

Over the first two weeks of April we ran a short survey to collect a “snapshot” of how you felt the 2019 summer season had been for monarch butterflies. As part of that survey we also asked you to spend a few minutes counting how many eggs and caterpillars you had on your swan plants. We received almost 200 responses from all over the country - thank you to everyone who took the time to give us your feedback.

How did this season compare to the previous summer season?

We asked respondents to rate the 2019 summer season on a scale of 1 to 5, with 1 being “much worse than the previous summer” and 5 being “much better than the previous summer.” Splitting the country up into four regions (upper North Island, lower North Island, upper South Island, and lower South Island) found that, on average, most of the country had a similar, perhaps slightly worse, season to last summer. The exception is the upper North Island, where the average score was below 2, indicating a much worse season than the previous summer. It was interesting to note that in some cases we received several responses from the same suburb, with some reporting a great year for monarchs, and others reporting a very poor year for monarchs. Many of the responses included comments on predator levels, with high predator levels (particularly paper wasps and praying mantises) typically corresponding with lower scores. A few people reported actively managing wasp and praying mantis levels in their gardens and seeing positive results. The variation in ratings, even in small areas, may therefore reflect localised predator levels and management (or lack thereof).



Egg and caterpillar numbers

The lower South Island showed a much lower egg count but similar caterpillar numbers to the rest of the country. This may indicate that lower temperatures had already initiated diapause in butterflies in the lower South Island. It may also be due to both lower butterfly and lower predator numbers. While the middle of the country showed similar egg and caterpillar count rates, the average number of both eggs and caterpillars counted per minute was lower in the upper North Island. Since temperatures were unlikely to be low enough in this region to initiate diapause yet, this suggests that something is reducing egg numbers in the upper North Island. Two possible explanations are that fewer eggs were being laid or that predators were taking eggs as well as caterpillars. Some respondents reported seeing paper wasps and ants taking eggs from their plants. Other respondents mentioned noticing a clear gender imbalance in their released butterflies or in their gardens, with more male butterflies than female butterflies being seen. This could contribute to a reduction in eggs being laid, so it will be interesting to see if a similar imbalance is seen in tagged butterflies this season.

