Credit: Sue Elwell

BIMBY

BUTTERFLIES IN MY BACKYARD

BIMBY 2025 Summary report

December 2025

Poweshiek Skipperling
Credit: Kirstvn Eckhardt

INTRODUCTION

Butterflies in My Backyard (BIMBY) is a nationwide community science project led by the David Suzuki Foundation in collaboration with University of British Columbia researchers and volunteers throughout Canada. The project engages participants — known as BIMBY Seekers — to observe and document butterflies in their communities using iNaturalist, which is an online social network of people sharing biodiversity information to help each other learn about nature.

Since 2022, BIMBY Seekers have documented more than 230 butterfly species and contributed more than 100,000 observations to iNaturalist. The project's goal is to provide critical data for conservation while helping people build a deeper connection with the natural world.

By gathering thousands of observations, BIMBY helps scientists answer these key questions about butterfly ecology:

- Which species are found where in Canada?
- How are butterfly activity patterns changing over time?
- Which plants are adult butterflies visiting for nectar?

- On which plants are adult butterflies laying eggs (ovipositing)?
- On which plants are caterpillars feeding?

THE BIMBY COMMITTEE

BIMBY is led by a small team of volunteers and researchers who guide the scientific direction, data analysis and delivery of the project. Their expertise and enthusiasm help ensure that BIMBY remains a meaningful, accessible and scientifically valuable initiative.

Below are the members of the 2025 BIMBY committee, and in paratheses are their iNaturalist names. Each member plays an important role in supporting participants, strengthening data quality and deepening our understanding of and appreciation for butterflies.

- Stephen Deedes (deedesie)
- Kirstyn Eckhardt (kirstynleighe)
- Sue Elwell (selwell)
- Michelle Tseng (michelletseng)

2025 RESULTS

In 2025, BIMBY Seekers submitted **35,448** observations of **235** butterfly species. This represents **28 per cent** of all butterfly observations submitted to iNaturalist in Canada in 2025.

Butterfly experts on iNaturalist further enhanced BIMBY's contributions by identifying **26,809** observations, thereby granting them research-grade status. This status is important because it provides researchers with greater confidence in iNaturalist data.

British Columbia BIMBY Seekers were responsible for more than one third of BIMBY observations in 2025, thanks in large part to prolific observer Sue Elwell, who contributed 3,418 observations.

Here is a summary of BIMBY observations for 2025:

- Total observations: 35,448
- Total research-grade observations: 26,809
- Total species observed: 235

Here are numbers for research-grade observations by province/territory, from largest to smallest:

- British Columbia: 14,831
- Ontario: 9,007
- Manitoba: 1,208
- Alberta: 698
- Nova Scotia: 316
- Quebec: 266
- Saskatchewan: 161
- Yukon: 125
- Newfoundland and Labrador: 90
- New Brunswick: 78
- Northwest Territories: 10
- Nunavut: 10
- Prince Edward Island: 9

Butterfly families and species in Canada

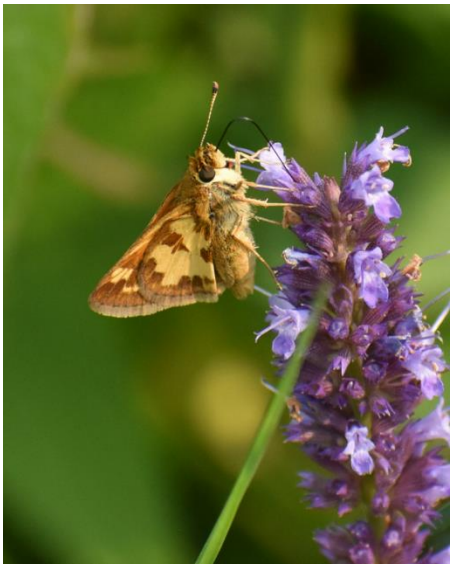
There are approximately 300 butterfly species in Canada, which can be grouped into six families. Some families contain many species, while others contain few. The Riodinidae family contains one species (Mormon metalmark) that only exists in the extreme south of British Columbia and Saskatchewan. Below are research-grade observations by family.

Butterfly family	**Research-grade observations**
Nymphalidae: brush-foots	11,492
Lycaenidae: gossamer-winged	5,429
Pieridae: whites, yellows and sulphurs	4,342
Hesperiidae: skippers	3,668
Papilionidae: swallowtails and parnassians	1,822
Riodinidae: metalmarks	56

PLANT ASSOCIATION DATA

A unique aspect of the BIMBY project is the additional fields and analyses that relate butterfly observations with the plants on which they were photographed. In 2025, BIMBY Seekers submitted 8,030 “butterfly to plant” associations. Below are the most frequently visited plants in the 2025 dataset, 75 per cent of which came from B.C. participants.

- Spreading dogbane: 304 observations of 47 butterfly species
- Alfalfa: 183 observations of 41 butterfly species
- Canada thistle: 162 observations of 39 butterfly species
- Pearly everlasting: 146 observations of 37 species



Peck’s skipper on anise hyssop
Credit: John Sproule

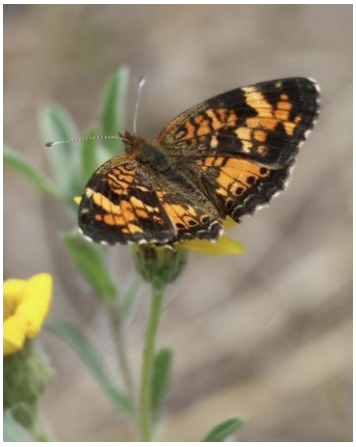
Northwestern fritillary on ox-eye daisy
Credit: Jakob Dulisse

ENDANGERED BUTTERFLY SPECIES

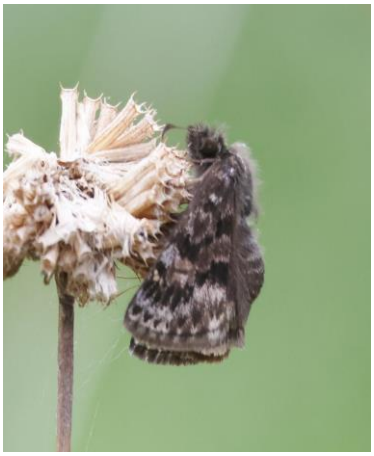
During 2025, BIMBY Seekers observed six butterfly species listed as at-risk of extinction at the international (G), federal (N) and/or provincial/territorial (S) level. See the list below for at-risk species observed by BIMBY Seekers and their associated rankings by NatureServe Canada. The ranking goes from 1 for critically imperiled species to 5 for secure species.

Imperilled butterfly species observed by BIMBY Seekers in 2025:

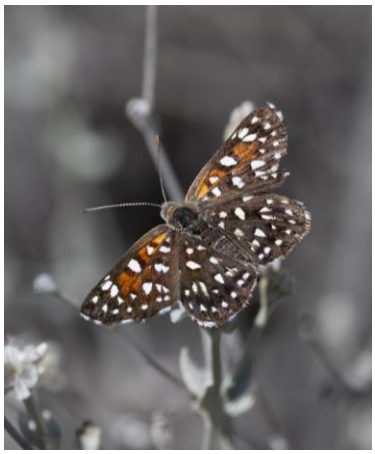
- Poweshiek skipperling - Global (G1), Canada (N1): MB (S1)
- Columbine duskywing - Global (G3), Canada (N5): MB (S3), ON, QC (S4)
- Duke's skipper - Global (G3), Canada (N2): ON (S2)
- Mottled duskywing - Global (G3), Canada (N1): MB (S1), ON (S2)
- Tawny crescent - Global (G3), Canada (N5): BC, NT, QC (S3), ON (S4), AB, MB, SK (S5)
- Mormon metalmark - Global (G5), Canada (N2): BC (S1), SK (S2)



Tawny crescent
Credit: djholland2022



Mottled duskywing
Credit: Susan Blayney



Mormon metalmark Credit: Brian Starzomski

THE NEXT GENERATION

Butterflies observed by BIMBY Seekers fall into one of three voltinism categories based on the number of broods or generations they produce each year. Multivoltine species have two or more generations of adults per year; univoltine species have one generation per year, and semivoltine species take more than one year to complete their life cycle (egg, caterpillar, chrysalis and adult).

Voltinism reflects how butterflies adapt to regional climates and the length of growing seasons. Multivoltine species are more prevalent in southern regions with longer, warmer growing seasons. Semivoltine species occur more frequently at higher latitudes and altitudes — areas with colder climates and shorter growing seasons.

BIMBY data offer insights into the life cycle timing of the same butterfly species in different regions of Canada. For example, we can see from BIMBY Seekers' observations of Macoun's Arctic that these butterflies emerge in odd-numbered years in Western Canada and in even-numbered years in Eastern Canada. The data also provide a baseline for understanding the ways in which climate change could influence butterfly development in the future.

BIMBY observations of Macoun's Arctic, showing records from 2025 (blue) and 2024 (red). The east-west "split" occurs in Manitoba, which is the only province where this species can reliably be seen every year.

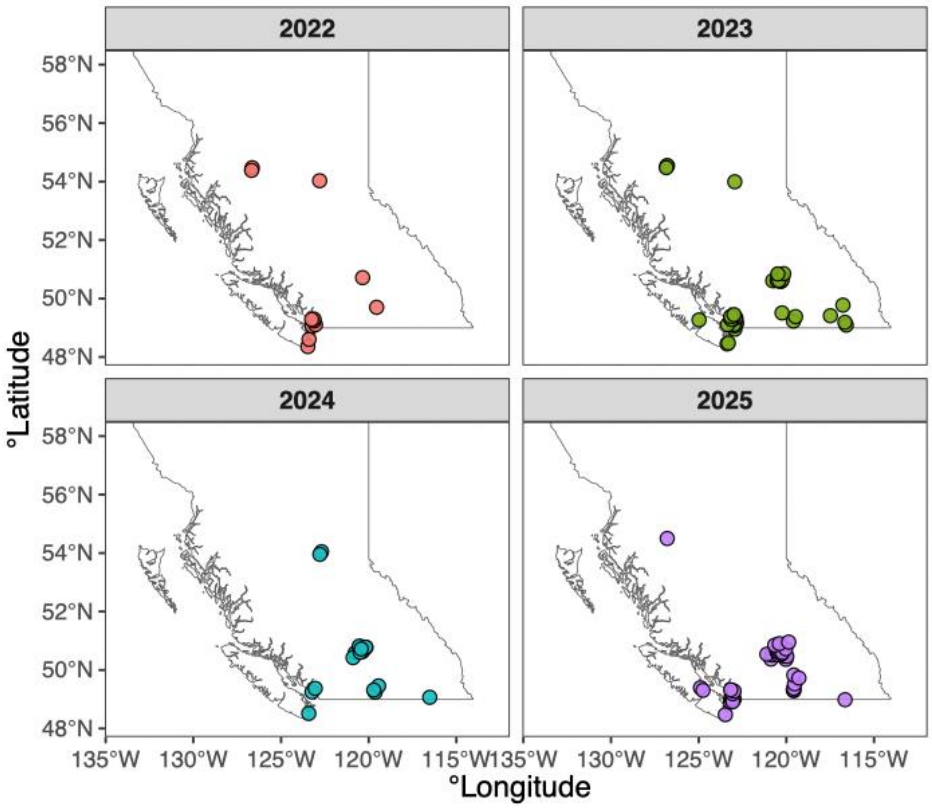
BIMBY TRANSECT PROJECT

BIMBY data provide a valuable resource for researchers studying butterfly ecology, population trends and climate-related changes in Canada. In addition to iNaturalist observations, dedicated volunteers in B.C. have walked prescribed routes, called transects, on a regular basis for four years.

These volunteers have walked more than 4,000 kilometres of transects since 2022 — an extraordinary effort that has generated one of the most detailed regional butterfly datasets in the country. Through 1,200 transect walks they have recorded more than 10,000 butterflies, providing consistent, repeatable monitoring.

These observations help scientists track how butterfly abundance and distribution shift from year to year and identify which populations may be declining or expanding. Long-term transect data is especially powerful because it complements iNaturalist observations, giving researchers both structured and community-generated insights into butterfly populations. This combination allows for a deeper understanding of how butterflies respond to environmental pressures, from habitat change to warming temperatures.

Locations of BIMBY transects in B.C. from 2022 to 2025



CONCLUSION

BIMBY continues to demonstrate the extraordinary power of community science. Since 2022, participants have contributed more than 99,000 iNaturalist observations from across Canada. Their commitment shows how much can be achieved when people come together with curiosity, care and a desire to better understand the natural world.

These efforts are directly advancing scientific research. BIMBY observations now account for roughly one quarter of all butterfly records in Canada submitted to iNaturalist each year, providing researchers with data that would otherwise be impossible to collect at a national scale. In addition, BIMBY engages with butterfly experts who make thousands of identifications on iNaturalist, thereby granting research-grade status to many BIMBY observations, which is essential for researchers.

Just as importantly, BIMBY is an invitation for people to slow down, pay attention to and learn about the wild species around them, and to join a community of kind and curious humans.

This project builds a deeper sense of relationship with nature and one another. It strengthens both our scientific understanding and our collective capacity to care for the places we call home.

Together, BIMBY participants are showing that meaningful conservation begins with paying attention, and that when thousands of people do this together, the impact is profound.

SPECIAL THANKS

BIMBY thrives thanks to the dedication and expertise of the BIMBY committee, including Stephen Deedes, Michelle Tseng, Kirstyn Eckhardt and Sue Elwell.

The committee is grateful for the guidance and steady support of David Suzuki Foundation staff members, and Freya Innes, a student at the University of British Columbia, for help with the B.C. transects.

And huge thanks go to the BIMBY Seekers whose curiosity and care help BIMBY flourish and inspire others to celebrate butterflies in their communities.