

# North East England GMS Report

## Second Quarter 2024

In 2024, Quarter 2 of the GMS ran from Friday 3<sup>rd</sup> May until Friday 28<sup>th</sup> June.

### Number of GMS participants

I received valid GMS recording forms from 27 participants in 2024, quarter 2. Of these 10 were in County Durham (VC 66), 14 were in South Northumberland (VC 67) and 3 were in North Northumberland.

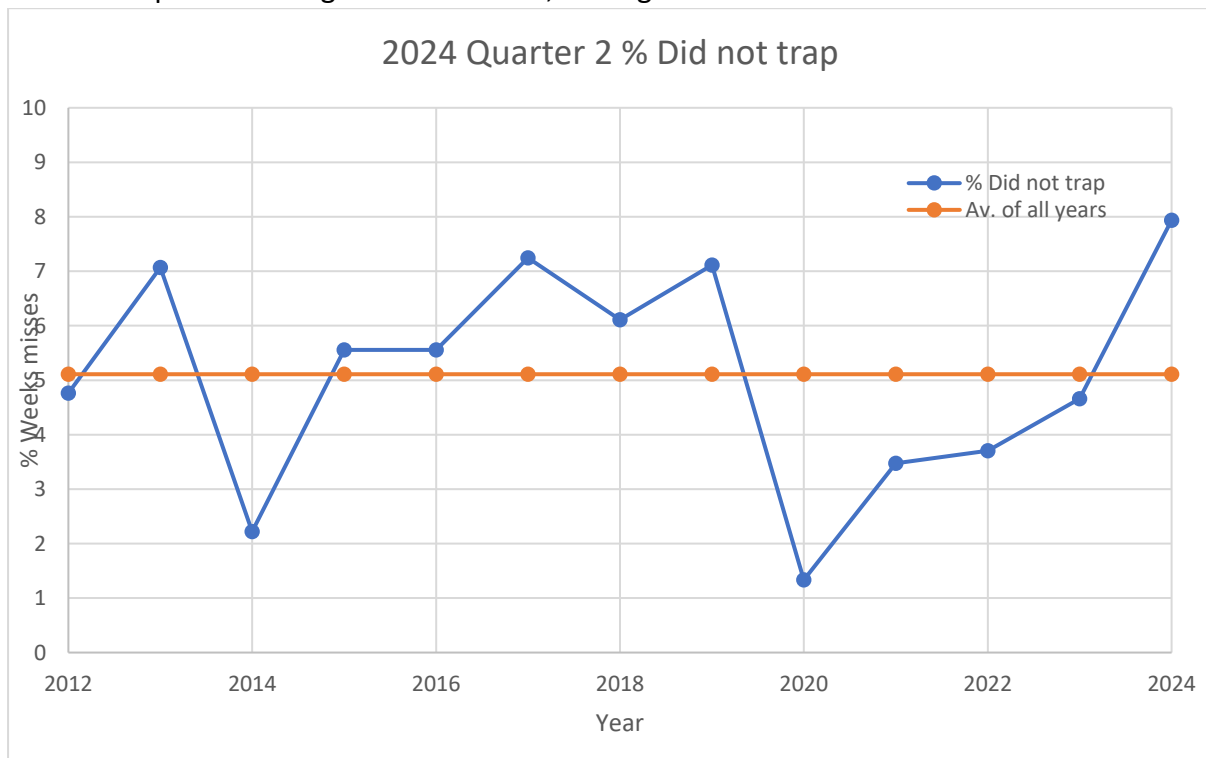
### Loan traps

I have six traps that I lend each year, to applicants who are willing to try and complete the GMS. Every year, I used to have a waiting list of two or three applicants who had to be carried forward to the next year because the scheme was oversubscribed. There was no waiting list at the end of 2023 and in 2024 I have had one trap unused because I only had five applicants.

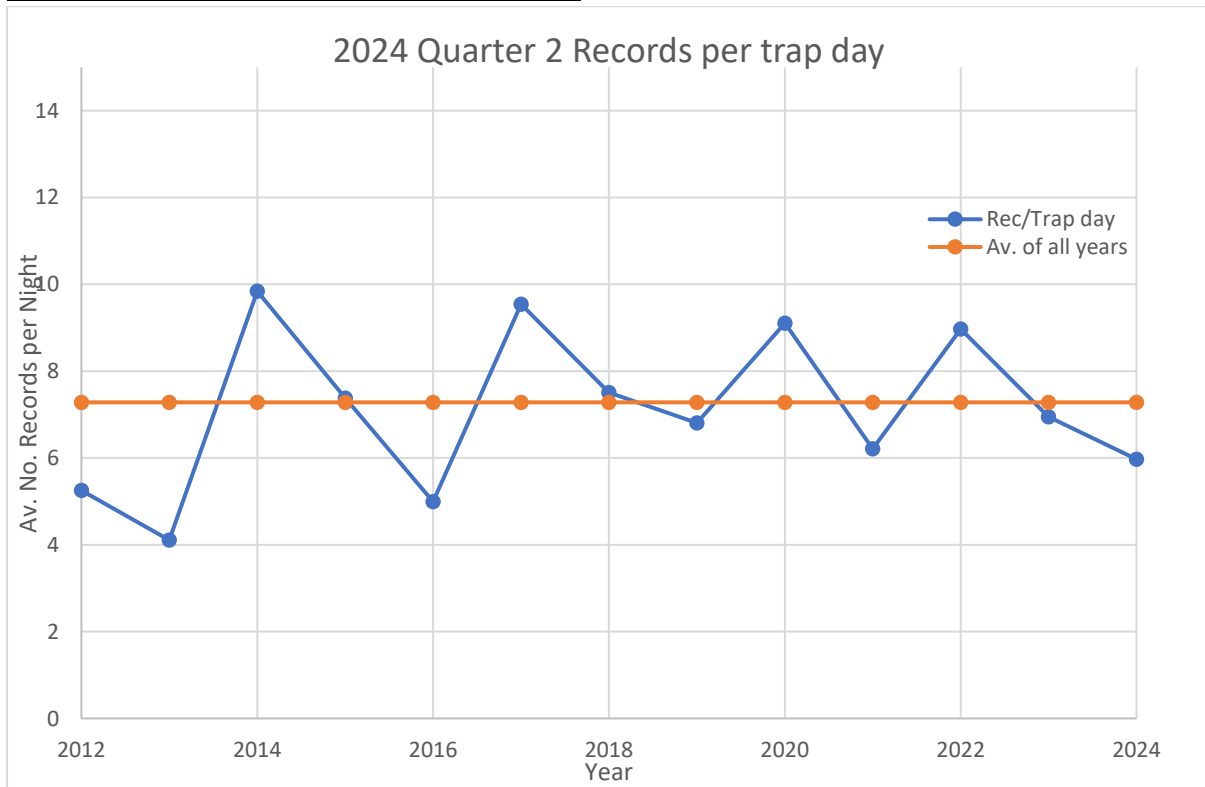
I publicise my loan scheme through the North East branch of Butterfly Conservation, the Natural History Society of Northumbria, ERIC North East and Northumberland and Tyneside Bird Club. I'm going to talk to someone at Northumberland Wildlife Trust, to see if they are willing to publicise the loan scheme. Beyond that, I can't think what else to do. Surely there must be nature lovers out there who would like to try trapping moths!

### Did not trap

Just over 8 percent of nights were missed, the highest ever for Quarter 2!

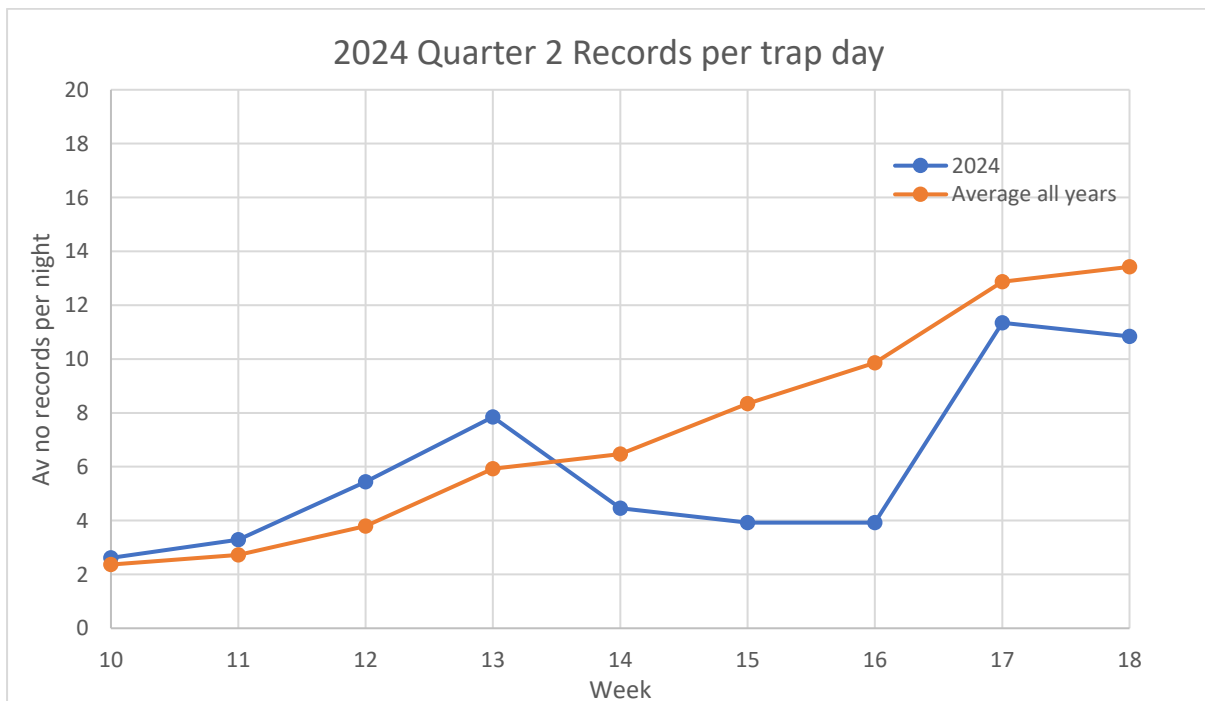


### How do catches compare with earlier years



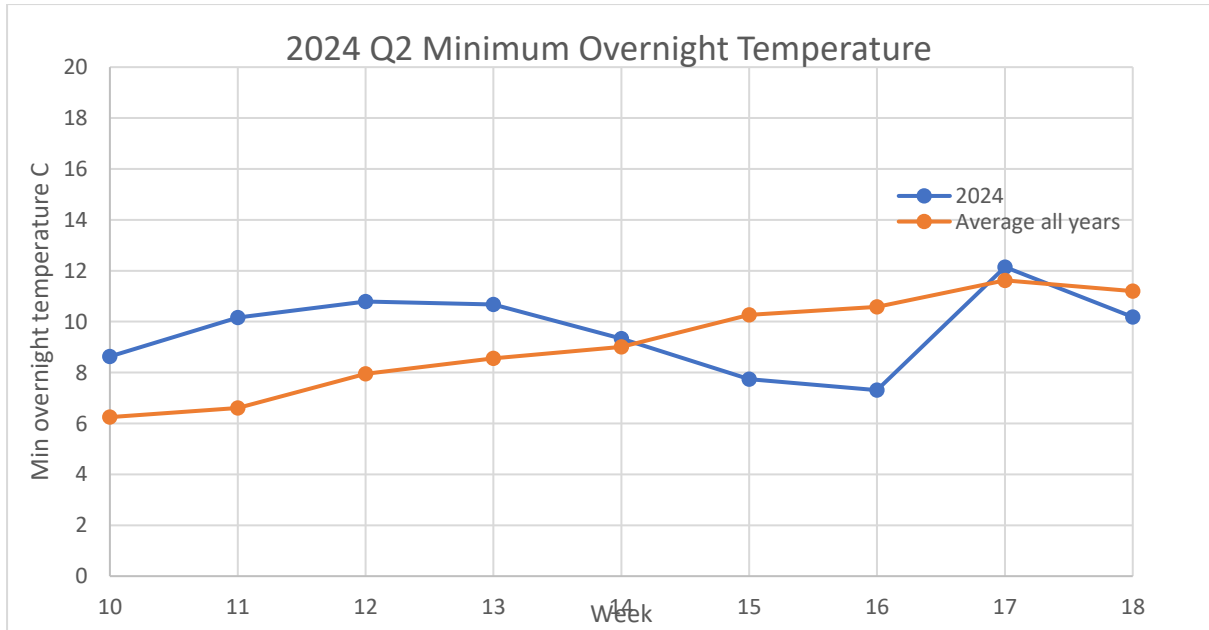
Catches are just below average, but better than 2012, 2013 and 2016.

Now we'll consider how the number of records per trap night varies by week.



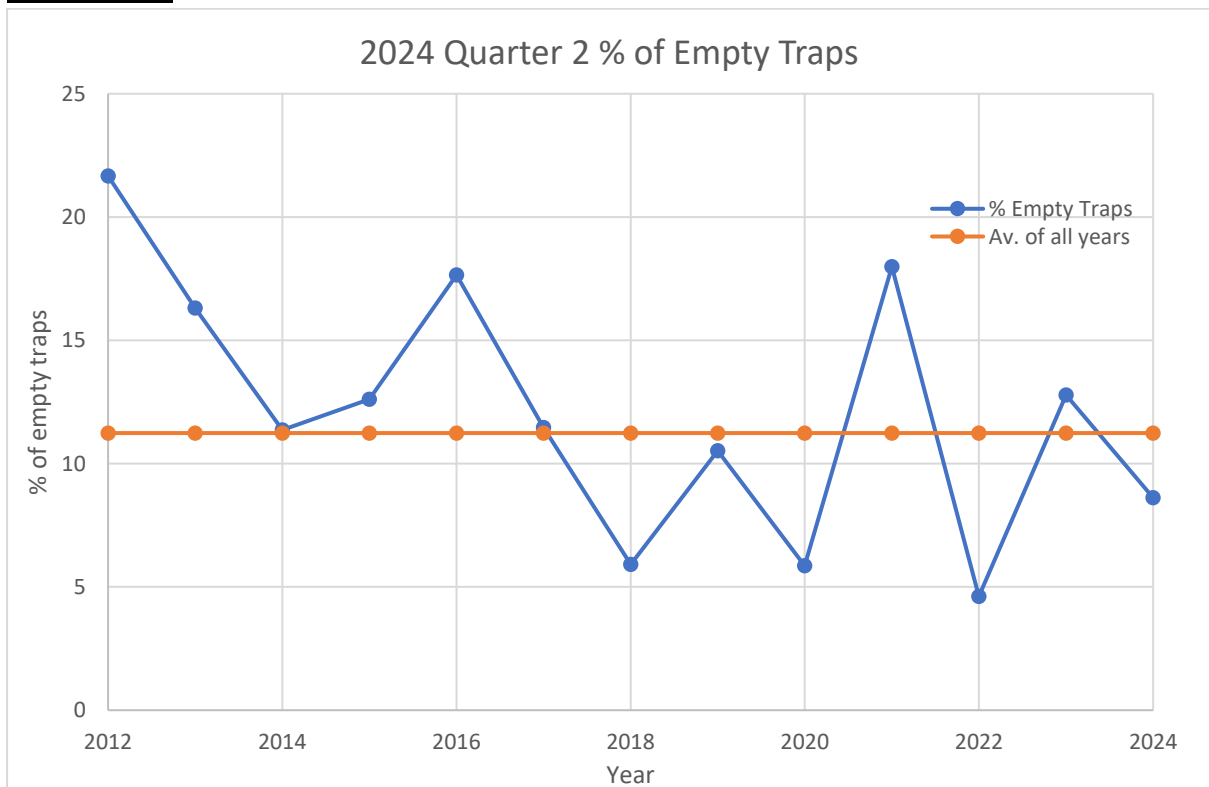
Up to week 13, (24<sup>th</sup> May) things were looking good, then catches were below average, with weeks 15 and 16 (7<sup>th</sup> and 14<sup>th</sup> June) especially poor.

What were the minimum overnight temperatures each week?



The poor catches in weeks 15 and 16 can possibly be explained by the fact that the overnight temperatures on those nights were more than 2C below average.





















### Empty Traps



In spite of the fact that the number of records in 2024, Quarter 2 was less than the average, the number of empty traps was also less than average.

### Top twenty species

Here is a list of the 2024 top twenty species in Q2 (by number of records), compared to the top twenty for last year, and for all years from 2012 until 2024. The green species are moving up the top 20, the yellow species are non-movers and the red species are moving down compared with 2023 quarter 2.

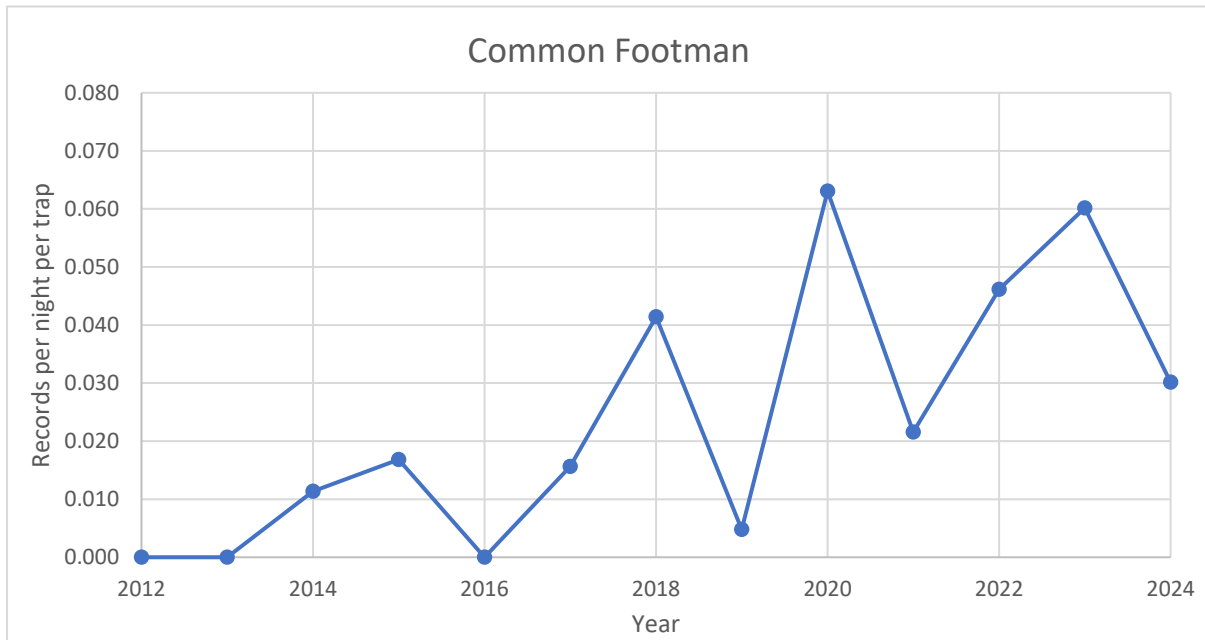
Row Labels	Av. 2012 to 2024	2023	2024	Trend
Heart and Dart	1	1	1	
Common Pug	7	4	2	
Bee Moth	10	5	3	
Light Brown Apple Moth	2	2	4	
Common Marbled Carpet	14	19	5	
Buff Ermine	6	8	6	
Brimstone Moth	5	12	7	
Clouded-bordered Brindle	13	27	8	
Silver-ground Carpet	3	9	9	
White Ermine	8	15	10	
Large Yellow Underwing	9	6	11	
Garden Carpet	4	7	12	
Silver Y	30	18	13	
Green Carpet	28	21	14	
Ruddy Streak	61	44	15	
Poplar Hawk-moth	11	10	16	
Diamond-back Moth	32	61	17	
Hebrew Character	12	38	18	
Garden Grass-veneer	19	11	19	
Marbled Minor agg.	15	13	20	

**Trending species.**

In my Quarter 2 reports for previous years, I've identified Garden Carpet, Scalloped Hazel, Shoulder Stripe and Silver-ground Carpet as decreasing. The downward trend seems to be continuing for all four species.

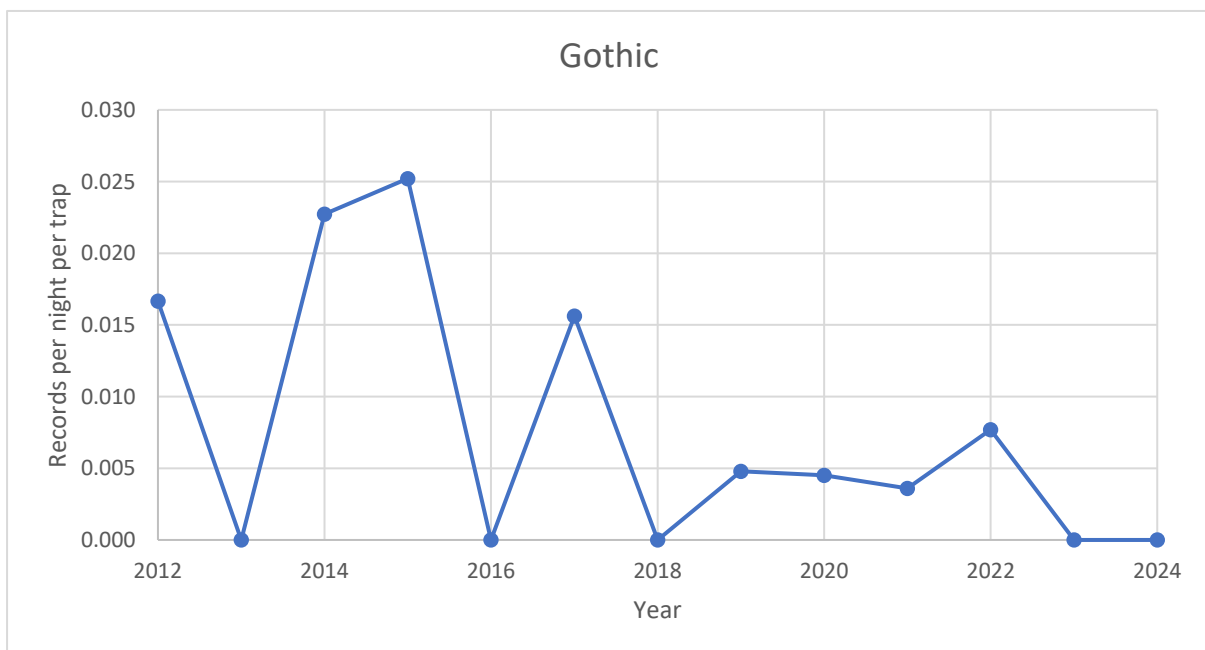
Similarly, I've previously identified Red Chestnut, True Lover's Knot, Pale Tussock and Common Pug as increasing. Red Chestnut and True Lover's seem to be flattening out, but Pale Tussock and Common Pug are still increasing.

**Common Footman- increasing**



The New Atlas states that its distribution trend shows a significant increase since 1970.

**Gothic - decreasing**



Looking at the graph, Gothic has been a bit of a boom-and-bust species, but since 2015 it's looking more of a bust-and-bust species!

The New Atlas states that the distribution has decreased significantly in the long term.

### **Outstanding Records**

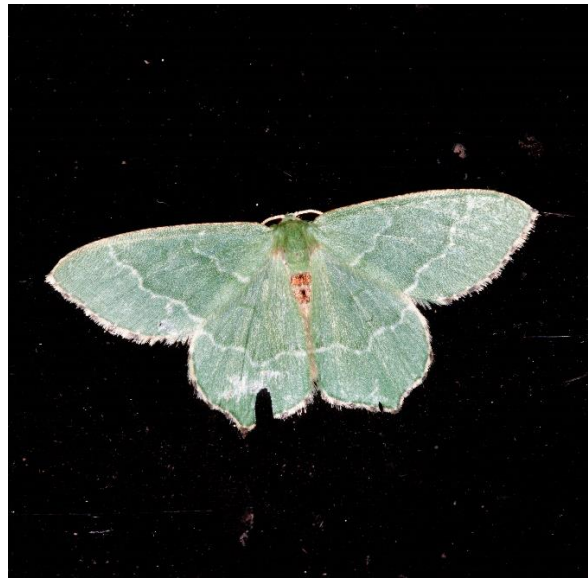
On 21<sup>st</sup> June (GMS weeks 17), Richard recorded an Eyed Hawk-moth in Old Quarrington, County Durham. This is only the third record for this species in the North East GMS database for Quarter 2 (Richard also recorded the first one on 25<sup>th</sup> May 2020).

Interestingly, about a week or two later, Susie recorded the second Northumberland GMS record of the species, but that falls into Quarter 3. The first Northumberland record was Stewart's, from Howick on 1<sup>st</sup> July 2022.

On 29<sup>th</sup> June (GMS weeks 18), Phil recorded a Common Emerald in Darlington. This is the only the fourth record for this species in the North East GMS database.



Eyed Hawk-moth (Image courtesy of Susie White)



Common Emerald (Image courtesy of Phil Sharp)