone traps were not set.

## Small Eggar (*Eriogaster lanestris*)

Visit 1: 19<sup>th</sup>-20<sup>th</sup> May 2019

The timing of the first visit was right at the start of the larval field season for this species, so any webs and caterpillars would be very small. Our plan was to locate potential *E. lanestris* webs in hedgerows and revisit them during Visit 2 to confirm identification.

2.25km of suitable hedgerow (predominantly hawthorn and blackthorn, the main food plant) was searched at Bickley Hall Farm on 19<sup>th</sup> May. Several small webs were found but most were presumed to be *Yponomeuta* sp. as the caterpillars were the wrong colour for *E. lanestris*. The locations of any other possible *E. lanestris* webs were noted for checking during Visit 2.



Left: Web of *Y.padella*, Bickley Hall Farm, May 2019; Right: Ideal *E. lanestris* habitat, Common Farm, July 2019 ©Tom Hayek

### Visit 2: 1<sup>st</sup> – 2<sup>nd</sup> July 2019

The timing of this visit was when any larval webs of *E. lanestris* should be well developed and obvious. Verified social media reports in the week before Visit 2 suggested a *E. lanestris* site local to us in Shropshire and to try and ‘get our eye in’ for this species we made a short detour to the site *en route* to Cholmondeley on 1<sup>st</sup> July. However, we were unable to find the webs.

4.3km of suitable hedgerow was searched at Bickley Hall Farm on 1<sup>st</sup> July and any potential web locations from Visit 1 were revisited. Many webs were found, larger and more developed than in Visit 1, but all were identified as *Yponomeuta* sp.

On 2<sup>nd</sup> July we also visited an adjacent farm (Common Farm, see Fig. 1) and walked 3km of suitable hedgerow. No *E. lanestris* webs were found.

## Other shortlisted species found

### *Coenagrion pulchellum*

On both days during Visit 2 we netted this species at Chapel Mere. This is a new site for this species (according to NBN) – this will be checked with the county recorder.



Variable damselfly showing characteristic thoracic marks, Chapel Mere July 2019 © Tom Hayek

## Species records

In total 147 invertebrate records were made. A breakdown of these records by Order is shown below in Fig. 2.

A full species list for both visits will be sent to the relevant record centre and county recorders.

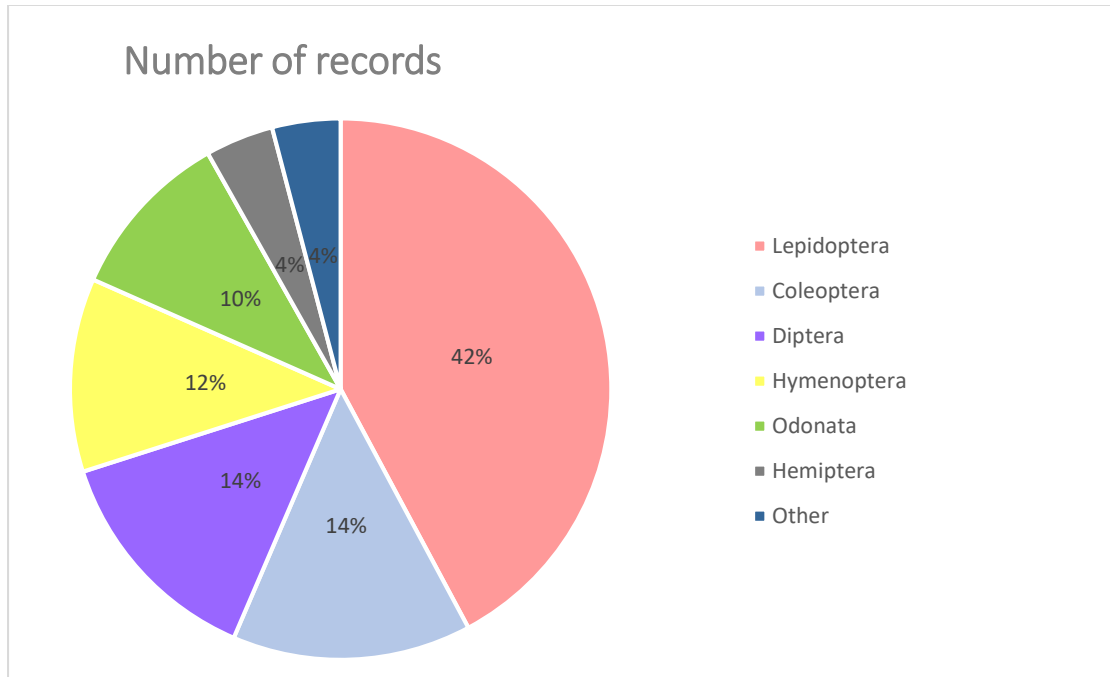


Figure 2: Invertebrate records broken down by Order

## Acknowledgements

Many thanks to the following:

- The Tanyptera Trust for funding the project
- The Cholmondeley Estate and Cheshire Wildlife Trust for granting access to their land
- The many members of various Facebook invertebrate ID groups, who helped us with some of the identifications
- Tereza and Dave, who wanted to be part of SCRaM really