## Dr. Christine Bishop

## **HUMMINGBIRDS: BIOLOGY and THREATS**

Dr. Christine Bishop is a Research Scientist with Environment and Climate Change Canada and she will enlighten us about trends in populations of hummingbirds, their biology and her recent studies on pesticide exposure in the birds.



Photo: Colin Clasen

Their research team from Environment and Climate Change Canada, Rocky Mountain Bird Observatory and Simon Fraser University has examined pesticide exposure in avian and invertebrate pollinators living in the Fraser Valley, as well as trends in hummingbird populations across North America. 14 species of hummingbirds co-occur in North America and among the 7 with reliable data, 3 species are showing significant population declines, as indicated by analysis of the North American Breeding Bird Survey.

One local example is their study of hummingbirds using the sprayed blueberry fields next to Minnekhada Park in northeast Coquitlam. They analyze the insecticide concentrations in the droppings of the hummingbirds and flowers of the blueberry bushes a year after being sprayed.

'No one has ever measured pesticides in hummingbirds before. So we decided to try it'. (Dr. Christine Bishop – interview with CBC, July 09, 2017): <a href="https://www.cbc.ca/news/canada/british-columbia/insecticide-found-in-same-b-c-hummingbirds-that-are-in-decline-1.4196876">https://www.cbc.ca/news/canada/british-columbia/insecticide-found-in-same-b-c-hummingbirds-that-are-in-decline-1.4196876</a>

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