

October 12, 2004

### **Where are the butterflies this fall?**

Since late August, we have enjoyed some of the finest weather of the year, with warm temperatures and lots of sunshine. It therefore seems surprising that there have not been more butterflies around. Peterborough County is home to 83 species of butterflies and, even in mid-October, at least six species are usually still active. According to Jerry Ball, a local naturalist who has become an expert on the lepidoptera of the Kawarthas, species diversity has been healthy this year but the number of individuals is down. Jerry managed to find 80 local species between May and late September but not in their usual abundance.

By the beginning of August, it was already apparent that Monarch Butterflies in particular seemed scarce. This was the first summer in years that I did not have Monarchs visiting the Purple Coneflower in my garden. Caterpillars, too, were few and far between. In early September, it took me four hours of searching - in prime Lake Ontario shoreline habitat - just to come up with a few Monarch caterpillars for my classroom. I was beginning to panic because raising Monarchs is always a huge hit with my students.

Every July local naturalists spend a day counting the number of butterflies in the area between Apsley and Stoney Lake. Only 19 Monarchs were recorded this year which is well below normal levels. The trend was the same on other butterfly counts across the province. This fall, Monarch numbers have also been down at monitoring stations along the north shore of Lake Erie where birders tally the number of migrating hawks. They also keep track of the number of Monarchs passing through each day. One can only speculate as to the reason for the decline in numbers, but the cold, wet summer weather is probably a major factor. A large die-off of Monarchs in Mexico last winter may also be partially responsible.

Most Monarchs from Canada make a 5000 km flight to the Sierra Madre mountains of Mexico each fall, where they spend the winter in pine forests near Mexico City. They begin arriving in November and by January, it is estimated that as many as 100 million butterflies may be present. Unfortunately, illegal lumbering in the area has thinned the tree cover and therefore made the insects more vulnerable to bad weather. A considerable die-off occurred last winter as a result of cold rain and wind, but it is unclear how many butterflies were affected. Some reports estimated that ten percent of the Monarchs died, but others put the numbers much higher. It will be interesting to see how many Monarchs return to the area this winter.

Monarchs are not our only butterflies that migrate. Painted Ladies, American Ladies and Red Admirals also make their way to more hospitable climes in the southern United States in September. The relative abundance of these species varies great deal from year to year. Red Admirals, for example, were extremely common in 2001 but much harder to find these past two years.

Three butterfly species that are still fairly common at this time of the year, albeit in lower numbers than usual, are the Orange and Clouded Sulphurs and the Cabbage White. These are the small yellow (sulphurs) and white (Cabbage) butterflies that you often see flying along roadsides and over meadows. By mid-October, asters are just about their only source of nectar. These small mauve, purple or white flowers of open areas are the last wildflowers of the year to bloom. The sulphur butterflies overwinter in the larval (caterpillar) stage, transform into a pupa (chrysalis) in the spring and then emerge as adults in May. Cabbage Whites, on the other hand,

spend the winter in the pupal stage which allows them to emerge as adults with the first warm weather of April. Sulphurs can sometimes be found “mud puddling”, a behaviour in which they gather in large numbers around puddles in order to ingest sodium present in solution.

With a little bit of luck, you may still be able to find Eastern Commas this month, along with Compton Tortoise Shells and Mourning Cloaks. Strangely enough, none of these species comes to flowers. Rather, they feed on sap flows and animal dung. They often alight on the ground and on tree trunks where they benefit from near-perfect camouflage. Instead of flying south as the Monarchs do or choosing to overwinter in the larval or pupal stage, the commas and tortoise shells hibernate as adults. They are often associated with cottages, where they like to overwinter in tree cavities, under eaves, or even in outhouses. I have often seen these species on the wing in the early spring when there is still snow on the ground.

#### WHAT TO WATCH FOR THIS WEEK

Yellow-rumped Warblers, along with Golden-crowned and Ruby-crowned Kinglets are passing through right now in large numbers. They constantly make contact calls as they search for food in trees and shrubs.

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