

# North East England GMS Report

## Fourth Quarter 2025

In 2025, Quarter 4 of the GMS ran from Friday 12<sup>th</sup> September until Friday 7<sup>th</sup> November.

### Number of GMS participants

I received valid GMS recording forms from 32 participants in 2025, Quarter 4. Of these 11 were in County Durham (VC 66), 17 were in South Northumberland (VC 67) and 4 were in North Northumberland (VC68). In addition another 1 participant, from South Northumberland, missed too many consecutive weeks to produce a valid GMS data set for 2025, but I have been able to use their data in this analysis, as I allow for missed weeks.

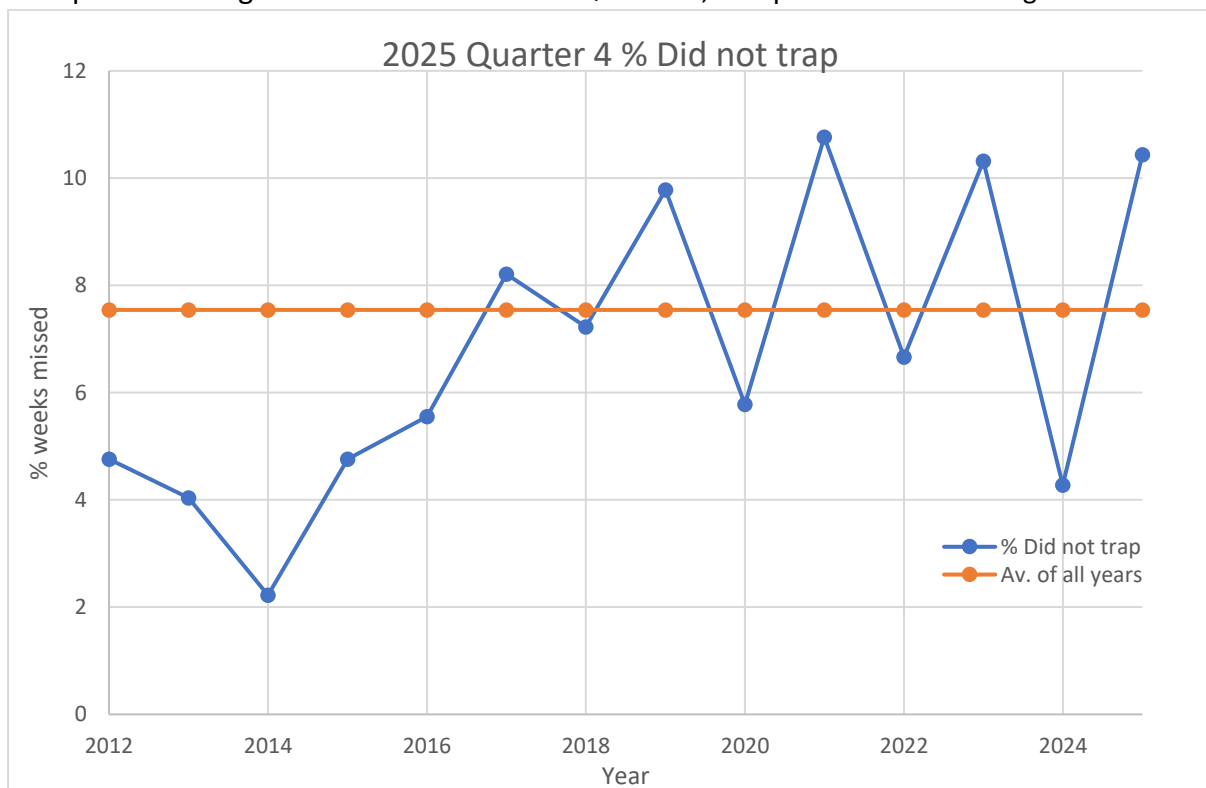
### Loan traps

In 2025, I had five traps out on loan to people who wanted to try trapping and recording moths. All being well, I should have all 5 traps available for loan in 2026.

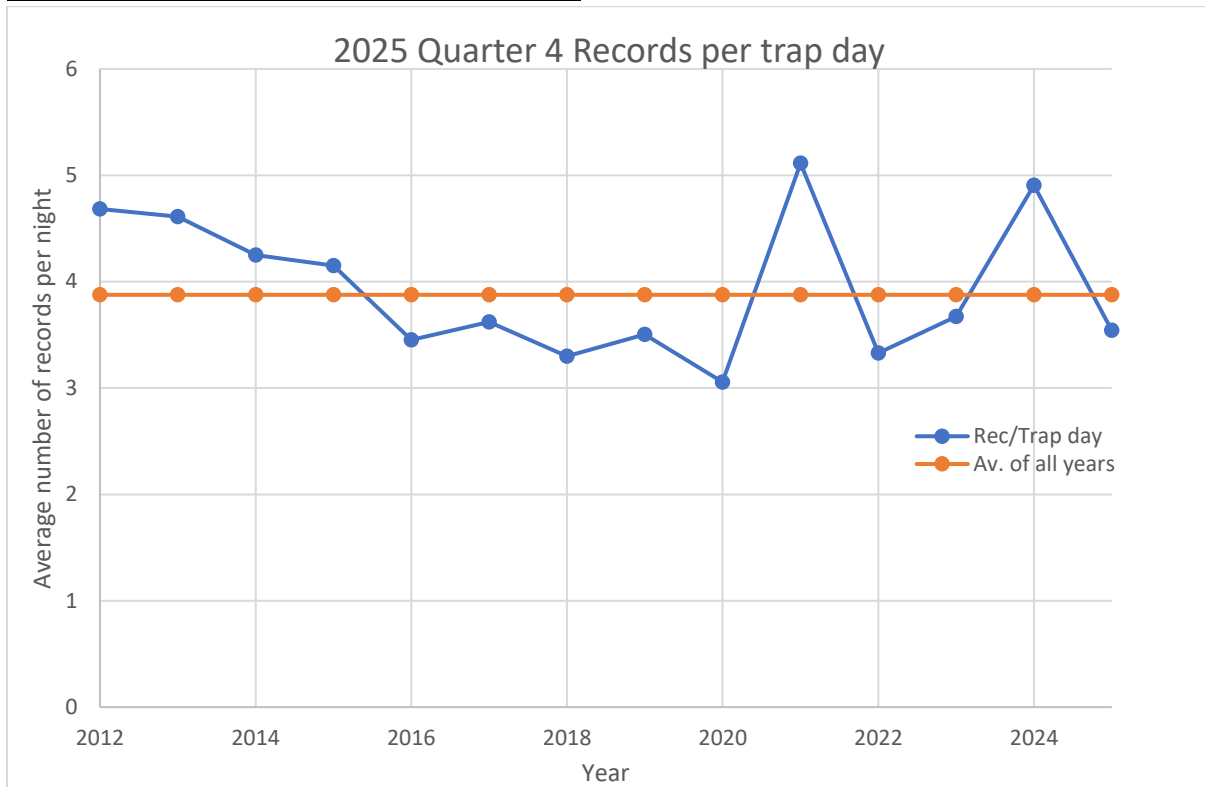
If you know anyone who would like to borrow a trap and would be willing to participate in the 2026 GMS, why not give them my contact details so they can get to the front of the queue. Leaflets publicising the loan scheme will be available at the Natural History Society of Northumbria Monday night talks until all traps have been allocated.

### Did not trap

10.4 percent of nights were missed in 2025 Quarter 4, compared with an average of 7.5%.

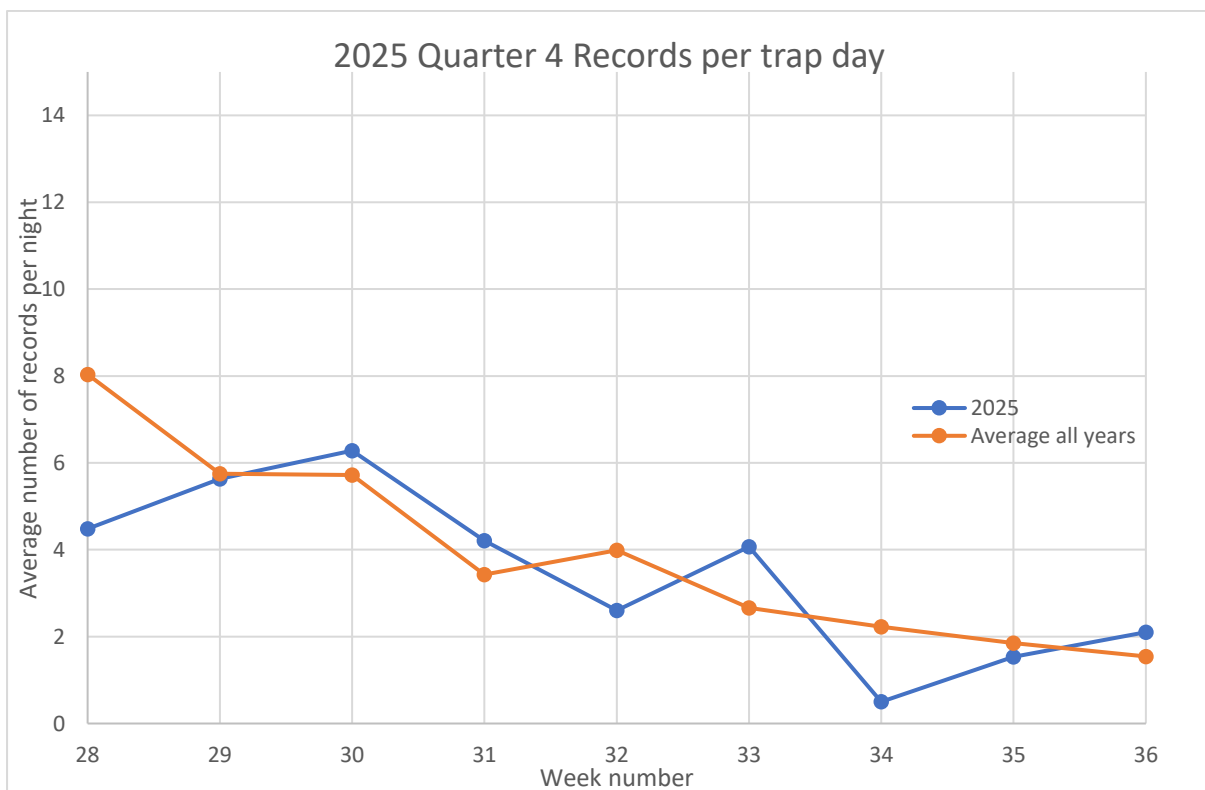


### How do catches compare with earlier years



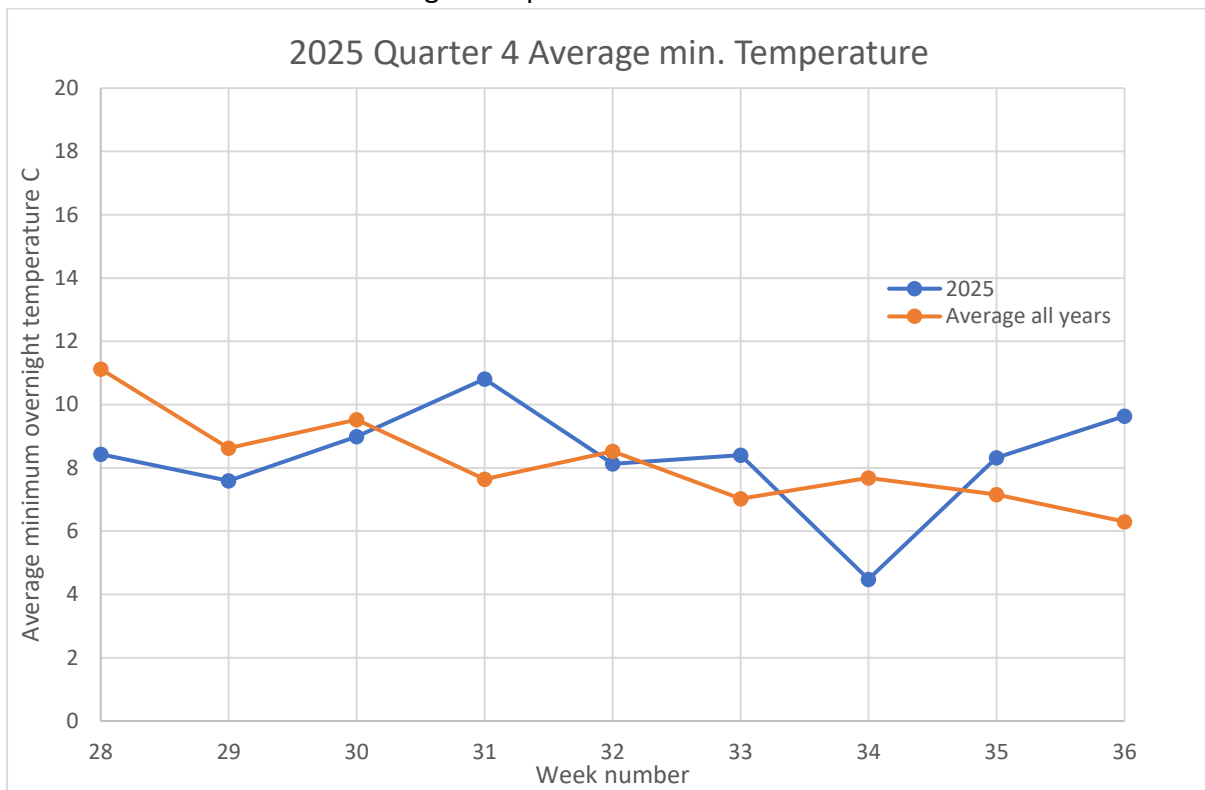
As with Quarter 3, catches in Quarter 4 dropped to slightly less than the average (3.5 records per trap night against the average of 3.9).

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



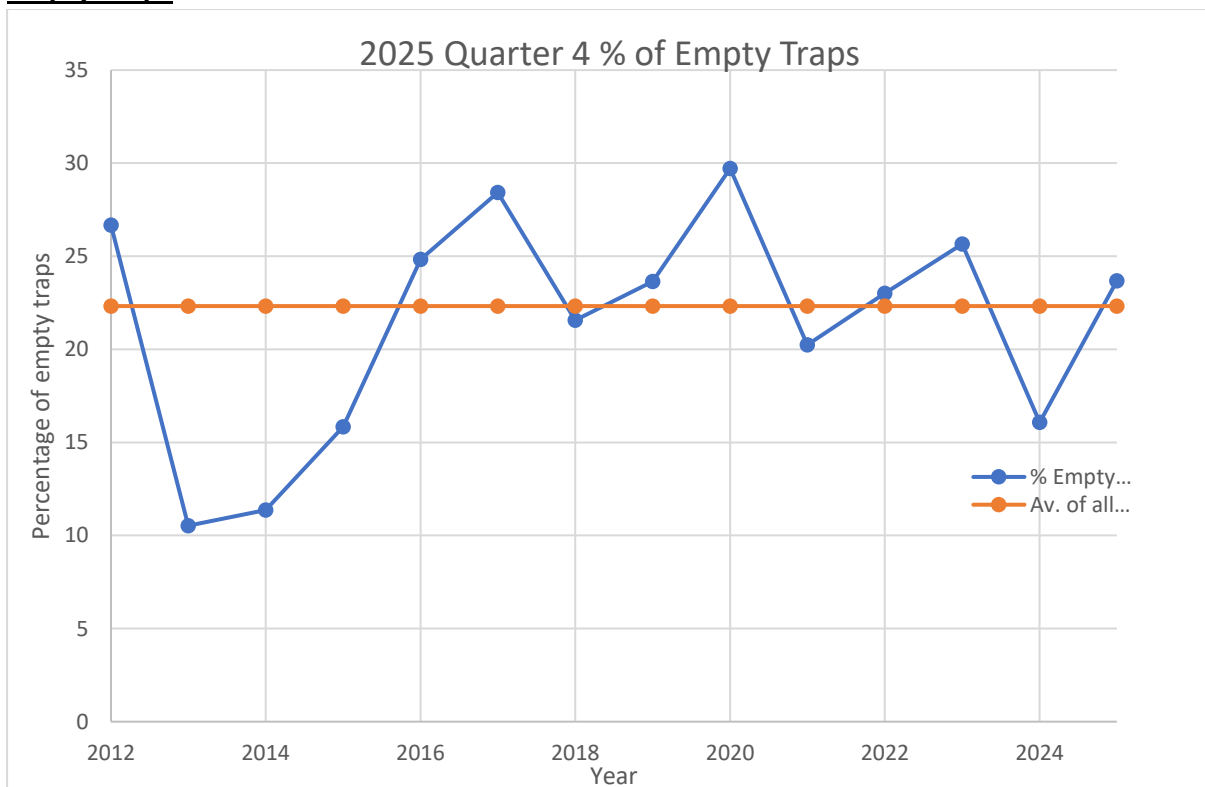
The number of records has been roughly average apart from in week 28 (12<sup>th</sup> September), when catches were significantly down.

What were the minimum overnight temperatures each week?



Temperatures closely followed the average in Quarter 4, so the low catches in week 28 are probably not temperature related.

### Empty Traps



23.7% of traps were empty in 2025, about the same as the average over all years of 22.3%.

### Top twenty species

Here is a list of the 2025 top twenty species in Q4 (by number of records), compared to the top twenty for last year, and for all years from 2012 until 2025. The green species are moving up the top 20, the yellow species are non-movers and the red species are moving down compared with 2024 quarter 4.

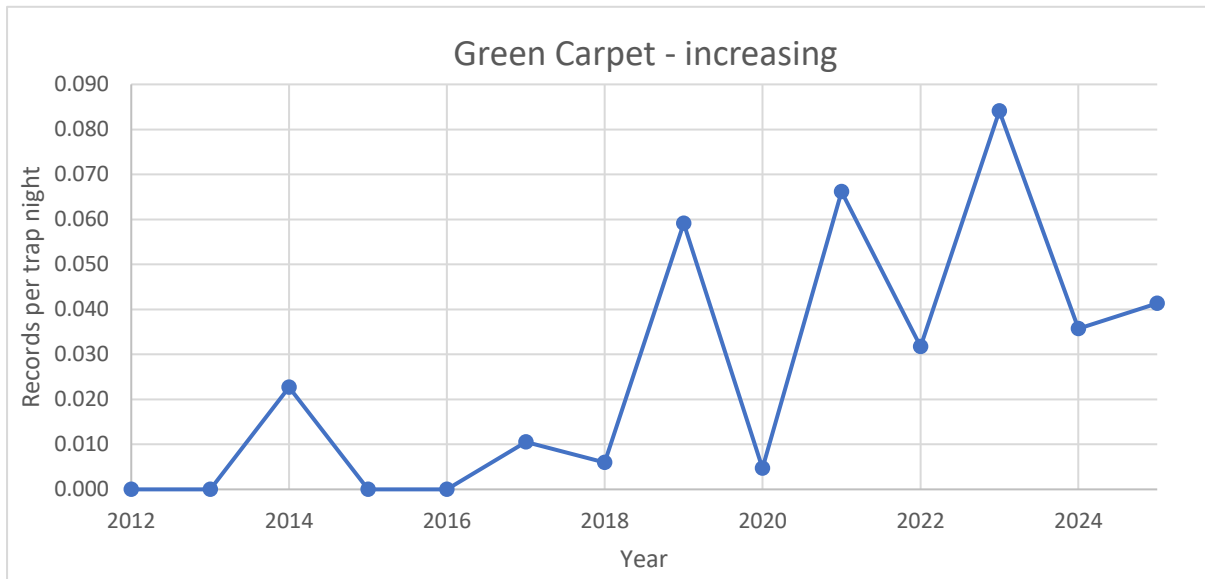
Species	Av. 2012 to 2025	2024	2025	Trend
Large Yellow Underwing	1	1	1	
Shuttle-shaped Dart	24	32	2	
Light Brown Apple Moth	2	3	3	
Lesser Yellow Underwing	6	6	4	
Red-green Carpet	5	7	5	
Setaceous Hebrew Charact	7	2	6	
Common Marbled Carpet	3	5	7	
Square-spot Rustic	12	11	8	
Green-brindled Crescent	14	15	9	
Australian Orange-tip	34	40	10	
Angle Shades	8	10	11	
Blair's Shoulder-knot	13	17	12	
Dark Sword-grass	47	57	13	
Feathered Thorn	19	18	14	
Silver Y	4	4	15	
Garden Carpet	17	12	16	
November Moth agg.	10	14	17	
Red-line Quaker	18	22	18	
December Moth	26	33	19	
Snout	27	21	20	

Some species of moth have just appeared from nowhere in this top twenty. Shuttle-shaped dart shot up 30 places, from 32<sup>nd</sup> place in 2024 to 2<sup>nd</sup> place in 2025 and Dark Sword-grass, a migrant, rose 54 places from 57<sup>th</sup> place in 2024 to 13<sup>th</sup> place in 2025.

### Trending species.

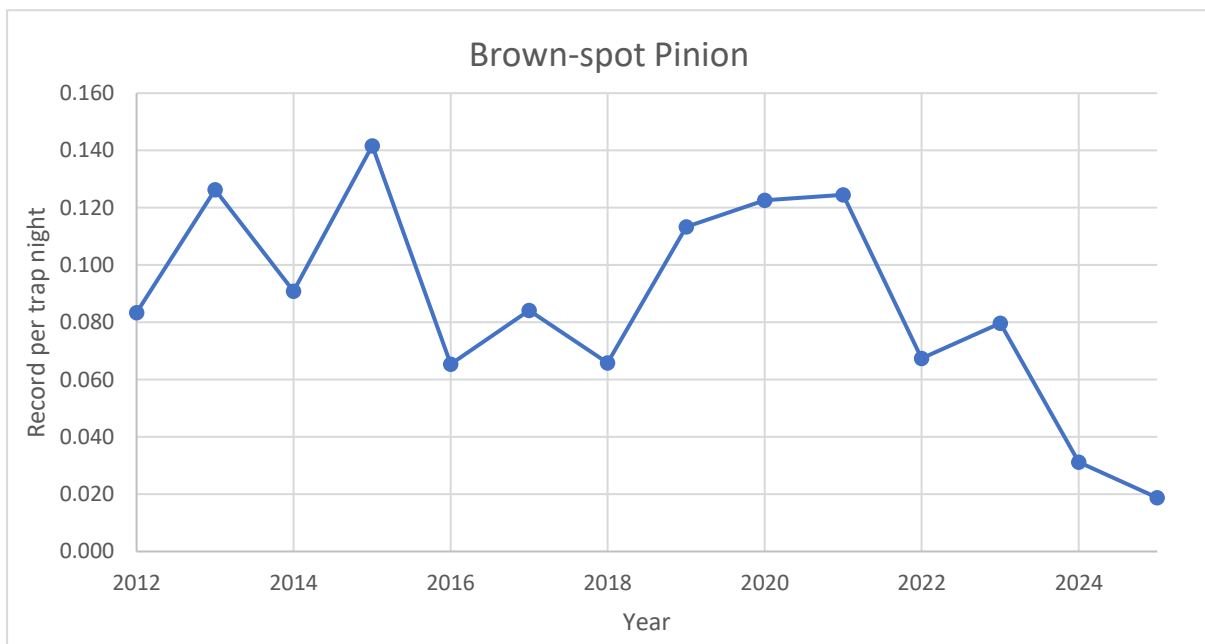
#### Green Carpet

Green Carpet appears to be increasing, but this species is bivoltine and the peak of the second generation is at GMS week 28, so in Quarter 4, we are just looking at the end of the second generation. Could there be a partial third generation in good years?



#### Brown-spot Pinion

The Brown-spot Pinion looked to be doing all right up to 2021, but now it is falling fast.



Species identified in previous reports as trending

Rosy Rustic and Garden Rose Tortrix continue to show a downward trend. On the other hand, Lesser Yellow Underwing and Feathered Thorn seem to have flattened out.

Beaded Chestnut, Figure of Eight, Juniper Carpet still seem to be increasing but Lunar Underwing and Autumn Green Carpet have peaked and are now decreasing.

**Outstanding Records**

On 26<sup>th</sup> September, Mandy and Neil recorded a Vestal at Sharperton, near Morpeth. This species was only added to the North East GMS list this year as part of the consolidation from regional species lists to a single all-inclusive species, but the Northumberland Moths website shows just one or two county records each year up to 2020.

On 17<sup>th</sup> October, Neil and Mandy recorded a Pebble prominent. Waring and Townsend give the flight season as Apr to Jun and Jul to Aug in the South and Midlands, where two generations are possible and Jun to Jul in the far North and upland areas. Mid-October is very late, possibly a third generation in North Northumberland?

Also on 26<sup>th</sup> September, Julie recorded a Beautiful Hook-tip in Stockton-on-Tees. Although there have been six previous North East GMS records (including one from Julie last year), they have all been in June or July. Does Julie's September record imply that they might have managed a second brood this year?



Vestal (Image courtesy of Mandy and Neil Tomas).



Very late Pebble Prominent (Image courtesy of Mandy and Neil Tomas).



Beautiful Hook-tip (My image as I did not receive one from Julie).