

North East England GMS Report

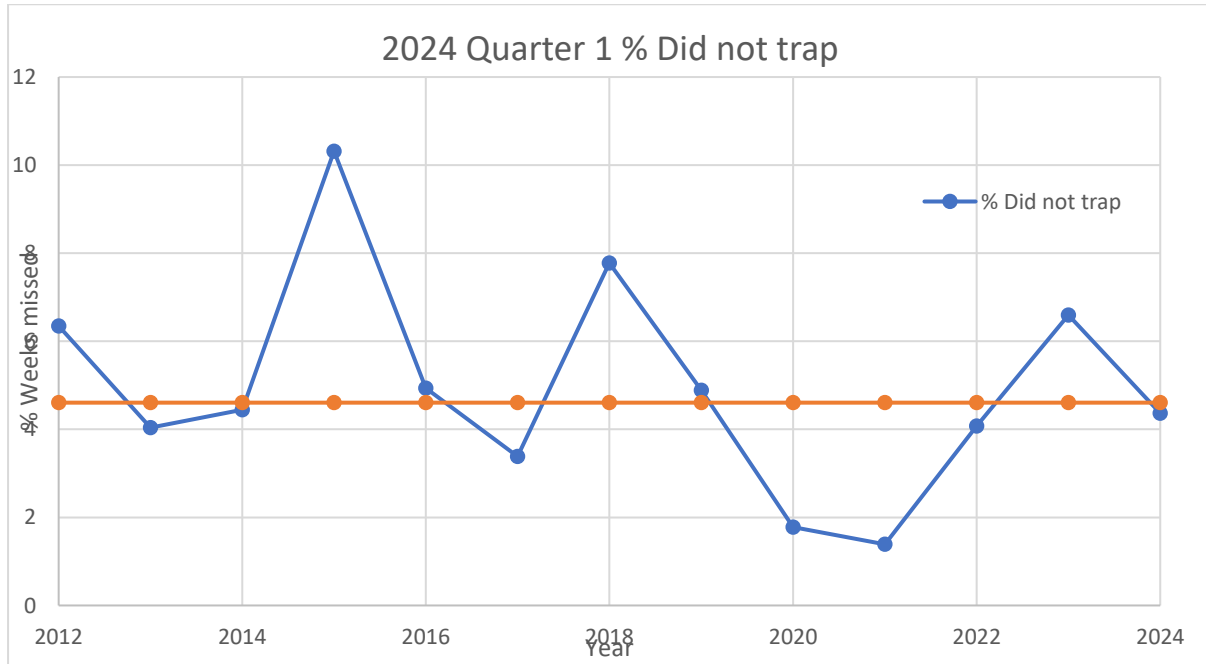
First Quarter 2024

Number of GMS participants

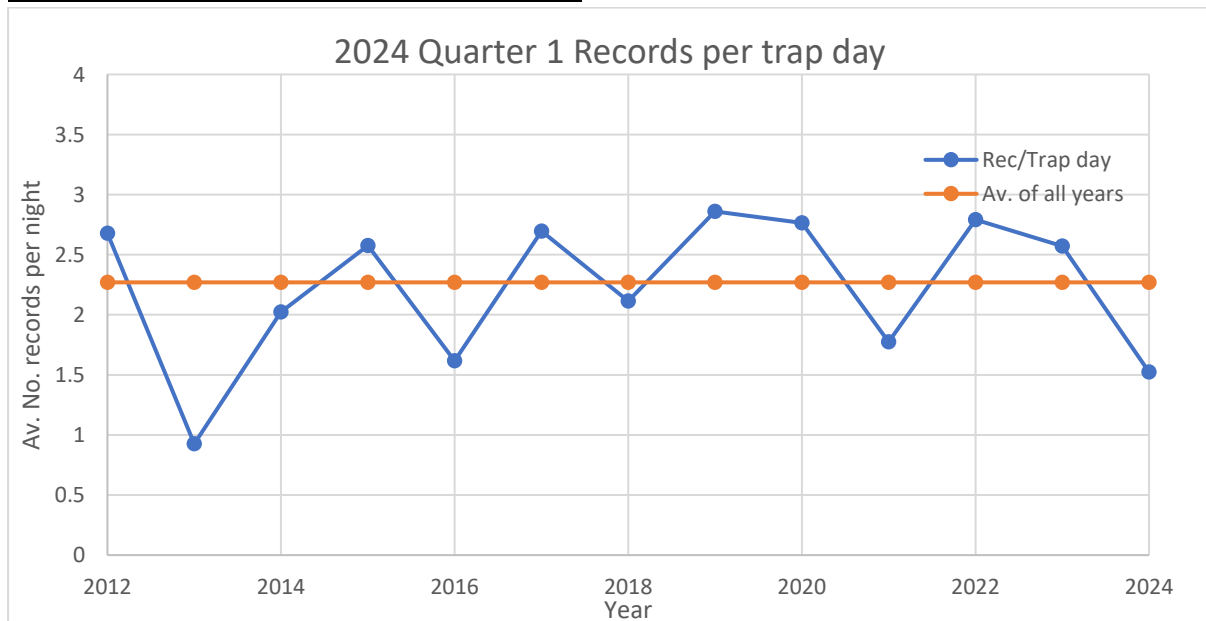
I received valid GMS recording forms from 28 participants in 2024, quarter 1. Of these 10 were in County Durham (VC 66), 15 were in South Northumberland (VC 67) and 3 were in North Northumberland. This is a fall of 4 participants compared with 2023.

Missed weeks

Just under 4.5 percent of nights were missed, about the average for Quarter 1.

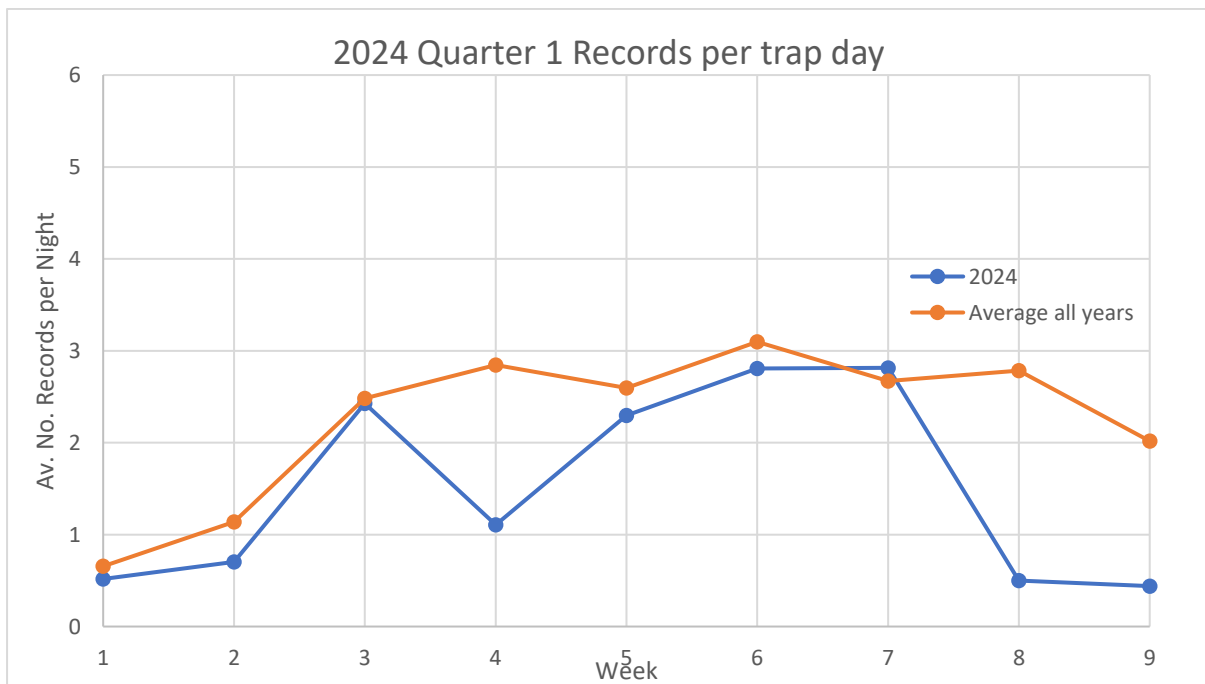


How do catches compare with earlier years

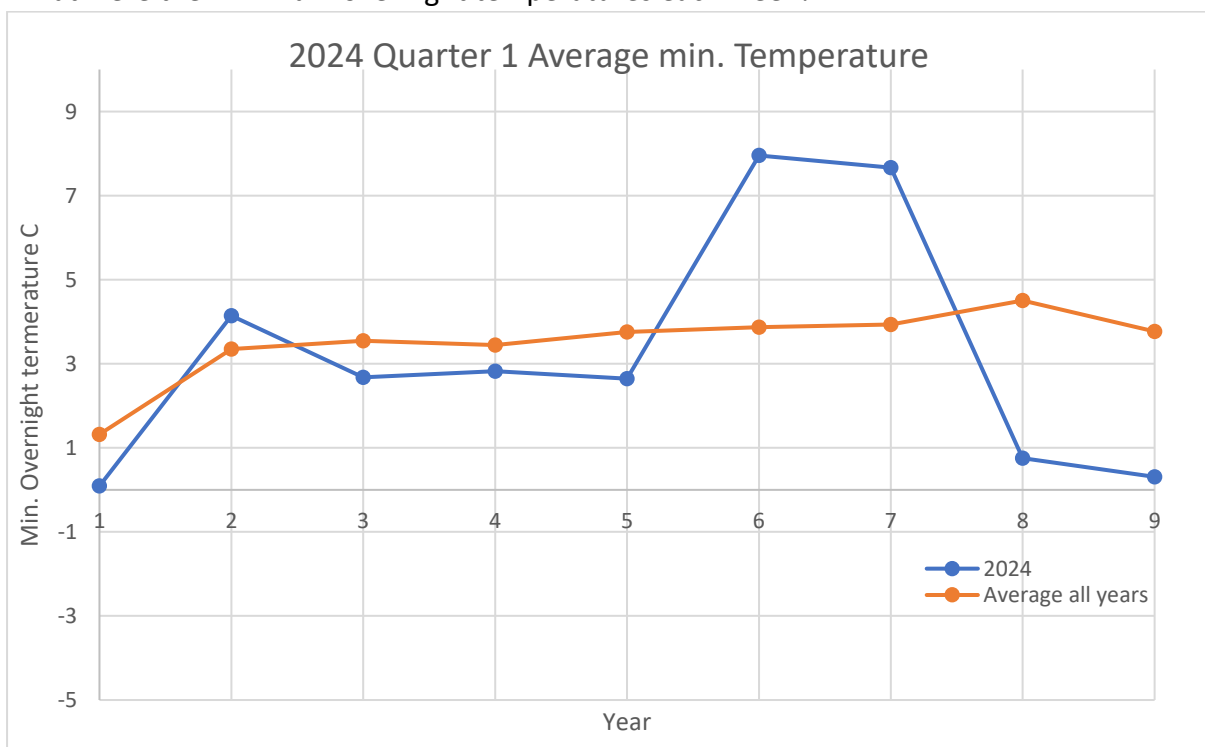


The data confirms what everyone's been reporting, it's been a very poor spring for moths, with only 2013 being worse, although 2016 was only slightly better than this year!

Now we'll consider how the number of records per trap night varies by week. Six of the weeks had about the average number of records, but weeks 4 (22nd March), 8 (19th April) and 9 (26th April) had very low catches.

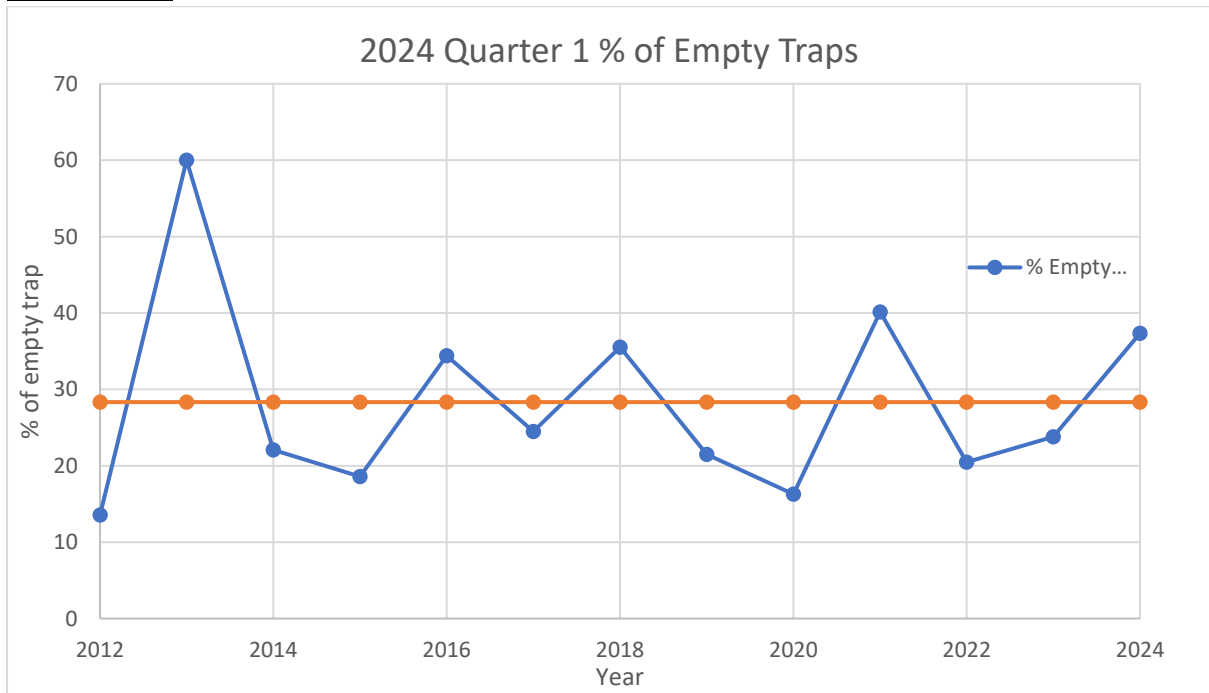


What were the minimum overnight temperatures each week?



Low temperatures at weeks 8 and 9 probably account for the low number of records those weeks. The low number of records at week 4 cannot be blamed on the temperature, But I noted strong winds that week. Temperatures were higher than average at weeks 6 and 7, but with no increase in the number of records. In low temperatures moth go torpid and don't fly, but high temperatures can't magic extra adults from nowhere!

Empty Traps



37% of traps were empty in Q1, above the average of 28%, but much lower than the 60% of 2013! It could have been worse!

Top twenty species

Here is a list of the 2024 top twenty species in Q1 (by number of records), compared to the top twenty for last year, and for all years from 2012 until 2024. The green species are higher in the top 20 than in 2023, the yellow species are non-movers and the red species are lower than in 2023.

Species	Av. 2012 to 2024	2023	2024	Trend
Hebrew Character	1	1	1	
Common Quaker	2	2	2	
Clouded Drab	3	4	3	
Early Grey	4	3	4	
Small Quaker	5	5	5	
Chestnut	6	7	6	
March Moth	12	12	7	
Twin-spotted Quaker	9	16	8	
Brindled Pug	13	8	9	
Satellite	14	14	10	
Double-striped Pug	16	18	11	
Powdered Quaker	7	6	12	
Early Thorn	15	11	13	
Common Plume	25	25	14	
Oak Beauty	11	13	15	
Grey Shoulder-knot	50	52	16	
Pale Pinion	33	20	17	
Many-plumed Moth	34	29	18	
Dark Chestnut	35	30	19	
Garden Carpet	27	32	20	

Trending species.

In my Quarter 1 reports for previous years, I've identified Double-striped Pug as decreasing, and this trend is continuing. Similarly, I identified both Mottled Grey, Early Grey and *Diurnea fagella* as increasing. Mottled Grey seems to be over its peak and numbers are falling. Numbers of Early Grey and *Diurnea fagella* fell in 2024, but that might just be the bad weather. We'll have to see if the increasing trend resumes, or if it takes them several years to recover. The good thing about lepidoptera is that they can lay a lot of eggs, so they can recover fast from set-backs.

Grey Shoulder-knot - increasing

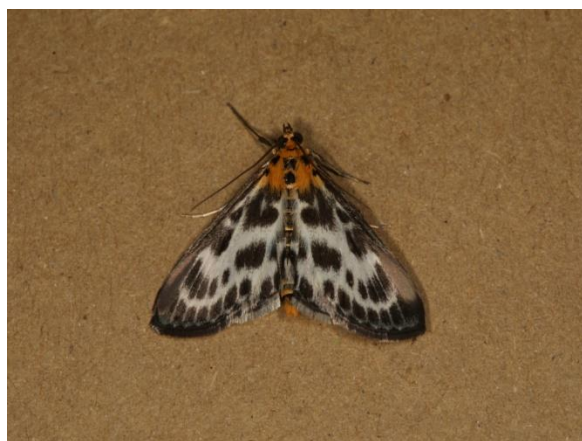
Not recorded in the North East GMS database before 2022, we recorded 1 in 2022 and 2 in 2023, all from County Durham. This year we recorded 3, all from South Northumberland (recorded by Susie, Melissa and ourselves). This isn't a species that peaks in Quarter 2 and appears to be increasing in Quarter 1 because it is emerging slightly earlier. This is a species whose spring flight season peaks in mid-March (GMS week 2), so it might genuinely be moving north rather than emerging earlier.

I'm not going to try and identify a decreasing species as so many dipped in 2024 due to the bad weather.

Outstanding Records

On 5th April, (GMS week 5) Mandy and Neil recorded a Small Magpie at Sharperton. This is the only record for this species in Quarter 1 in the North East GMS database. The peak of the flight season is GMS week 17 (21st June). Below the moth images you will see the Small Magpie flight season, plotted from all the data in the GMS database.

On 12nd April (GMS week 7) Christina and I recorded one of the three Grey Shoulder-knots in Jesmond (see Trending species in the previous section).



Small Magpie



Grey Shoulder-knot

Small Magpie

