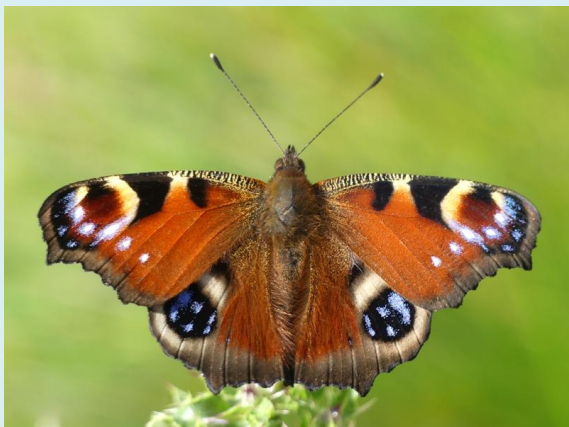


East Lothian Butterflies 2023

Nick Morgan

2023 started off with a reasonably mild, but wet winter. However, there were a few colder spells and the frosts persisted into April. The year was punctuated with an unusually high number of easterly winds. There wasn't really a lot of sunshine until mid May, when we had a warm, sunny spell, but sadly that only lasted until halfway through June! The remainder of the year was rather showery, with continuing east winds. This was only broken by a sunny week in early September and then back to cloud and rain! The first frost, around the 12th October, saw a sudden drop in the number of butterflies.

The weather can have an impact on the number of butterfly records received. This isn't necessarily because the butterflies aren't out and about when the weather is poor, but may be because recorders are less likely to be out looking for them. It is often the weather from the previous year that can have more of an impact, preventing the adults laying eggs, or heavy rain washing small caterpillars off their food plants.



Some species had a really poor year in 2023, but others did surprisingly well. It is difficult to know exactly why this should be.

The first record I received was of 3 Peacocks seen on the 17th March and several more were seen over the next few days. They had a pretty good year, particularly later in the summer when the new generation appeared.

On 23rd March I received the first record of a Small Tortoiseshell. Nationally there is much concern about the reducing number of Small Tortoiseshells, yet here their numbers have been fluctuating, but not really showing a decline. The number of records in 2023 was just a little lower than the average of the previous ten years.

The third species that overwinters as an adult is the Comma and they had a particularly good year, being seen in high numbers later in the season. The first one was spotted on the 2nd April. It is interesting that these three species have similar lifecycles, feeding on nettles as caterpillars and hibernating as adults, yet they each had different success rates in 2023.



The next butterfly to be seen was a Holly Blue on the 3rd April. This was the real success story of 2023, with them being spotted all over the county in good numbers. It seems funny to think that prior to 2019 they were rarely recorded in East Lothian. I received records of 377 Holly Blues last year.

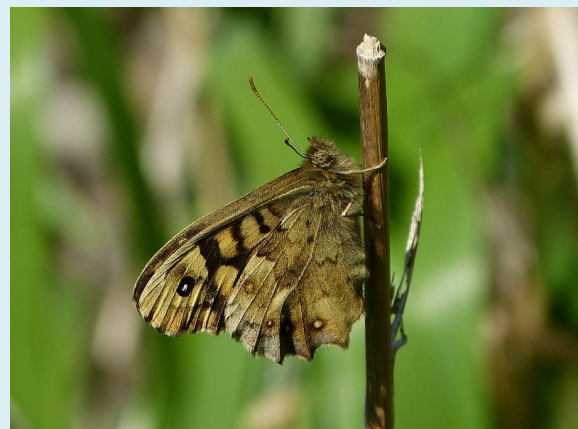


Next were the whites with Small White, Large White and Orange Tips first being seen on the 3rd, 5th and 7th April. These three species all had a good year with higher than average numbers being recorded. However, the Green-veined White



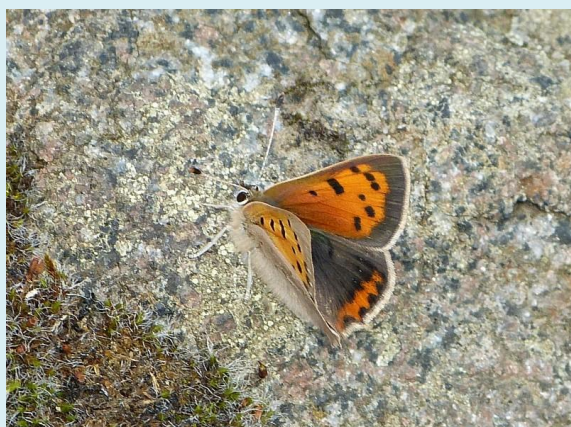
didn't make an appearance until the 19th April and it had the worst year since I have been collating the butterfly records. It is difficult to understand why it did so poorly when the other white species did so well. My only suggestion is that I usually associate Green-veined Whites with river banks and damper areas. Possibly the dry springs that we have had the last two years haven't suited it. Hopefully the numbers may bounce back in the future.

The first Speckled Wood appeared on 7th April. They had a fantastic year in 2023 and were seen in particularly high numbers in early September. It is interesting to speculate why they did so well in a year when the weather wasn't what we wouldn't normally think of as ideal for butterflies.



The Wall Brown has slowly been increasing in numbers over the last ten or twelve years in East Lothian. However, the number of records peaked in 2021 and since they have decreased again.

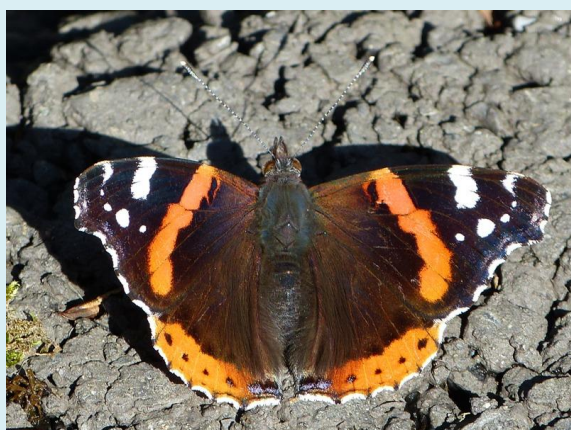
Nationally there is concern about this species reducing in range and numbers and



it had been thought that Wall Browns were spreading north in response to climate change. This year, we received the first record on 25th April with the summer generation being much more numerous than the spring generation.

Small Coppers are never really seen in big numbers. More often than not a male will take up territory on a sunny leaf and fly up when disturbed only to return to the

same spot. The first record in 2023 was on 26th April and it wasn't a particularly good year for them, which I can only imagine was down to the weather.



Although Red Admirals appear to be able to survive our winters as eggs, caterpillars, chrysalises or adults, the vast majority of those we see in the early summer have flown up here from continental Europe. However, there are a few early records, which are likely individuals that have found somewhere sheltered to over-winter. Our first record last year was on the 4th May, so it is difficult to be sure where this individual

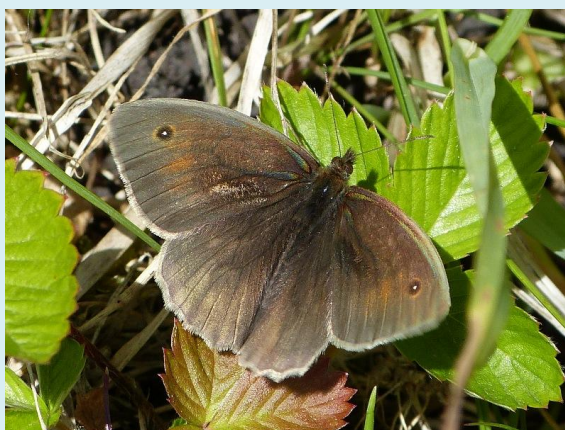
spent the winter! 2023 proved to be a bumper year for Red Admirals with 1421 individuals being recorded. The highest figure since I started collating the records. There were an enormous number of records in the third week of June, pointing to a mass arrival from overseas.



The first Small Heath was seen on the 17th May. They weren't seen in high numbers in 2023, possibly because not as many people were recording along the coast where they are most commonly seen. Apparently, there are two generations a year, but it is difficult to separate the generations because they overlap and vary according to each site along the coast and in the hills.

2023 could certainly not be described as a Painted Lady year. I only received 46 records and it was the first year, since I started recording butterflies in the 1990s that I didn't see one myself. The first record received was on 29th May and the maximum number seen in a week was 8 in August, indicating that they had managed to breed. It is interesting that the other migratory butterfly, the Red Admiral, did so well, but not so the Painted Lady.

The first Meadow Brown was recorded on the 4th June. They had the best year since I have been collating the butterfly records with 2565 butterflies recorded. Almost every year they are our most numerous butterfly recorded.



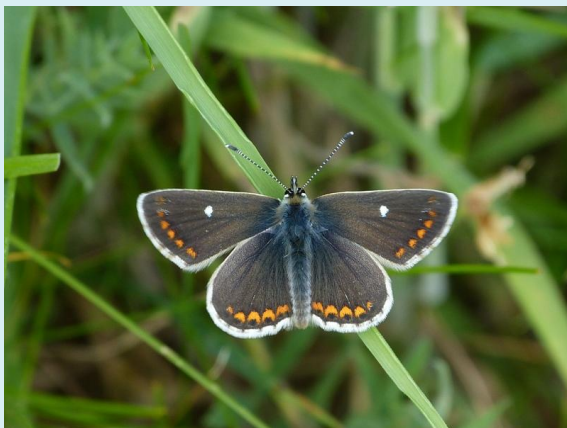
In contrast, the Common Blue had its worst year since I have been collating the records! The first record was on the 12th June and I only received records of 252 butterflies, with the average number over the previous ten years being 465.

The Large Skipper is a fairly recent arrival in East Lothian and is still seen in relatively small numbers. The first record I received was on the 13th June and I only received a total of 17 records. They have spread their range across the county, being seen along much of the coast and the foothills of the Lammermuirs. I suspect that it often goes unrecorded, being quite tricky to identify as it whizzes between flowers.



Ringlets were another species that had a poor year. In fact the worst year in the last ten years, not counting 2020, when we were in lockdown. The first record was on the 15th June and initially they seemed to do well, but just didn't peak in July as they normally would.

The Dark Green Fritillary also didn't do well in 2023 with the number of records being about a third of what we would normally expect. The first record was on the 18th June. The caterpillars feed on various species of Violets. I wonder if these plants didn't do well the previous summer with the dry weather we experienced.



On the 21st June I went into the Lammermuirs in search of Northern Brown Argus at a well known site for them. I managed to see five, which wasn't too bad for a short visit. They are only known to occur in a few small colonies in East Lothian and there have been no records from a couple of those sites in recent years. However, they were spotted on two occasions on the Barns Ness transect, so it would seem that there is a colony there, too. Also eggs have been found in a couple of locations north of Traprain Law, so there are probably more colonies than we realise.

I saw five Small Pearl-bordered Fritillaries when I was looking for Northern Brown Argus. They were the only records that I am aware of this year. It is a rare butterfly in East Lothian, which has only been recorded from a couple of sites.

The final species to be recorded in 2023 was the Grayling on 3rd July. There is a well-established colony on the pyramid at Meadowmill. I am aware of them being seen in an east Lammermuir Dean and I hear that they are often seen at the old power station site at Cockenzie. This year there was one seen at Levenhall, which is very exciting. Maybe our re-location project is going to be a success after all!

Sadly, there were no Brimstones seen in East Lothian in 2023, having had a few records in 2021 and 2022. We normally rely on the odd migrant flying in and I suspect that until we have more food plants available for them, they will not be able to maintain a presence in East Lothian.

I didn't receive any records of the Green Hairstreak in 2023. They are known to occur in a few remote locations in East Lothian, so we rarely get records of them. I saw some just over the border at Soutra, where they appeared to be doing well, so hopefully they are doing as well in their colonies in East Lothian.

Similarly, the recently discovered Purple Hairstreak occurs in a few small colonies in East Lothian. I didn't receive any records in 2023, but I am sure they would still have been at their covert colonies in the eastern Lammermuirs



There are 25 species of butterflies known to breed in East Lothian, with two or three additional species that are occasional visitors to the area. In 2023 I received 2244 ad hoc records, totalling 7737 butterflies. These were in addition to the transects, which recorded another 6025 butterflies. In addition to these, there are other places that butterflies are recorded such as iRecord, iNaturalist and the Big Butterfly Count. We are never

going to get close to recording every single butterfly that is in East Lothian, but I think we have a pretty consistent recording method that gives us a good idea of what has been going on in East Lothian over the last few years.

I am very grateful to all of the Countryside Rangers and volunteers who contributed records. If anyone would be interested in contributing their butterfly records in the future, I would be delighted to receive them. Please contact me on nmorgan@eastlothian.gov.uk All of the records I receive are passed on to Butterfly Conservation.

