There has been a lot in the national press about how badly butterflies have done in 2024. Certainly the weather wasn't ideal for them, but looking through the records I have received, I am surprised that things in East Lothian weren't as bad as I was expecting. Some species did well while others were seen in very low numbers. It is difficult to know why this should be.

The year started off with quite a mild, but stormy winter. Much of the spring and summer was cooler, with

a lot more cloud and showers than normal. Of course, there were a few sunny days, but the weather really didn't improve until September, which was a little late for the butterflies!!

There is no perfect way of recording butterflies.

Transects are great for comparing year on year for the same location, but in East Lothian they are mostly coastal, with two along the River Tyne. The ad hoc records are from all over the county and can pick up all sorts of interesting records. However, there is a lot of luck involved with being in the right place at the right time. They can also result in big spikes because a lot of enthusiasts, including myself, may be out on the same sunny day looking for butterflies!



Poor weather not only means that butterflies may not be flying, but also enthusiasts may not be out looking for them! However, it is amazing how quickly butterflies will appear when the sun does come out, but they may go unnoticed if recorders aren't out and about!



The records I have gathered are from ten transects that are currently walked in East Lothian along with ad hoc records from the East Lothian Countryside Rangers and about 20 volunteers. This gives a pretty good indication of butterfly numbers and can be compared with the previous 11 years when about the same number of people have been submitting records.

The first butterfly record I received from East Lothian was a Peacock on 16th February. This was quite early, possibly reflecting on the mild winter. Peacocks did quite well in East Lothian with high numbers been seen later in the year.

In contrast the Small Tortoiseshell had a very poor year. Their numbers have been declining in recent years,

with 2024 returning half the average number in East Lothian and it was the worst year for them since I started these comparisons in 2013. This is a worrying trend that has been seen across the UK.

The Red Admiral also had a very poor year. We had very few early records, which may have been butterflies that had survived the winter here. The arrival of migrants was a couple of weeks later than normal and then we had lower numbers later in the year when normally we would expect to see the next generation.





The figures for Commas in 2024 would suggest it was a fairly average year for them. However, a good proportion of the records were from three counts of over 20 Commas that were recorded in Saltoun Big Wood in September.

2024 was the worst year since I started collating the records for Painted Ladies. I only received 14 records of them and I haven't seen one in the UK for the last two years. The numbers that make it to our shores depend on how their relatives have done earlier in the year on their multi-

generational journey from Northern Africa. In good years, such as 2019 their numbers can be spectacular.

Orange Tips had a very good year. They appeared a little later than normal, but were seen in good numbers.



Interestingly the spring population of the Greenveined White and Large White were lower than normal, but their numbers picked up for the summer generation. So, both species ended up being recorded in fairly normal numbers.



Small White numbers can vary enormously from year to year. 2024

numbers ended up being just a little less than average.

One of our more recent arrivals, the Speckled Wood, had a fairly normal year.

The Wall Brown, which arrived about the same time, peaked in numbers in 2021, but has since been declining. 2024 saw about a



quarter of the number recorded in 2021. There has been a dramatic reduction in numbers of this species in England and although it appeared to be moving north in response to climate change it will be interesting



to see what happens to the East Lothian population in the coming years.

The Small Copper had a very poor year, with the lowest number since I started collating butterfly records. 2024 saw about a third of the average number.



Two species that appeared to have a very good year were Common Blues and Dark Green Fritillaries. They both tend to live in similar habitats and fly in June until August.





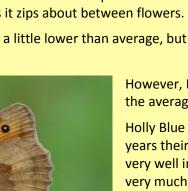
However, another species that inhabits similar landscapes is the Small Heath. Sadly they had a very poor year, which seems a little difficult to understand.

The number of Small Skippers recorded took a dip after they

have been increasing since they were first recorded in East Lothian in 2011.

Large Skippers are now found all across East Lothian, but we only receive a few records. I think it is quite a difficult butterfly to spot and identify as it zips about between flowers.

Ringlet numbers were a little lower than average, but nothing significant.



However, Meadow Brown numbers were down to about 75% of the average.

Holly Blue numbers crashed. After the odd sighting for many years their numbers have increased since 2019. They started off very well in the spring of 2024, but the summer generation was very much lower than expected. Across England the annual population fluctuates in response to a parasitic wasp. This wasp was discovered in East Lothian in 2024 by a local enthusiast who had reared some Holly Blues, only for some to fail with wasps

appearing from the chrysalises.

There are a number of small, isolated colonies of Northern Brown Argus across East Lothian. They are found north of Traprain, east of Dunbar and in the Lammermuirs. Some of



the known colonies may have died out and there are likely more undiscovered locations.



Because of their remote locations we struggle to monitor how they are doing. In 20224 the Countryside Rangers received funding to plant Rockrose at Barns Ness and they worked with Bear Scotland to plant up a south-facing road verge. Once these plants are established they will hopefully provide stepping

stones between the existing colonies.

Grayling butterflies continue to be found at Meadowmill. The other two locations near there - Blindwells and Cockenzie Power Station are both being developed, so I suspect we may lose those two sites. The exciting new was that there was a Grayling photographed on North Berwick Law last summer and they were also seen in the Lammermuirs.

The Small Pearl-bordered Fritillary is a rare butterfly in East Lothian, but they are found in a couple of locations in the Lammermuirs. They were seen in one of the Lammermuir valleys last summer.

And finally, hairstreaks! We have long been aware of a few small colonies of Green Hairstreaks around East Lothian. They are mostly in quite remote locations in the Lammermuirs, so I don't often receive records of them. There was a colony in Saltoun Big Wood, but there have been no Green Hairstreaks recorded there in the last few years, since there was a fire in the small area of woodland where they were found. I notice there is one record on iRecord this year from Hopes Reservoir.



Having found adult Purple Hairstreaks in 2022 at Woodhall and Dunglass, Geoff and Gail Ballinger returned to East Lothian to search for eggs last winter. They did a very thorough job collecting carrier bags full of terminal buds from fallen Oak twigs and branches and searching through them with a magnifying glass to look for eggs. Amazingly they were successful in finding eggs at Butterdean, Binning, Yester, Colstoun, Gosford and Pressmennan Woods. The adult butterfly rarely leave the top of mature Oak trees, where they can be seen flying in the late afternoon and early evening. Despite a lot of effort searching these woods

in the past Purple Hairstreaks haven't previously been recorded in these locations.

Probably the most exciting news of 2024 was the sighting of a White-letter Hairstreak in a garden in Haddington. This is the first sighting of this species in East Lothian. They have made their way out of Northumberland and into the Scottish Borders over the last few years, mostly along the Tweed Valley. So, this is a big jump for the species. However, one was also recorded in Edinburgh and another in Dundee. It is fascinating to consider how these butterflies have spread so far, or if they have been there for a while. It will be interesting to see how they do over the next few years.



It certainly wasn't a great year for butterflies, but I think East

Lothian probably did better than the UK as a whole, with one or two species actually appearing in good numbers. Some of the species such as Meadow Brown and Red Admiral did amazingly well in 2023, so the lower numbers in 2024 are almost to be expected. Certainly, I noticed that numbers where I live in the Borders were pretty similar to East Lothian. Given the wet summer that we had it isn't really surprising that numbers were a bit down. The next few years will give a better idea of how things are going. Let's hope for some decent weather to come!!

As always, thank you very much to everyone who took part in a transect or who sent in records. I am always delighted to receive them. If anyone is interested in sending in records or helping with a transect then please get in touch with me at nmorgan@eastlothian.gov.uk