

BC Parks iNaturalist Project

Brian Starzomski, John Reynolds, Kate McKeown, Lena Dietz Chiasson, Jason Headley, Thomas Barbin, Erin Springinotic, Tori Miller, Ellyne Geurts, Nico Munoz, Julia Carr, Braden Judson, Eva Ullstrom, Finn McGhee

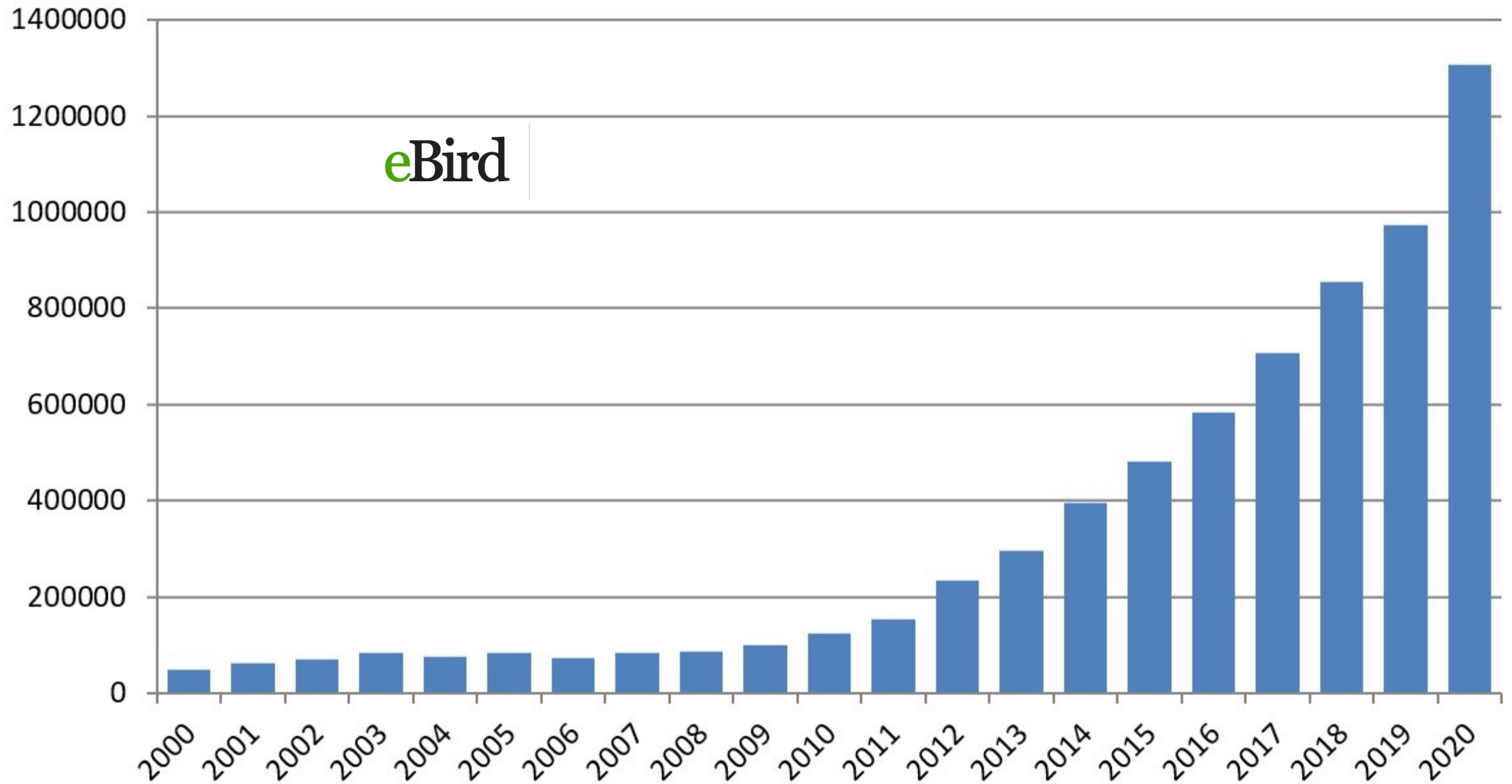
starzom@uvic.ca

Community = citizen science

Volunteers collect information that is useful
for scientific research



Number of checklists submitted in Canada



Observations



The World

116,293,894
OBSERVATIONS

395,962
SPECIES

272,905
IDENTIFIERS

2,403,490
OBSERVERS

Map

Grid

List



Places of Interest

Redo search in map



Map Legend



Common Thrips

(Family Thripidae)

Moscow, ID, USA • Today



1s



Green Lynx Spider

(*Peucetia viridans*)

Grimes County, TX,... • Today



1s



Hover Flies

(Family Syrphidae)

Pratte Ave, Norwic... • Sep 16, 2022



1s

Table, Elkhorn, and Staghorn...

(Genus *Acropora*)

The Point, Douglas... • Sep 8, 2022



1s

Solomon's Seals



Northern Pacific Rattlesnake (*Crotalus oreganus ssp. oreganus*)

VU

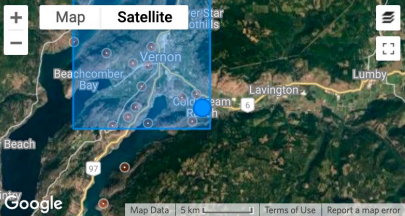
Research Grade

Follow



andrewnydam
51 observations

Observed:
Aug 6, 2019 - 9:00 PM PDT
Submitted:
Aug 13, 2020 - 4:45 PM PDT



North Okanagan, CA-BC,... Show (Obscured) Details

You faved this!

Subfamily Betairidovirinae

Needs ID

Follow



thomasbarbin
15,638 observations

Observed:
Jun 27, 2020 - 11:04 AM PDT
Submitted:
Aug 30, 2020 - 7:30 AM PDT



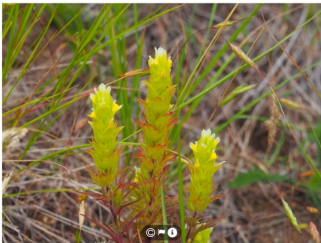
Cape Scott, Mount Waddington, Br... Show Details

emjtca, aliandbrice, and 1 other faved this observation

Grand Coulee Owl's-Clover (*Orthocarpus barbatus*)

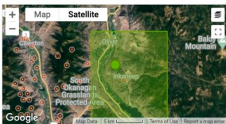
Research Grade

Follow



vanessa_robinson
673 observations

Observed:
Jun 27, 2018
Submitted:
Mar 10, 2019 - 9:49 AM PDT



British Columbia, CA (Obscured) Details

You faved this!

Common Bluecup (*Githopsis specularioides*)

Research Grade

Follow



msanseve
80 observations

Observed:
Jun 4, 2020 - 12:22 PM PDT
Submitted:
Jun 5, 2020 - 12:08 PM PDT



Capital, BC, Canada Details

Imaghee and bstarozski faved this observation

Frost's Crystalwort (*Riccia frostii*)

Research Grade

Follow



Beautiful live! Riccia frostii



glf
876 observations

Observed:
Oct 7, 2011
Submitted:
Jun 1, 2020 - 12:24 AM PDT



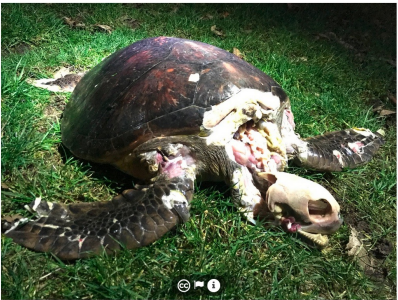
Chilliwack, BC, Canada Details

cgbc, bstarozski, and 2 others faved this observation

Green Sea Turtle (*Chelonia mydas*)

Research Grade

Follow



willywillycoolguy
2 observations

Observed:
Jan 16, 2021 - 5:45 PM UTC
Submitted:
Jan 17, 2021 - 7:22 PM PST



Canada (Obscured) Details

cgbc and bstarozski faved this observation

Hooded Merganser (*Lophodytes cucullatus*)

Research Grade



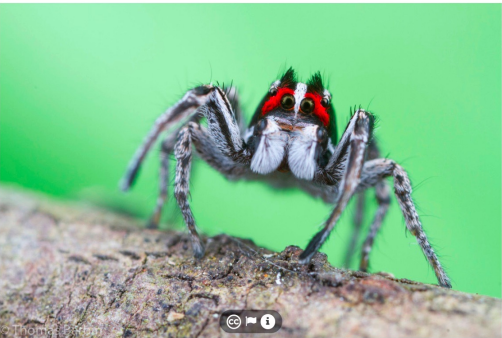
Notes

When I woke up this morning I didn't know I'd be taking a selfie with a duck. Or running after it as it tried to take off from a wet road, which they never can. Or driving one-handed to release it at the nearest body of water. Rescue mission: successfull! The duck is on the left.

Habronattus sansoni

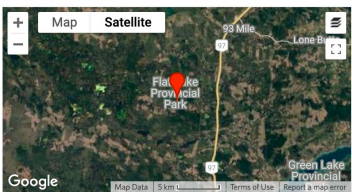
Research Grade

Follow



thomasbarbin
15,638 observations

Observed:
Jun 10, 2020 - 1:30 PM PDT
Submitted:
Jun 21, 2020 - 6:44 PM PDT



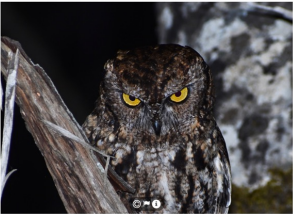
Cariboo, BC, Canada Details

You faved this!

Western Screech-Owl (*Megascops kennicottii*)

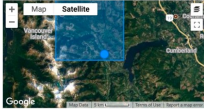
Research Grade

Follow



meganbueers
391 observations

Observed:
Apr 23, 2020 - 8:50 PM PDT
Submitted:
Apr 23, 2020 - 6:47 PM PDT




Comox-Stathema, CA-B... Show (Obscured) Details


bwildhead and bstarozski faved this observation



BC Parks iNaturalist Project

- Developed as a project that had a defined and focused extent that could contribute to better understanding BC's most beautiful landscapes
- BC Parks has less biodiversity data than it should
- We thought it would be an engaging place to start, to encourage more observations

Grey Wolf (*Canis lupus*) Research Grade







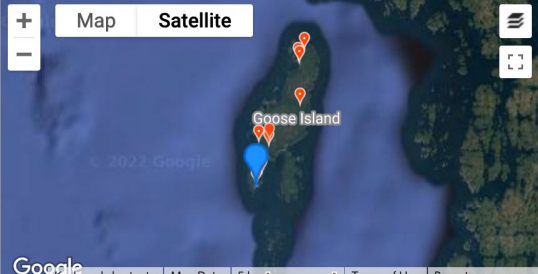
bstarzomski
 67,453 observations

Observed:
Jun 24, 2019 · 2:09 PM PDT

Submitted:
Jun 29, 2019 · 8:44 AM PDT

 Map

 Satellite



Keyboard shortcuts


Map Data

5 km

Terms of Use

Report a map error

Central Coast, BC, Canada [Details](#)

 mvmullin, kmfret, and 1 other faved this observation

Using iNat is easy!



Paintedhand Mudbug (*Lacunicambarus polychromatus*)

Research Grade



colindjones

7,131 observations



Observed:

May 15, 2018 · 3:23 PM EDT

Submitted:

May 18, 2018 · 4:49 PM PDT



V Marcotte Park, Windsor, ON, CA

[Details](#)

☆ Be the first to fave this observation!

- A new species for Canada discovered using iNaturalist

The Canadian Field-Naturalist

First record of Paintedhand Mudbug (*Lacunicambarus polychromatus*) in Ontario and Canada and the significance of iNaturalist in making new discoveries

**COLIN D. JONES^{1,*}, MAEL G. GLON², KAREN CEDAR³, STEVEN M. PAIERO⁴, PAUL D. PRATT³,
and THOMAS J. PRENEY³**

2019

Olympic Peninsula Millipede (*Tubaphe levii*)

1st Record for iNaturalist



Carmanah Walbran Provincial Park

About

Leave  8

Carmanah Walbran Provincial Park is a luxuriously forested sanctuary that is without a doubt one of the most remarkable wild places on Vancouver Island. The park offers protection to diverse forest ecosystems, including a large Sitka spruce

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 [Edit Project](#)

 [Project Journal](#)

Overview

4,355
OBSERVATIONS

526
SPECIES

462
IDENTIFIERS

108
OBSERVERS

 **Stats**



We hire a team each year




About

Leave  18

A project to track progress by BC Parks iNat team members during the 2021 field season!

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 [Edit Project](#)

 [Project Journal](#)

Overview

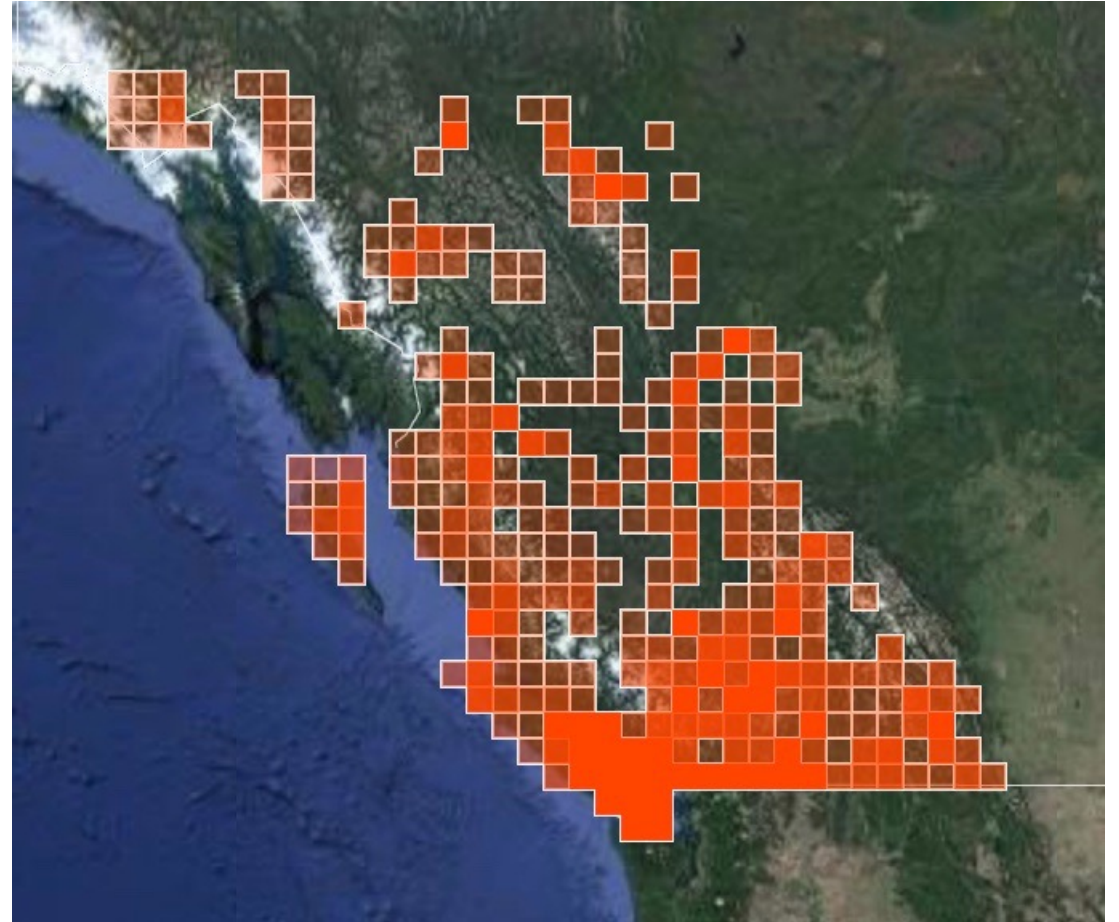
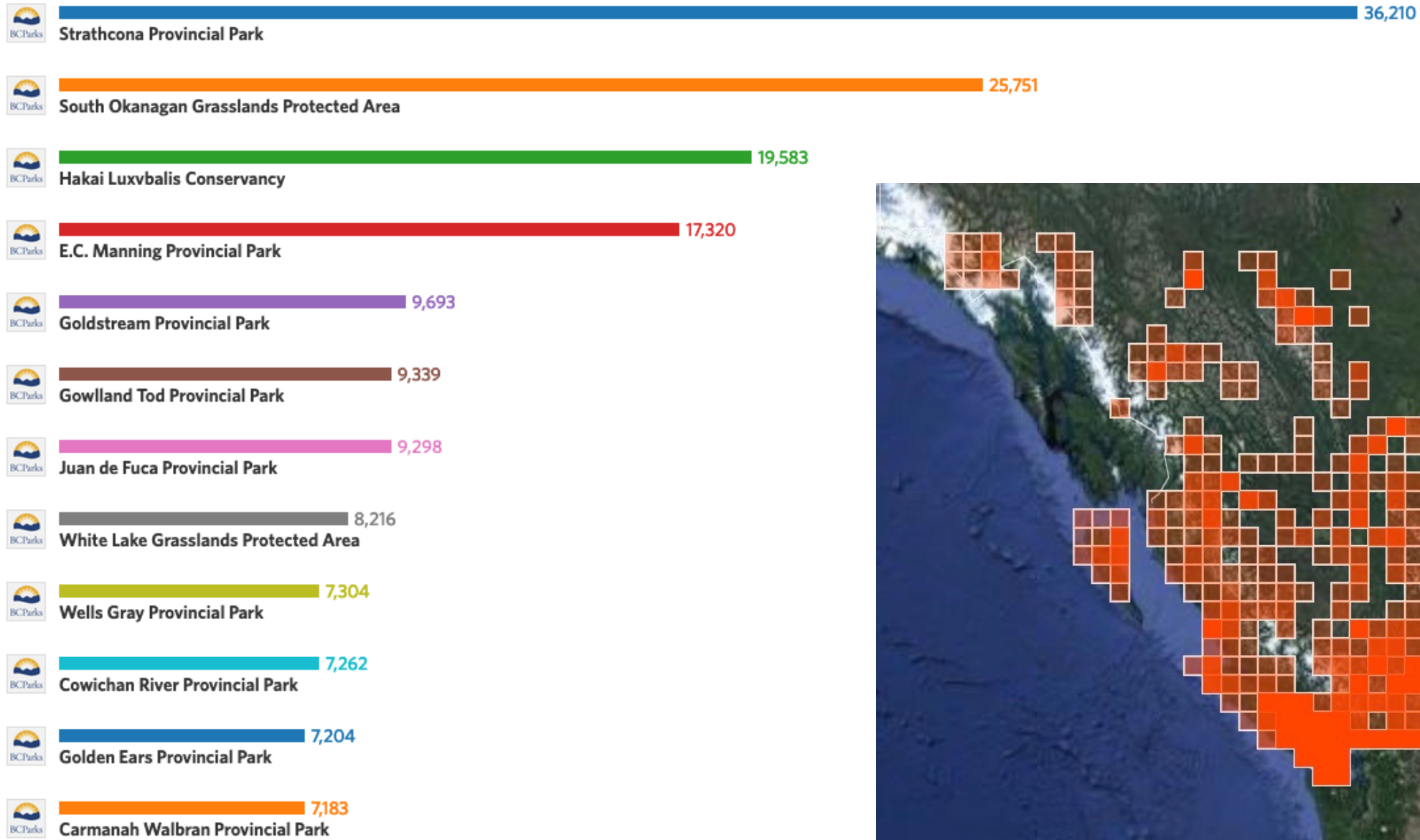
178,415
OBSERVATIONS

5,193
SPECIES

2,224
IDENTIFIERS

11
OBSERVERS

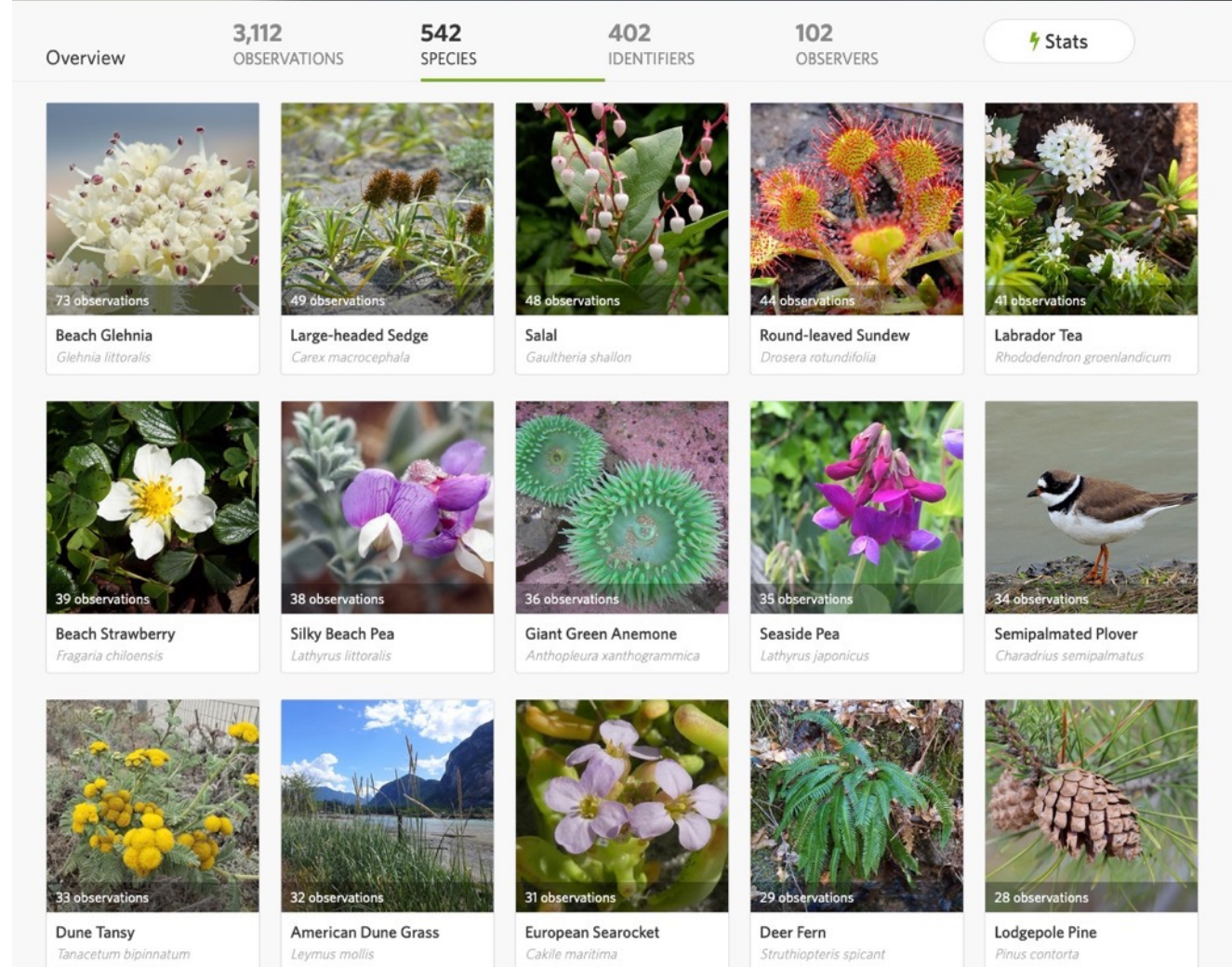
 **Stats**




1035 provincial protected areas

How it works


- AI-based ID of species from photos
- Can improve understanding of known species locations
- Can find new locations
- Can find more observations, especially for species not well surveyed using other methods
- Can track change
- Is another way to engage people and get them out in BC Parks!
- **Makes wonderful list of species found in protected areas**



BC Parks iNaturalist Project



[Explore](#) [Your Observations](#) [Community](#) [Identify](#) [More](#)

[Upload](#) 4 8 



About [Leave](#) 25
Help document and celebrate the biodiversity of BC Parks! Every species you upload from any British Columbia Provincial Park and protected area will be captured in this umbrella project.
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[Edit Project](#) [NEWS](#)

[Overview](#)

17,715
OBSERVATIONS

2,765
SPECIES

1,314
IDENTIFIERS

1,011
OBSERVERS

[Stats](#)

Leaderboard [Sort By: Observations](#) | [Species](#) | [Observers](#)



Hakai Luxvbalis Conservancy

2,768



Goldstream Provincial Park

1,340

May 2019- before our first field season

BC Parks iNaturalist Project



About

Leave 158

Help document and celebrate the biodiversity of BC Parks! Every species you upload from any British Columbia Provincial Park and protected area will be captured in this umbrella project.

This project is a collaboration between the University of Victoria, Simon Fraser University, BC

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[Edit Project](#)

[NEWS](#)

Overview

113,062
OBSERVATIONS

4,915
SPECIES


2,583
IDENTIFIERS

2,342
OBSERVERS


[Stats](#)

Fall 2019

BC Parks iNaturalist Project



About

[Members](#)  686

Help document and celebrate the biodiversity of BC Parks! Every species you upload from any British Columbia Provincial Park and protected area will be captured in this umbrella project. This project is led by the University of Victoria and Simon Fraser University, in partnership with BC Parks and the BC Parks Foundation, with

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[⚙️ Edit Project](#)

[📖 Project Journal](#)

Overview

267,726
OBSERVATIONS

6,862
SPECIES

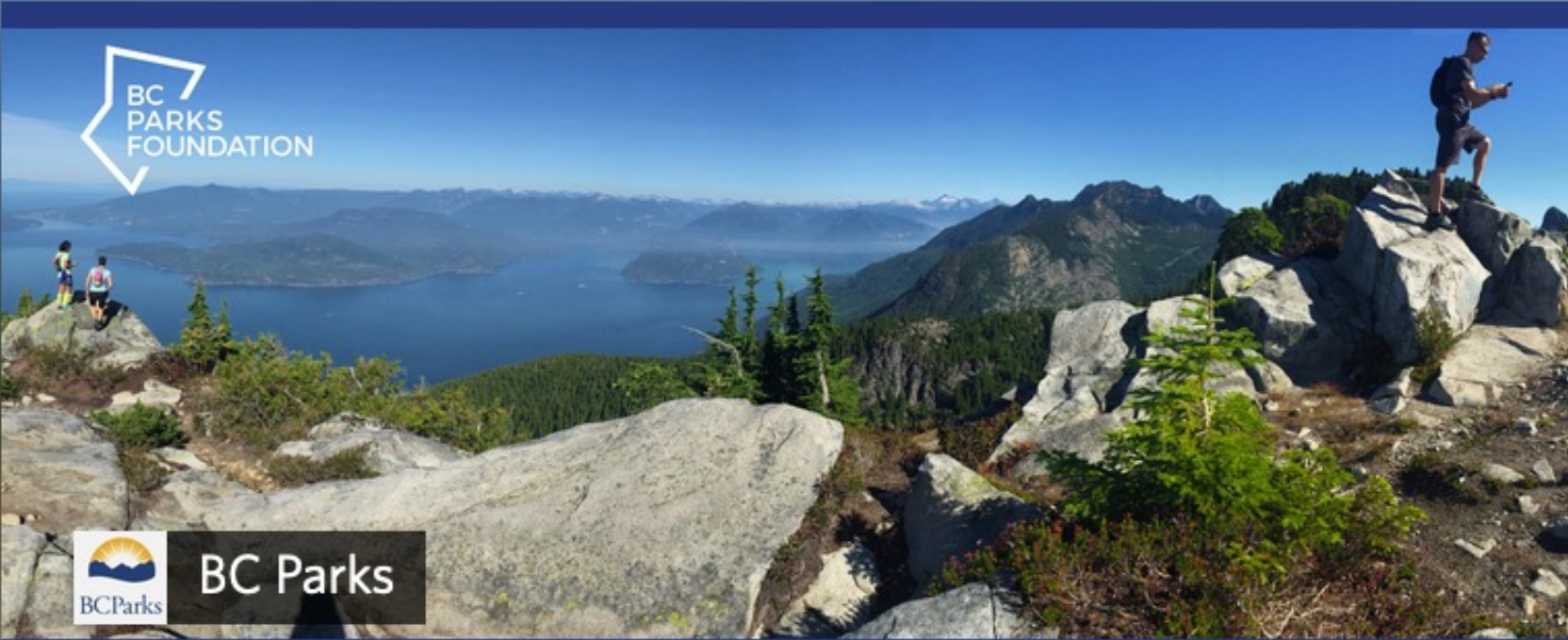
4,399
IDENTIFIERS

4,604
OBSERVERS


 **Stats**

November 2020

BC Parks iNaturalist Project



About

Members  883

Help document and celebrate the biodiversity of BC Parks! This project is led by the University of Victoria [@bstarzomski](#) and Simon Fraser University [@johndreynolds](#), in partnership with BC Parks, with additional funding from the Sitka Foundation and the Pacific Wildlife Foundation. The BC Parks Foundation has helped with

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[⚙️ Edit Project](#)[📅 Project Journal](#)

Overview

617,016
OBSERVATIONS

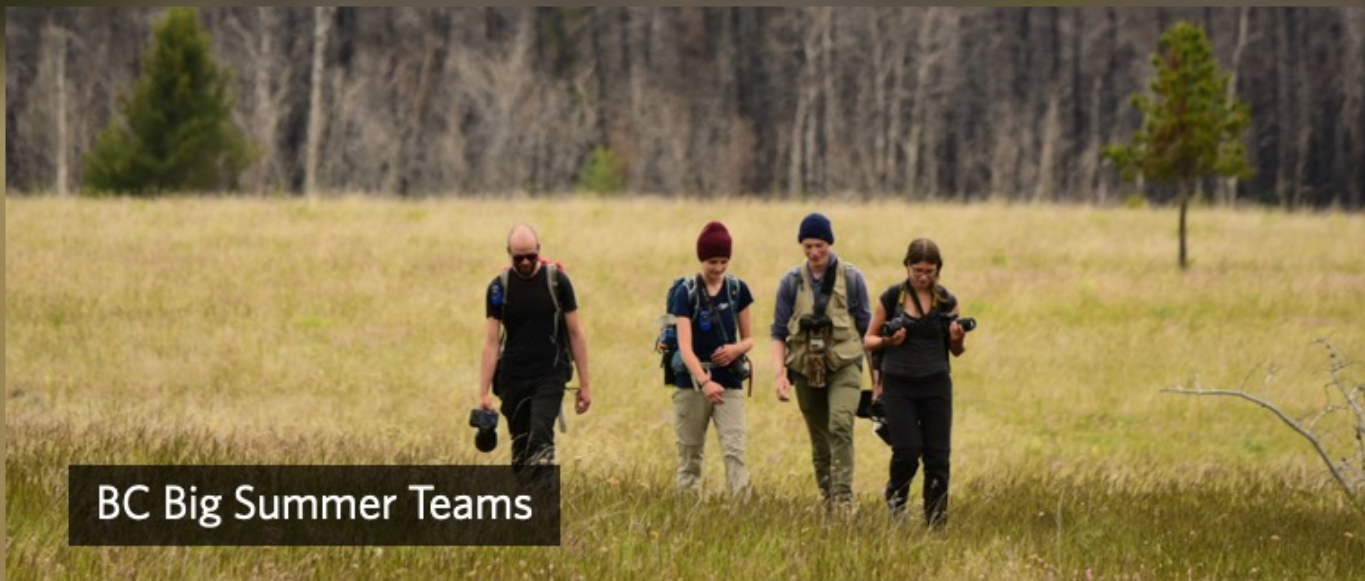
10,490
SPECIES

7,310
IDENTIFIERS

8,711
OBSERVERS

 **Stats**

September 26, 2022



BC Big Summer Teams

About

Members 4

A project to collect the observations of the BC Parks iNat teams

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[⚙️ Edit Project](#)

[📖 Project Journal](#)

Overview

450,471
OBSERVATIONS

7,986
SPECIES

4,822
IDENTIFIERS

27
OBSERVERS

[⚡ Stats](#)

Leaderboard

Sort By: [Observations](#) | [Species](#) | [Observers](#)



BC Parks iNat Team Big Summer 2022

4,391



BC Parks iNat Team Big Summer 2021

4,308



BC Parks iNat Team Big Summer 2020

3,793



BC Parks iNat Team Big Summer 2019

3,089

Field Season 2021

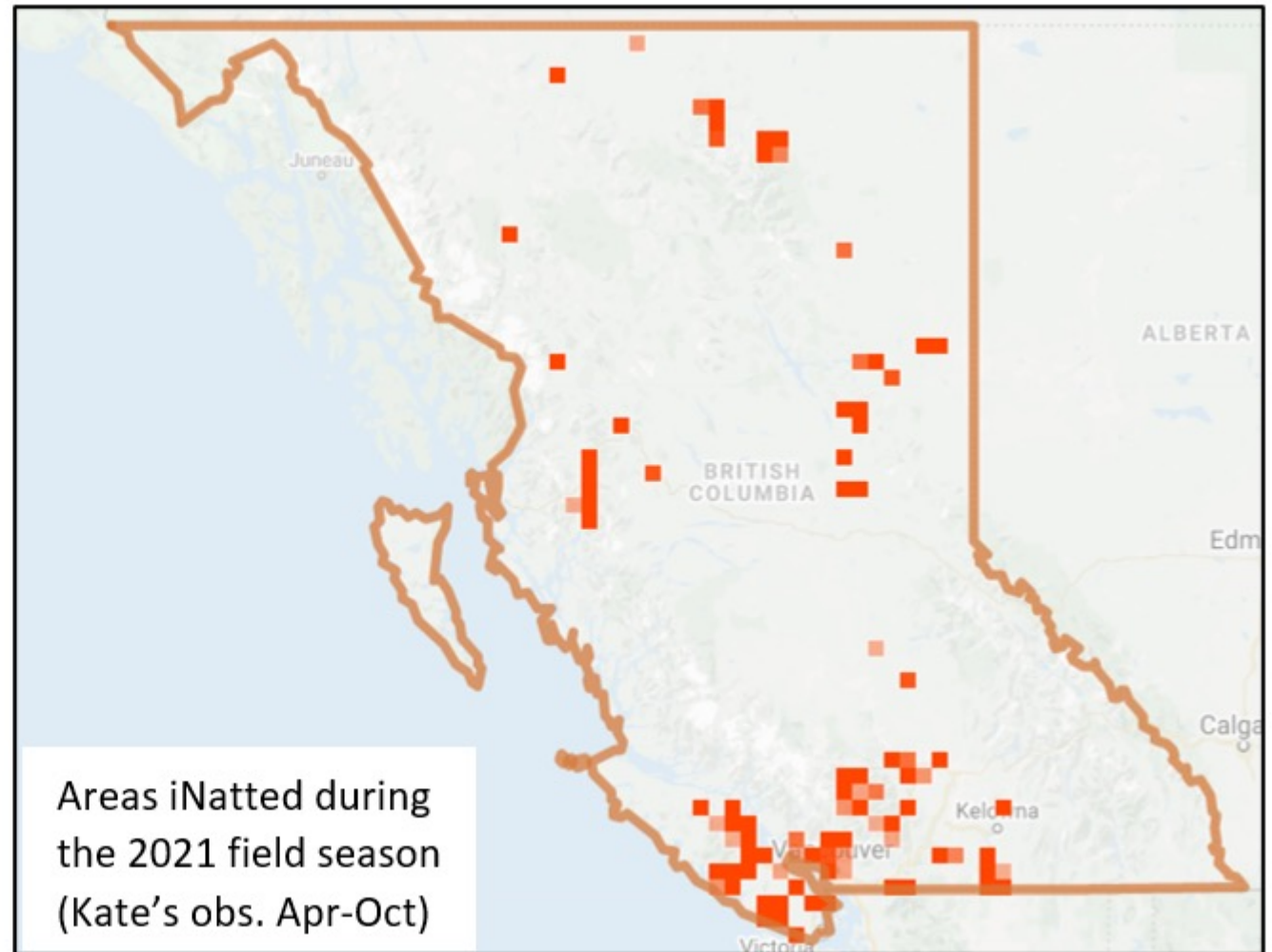
Provincial Parks, Ecological Reserves,
and Protected Areas visited: **87**

Days in the field: **104**

Km travelled while iNatting: **364**

Hours iNatting: **524**

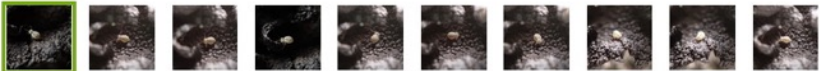
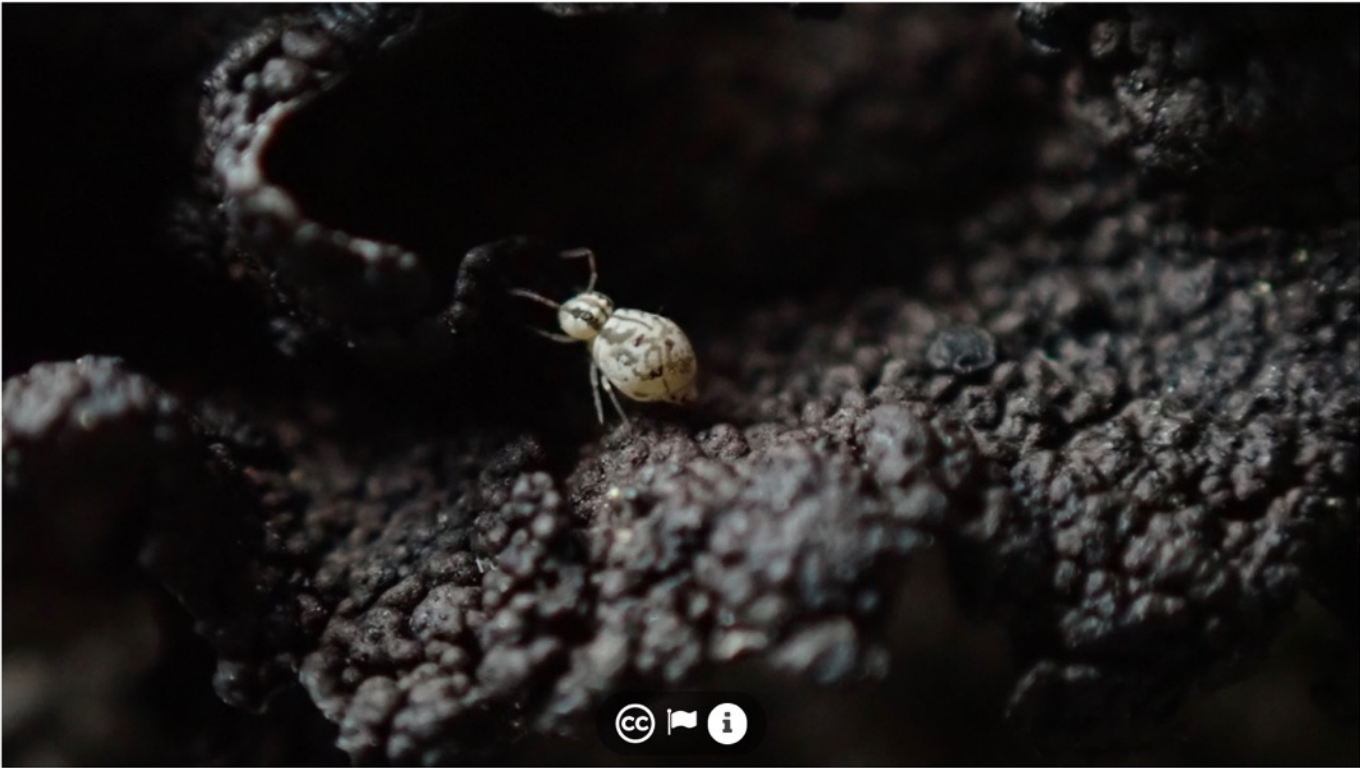
Observations during the 2021 field
season: **24,797**



Genus *Sminthurinus* Needs ID

New to science!

Follow



bee-worldly

19,831 observations



Observed:
May 21, 2021 · 11:06 AM PDT

Submitted:
Aug 27, 2021 · 4:09 PM PDT



South Okanagan Grasslands, Okana... Show

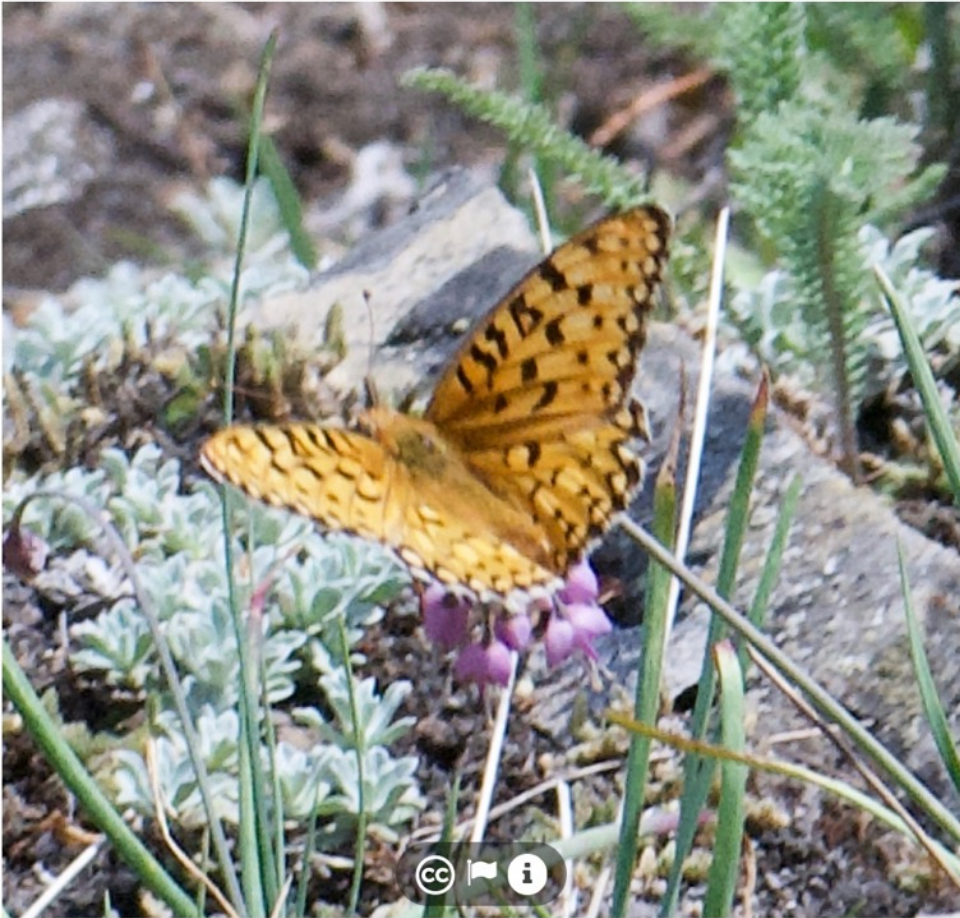
Details

★ bee-worldly, silaseckhardt, and 2 others faved this observation

Edwards's Fritillary (*Speyeria edwardsii*)

VU

Research Grade



New to BC!

Edit



bstarzomski

58,039 observations



Observed:

Jul 12, 2021 · 1:38 PM PDT

Submitted:

Sep 16, 2021 · 1:49 PM PDT



★ bstarzomski and jstraka faved this observation



Woodley Range Ecological Reserve

About

Leave

8

This ecological reserve is currently closed to the public. Woodley Range Ecological Reserve was established to protect exceptional plant species richness and sensitive meadow and woodland ecosystems developed on cretaceous sandstones.

Photo by ecoreserves.bc.ca

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[Your Membership](#)

[Edit Project](#)

[Project Journal](#)

Overview

7,015
OBSERVATIONS

705
SPECIES

375
IDENTIFIERS

24
OBSERVERS

Stats



Woodley Range Ecological Reserve

Overview

7,015
OBSERVATIONS

705
SPECIES

Northern range extension, used in
COSEWIC deliberations this year

About

Leave

8

This ecological reserve is currently closed to the public. Woodley Range Ecological Reserve was established to protect exceptional plant species richness and sensitive meadow and woodland ecosystems developed on cretaceous sandstones.

Photo by ecoreserves.bc.ca

[Read More >](#)

[Your Membership](#)

Sharp-tailed Snake (*Contia tenuis*) CR Research Grade



Finn McGhee

Follow



fmcghee

7,966 observations



Observed:
May 8, 2021 · 2:03 PM PDT

Submitted:
May 10, 2021 · 9:46 PM PDT

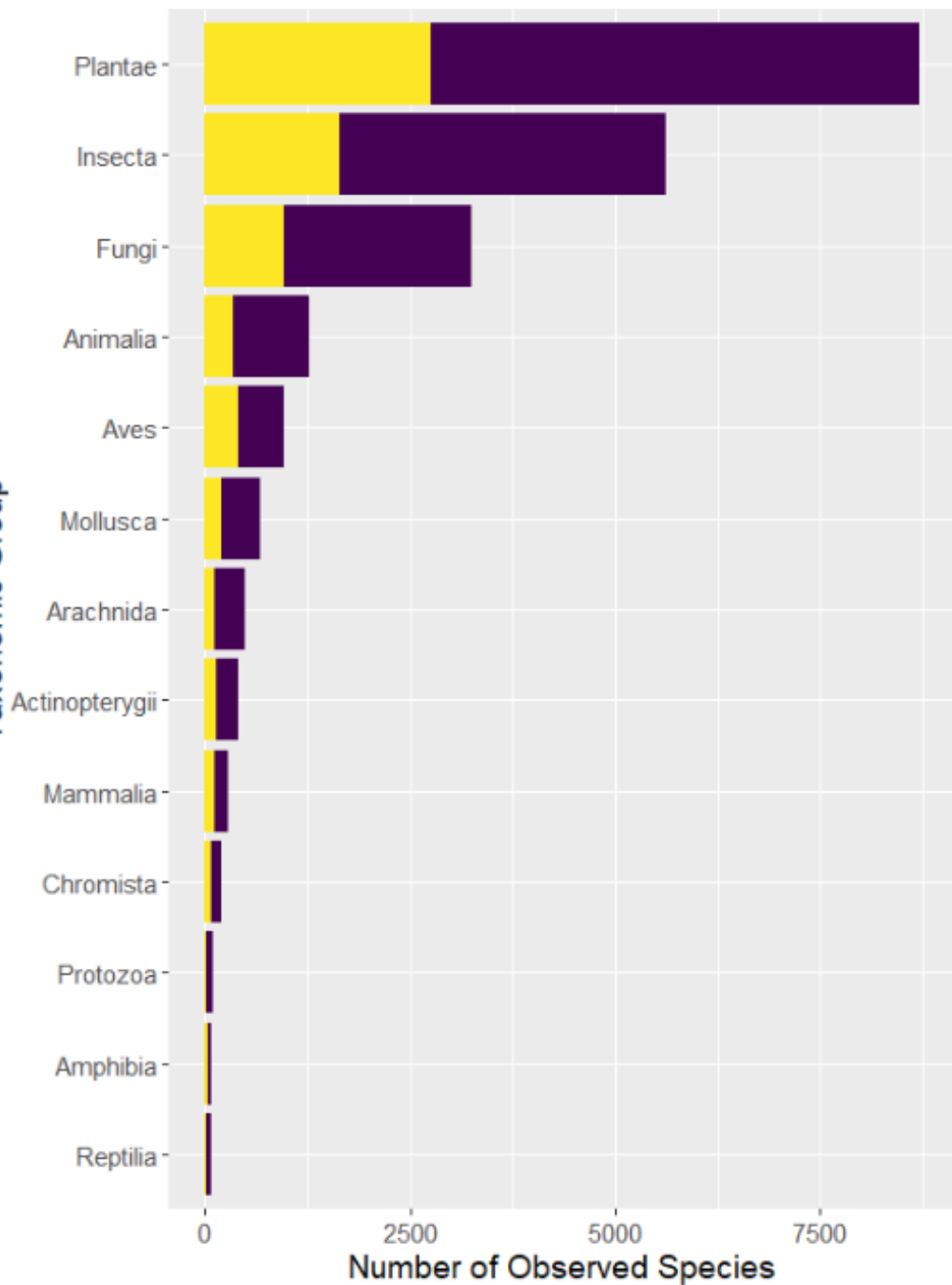


Cowichan Valley, BC, Canada

[Details](#)

iNaturalist observations in British Columbia

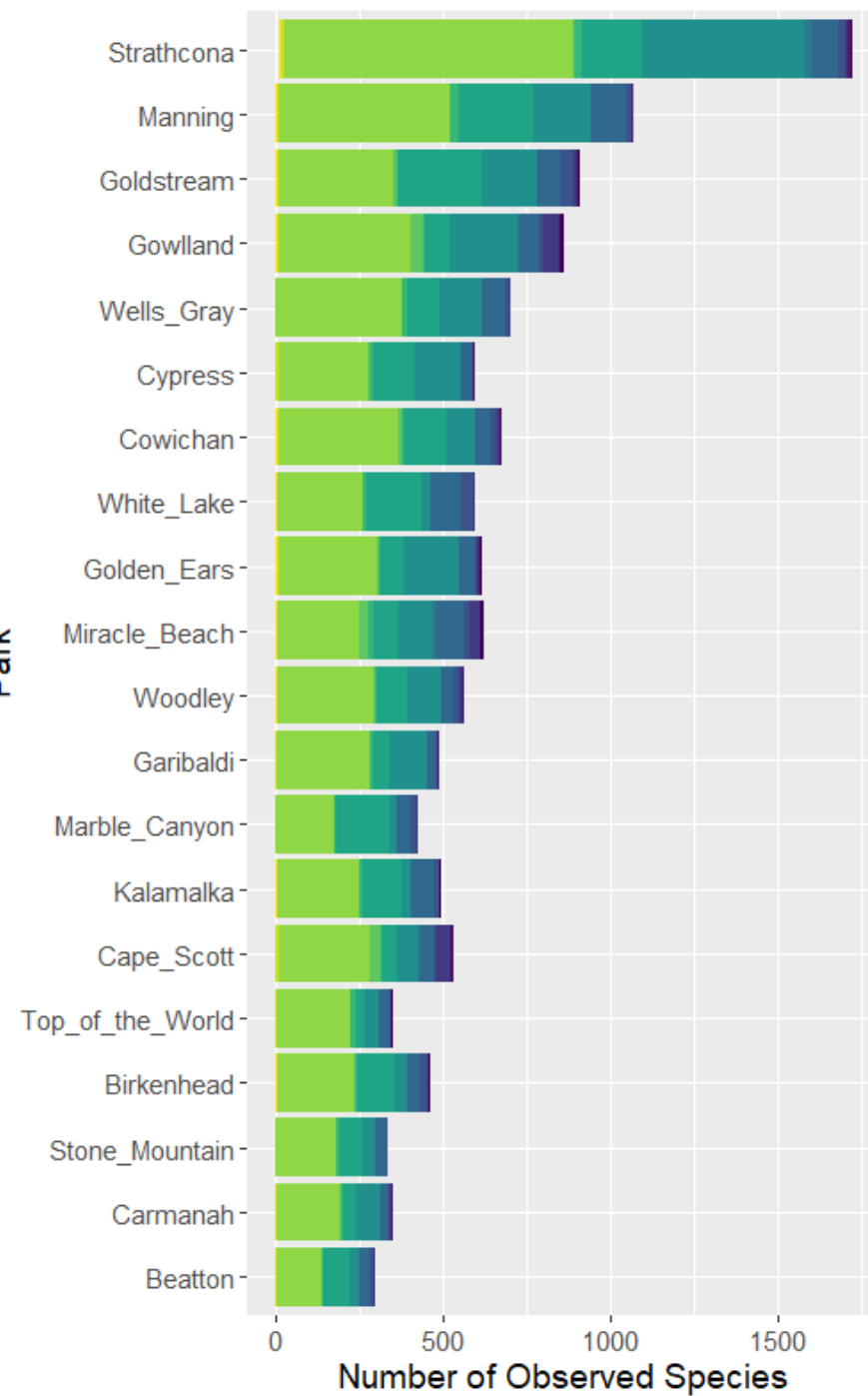
Taxonomic Group



Project

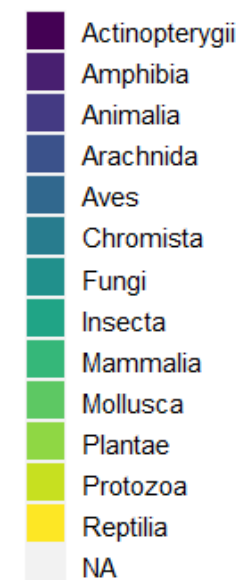


Park



Nico Muñoz

Taxonomic Group





BC Rarities

About

Leave  37

This project celebrates rare species of plants and animals in British Columbia.

All species that are listed as special concern (S3), imperiled (S2), critically imperiled (S1), possibly extirpated (SH), or presumed extirpated (SX) in BC and those that are on the SARA list of special

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Overview

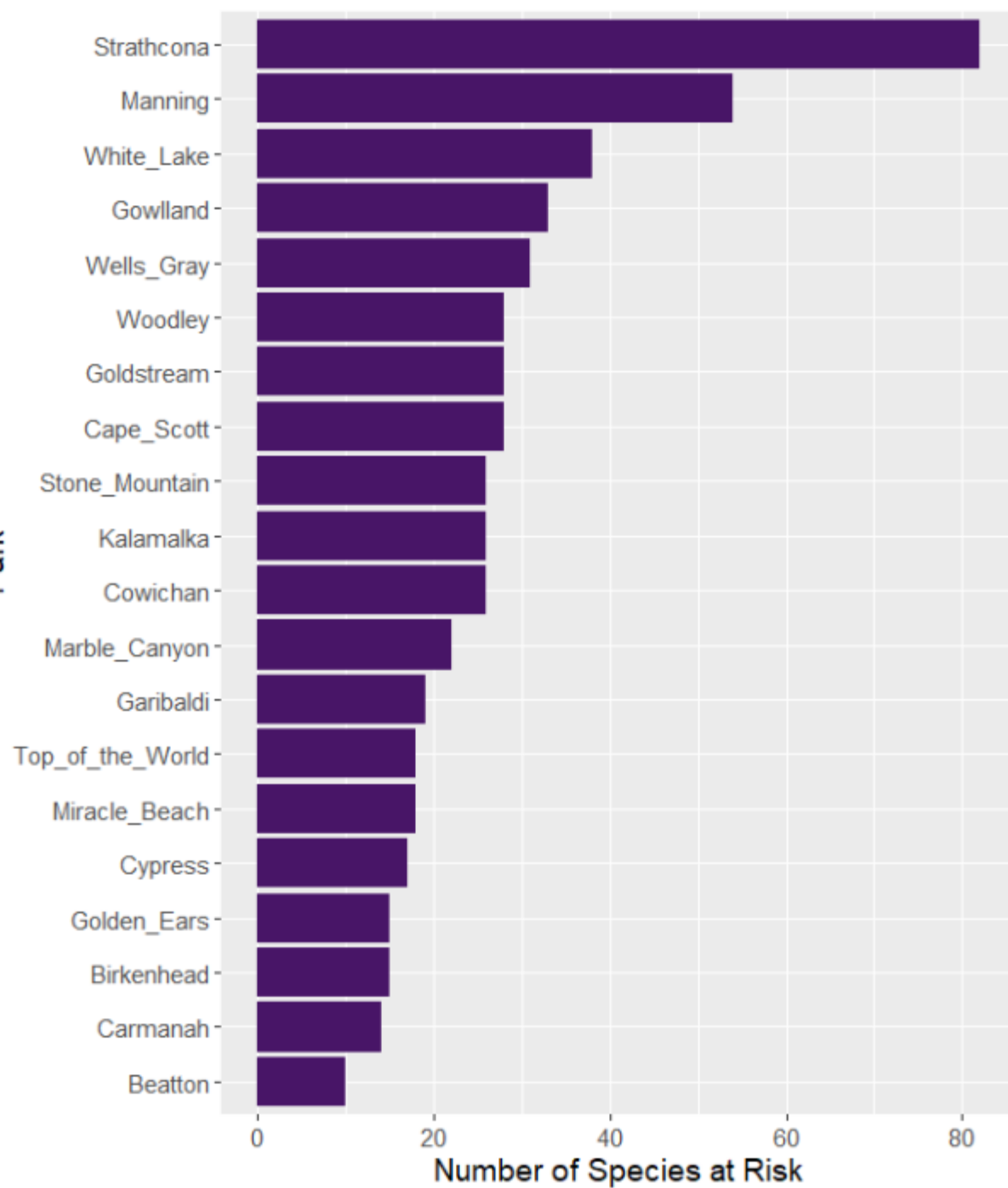
53,558
OBSERVATIONS

1,004
SPECIES

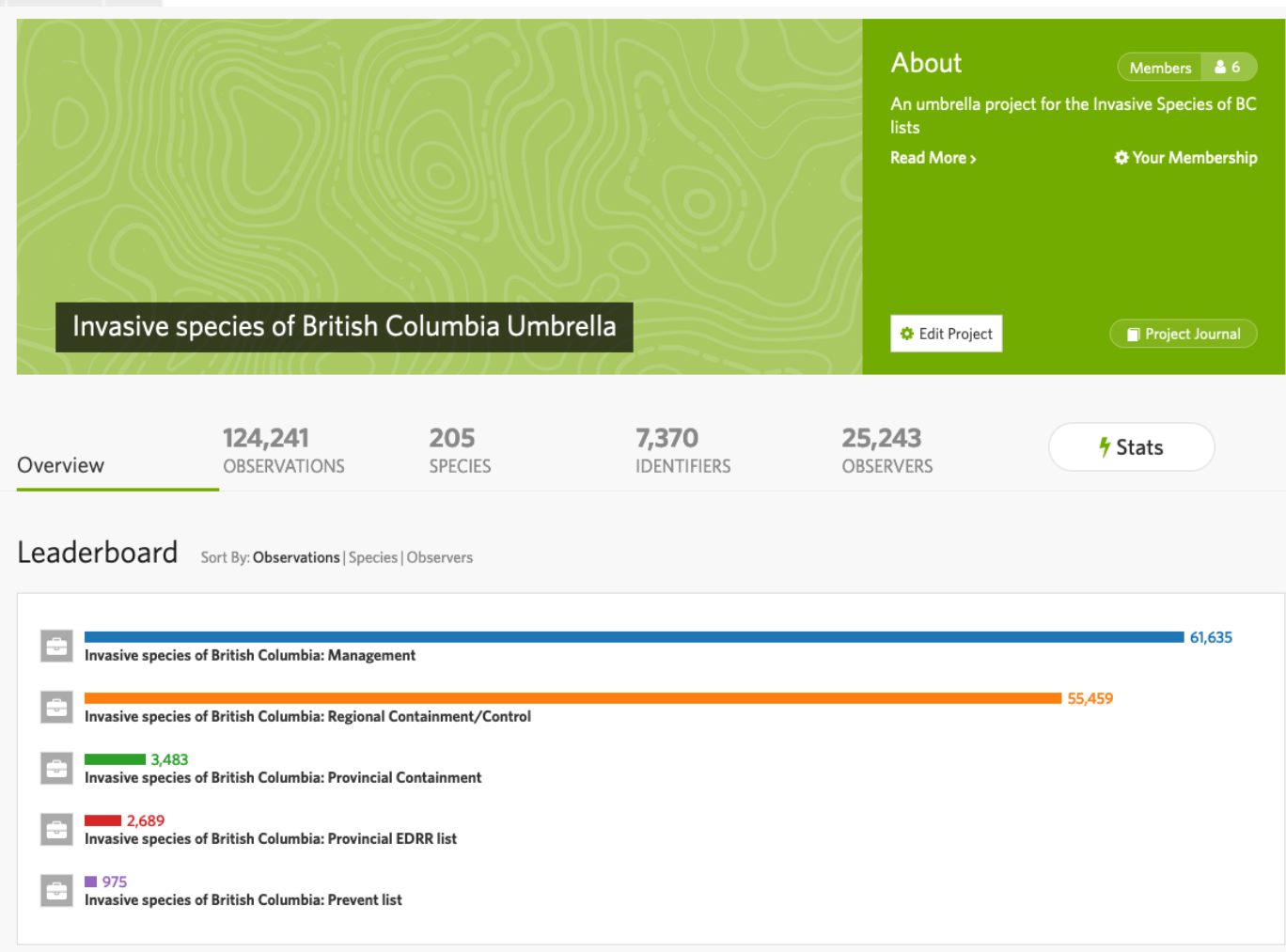
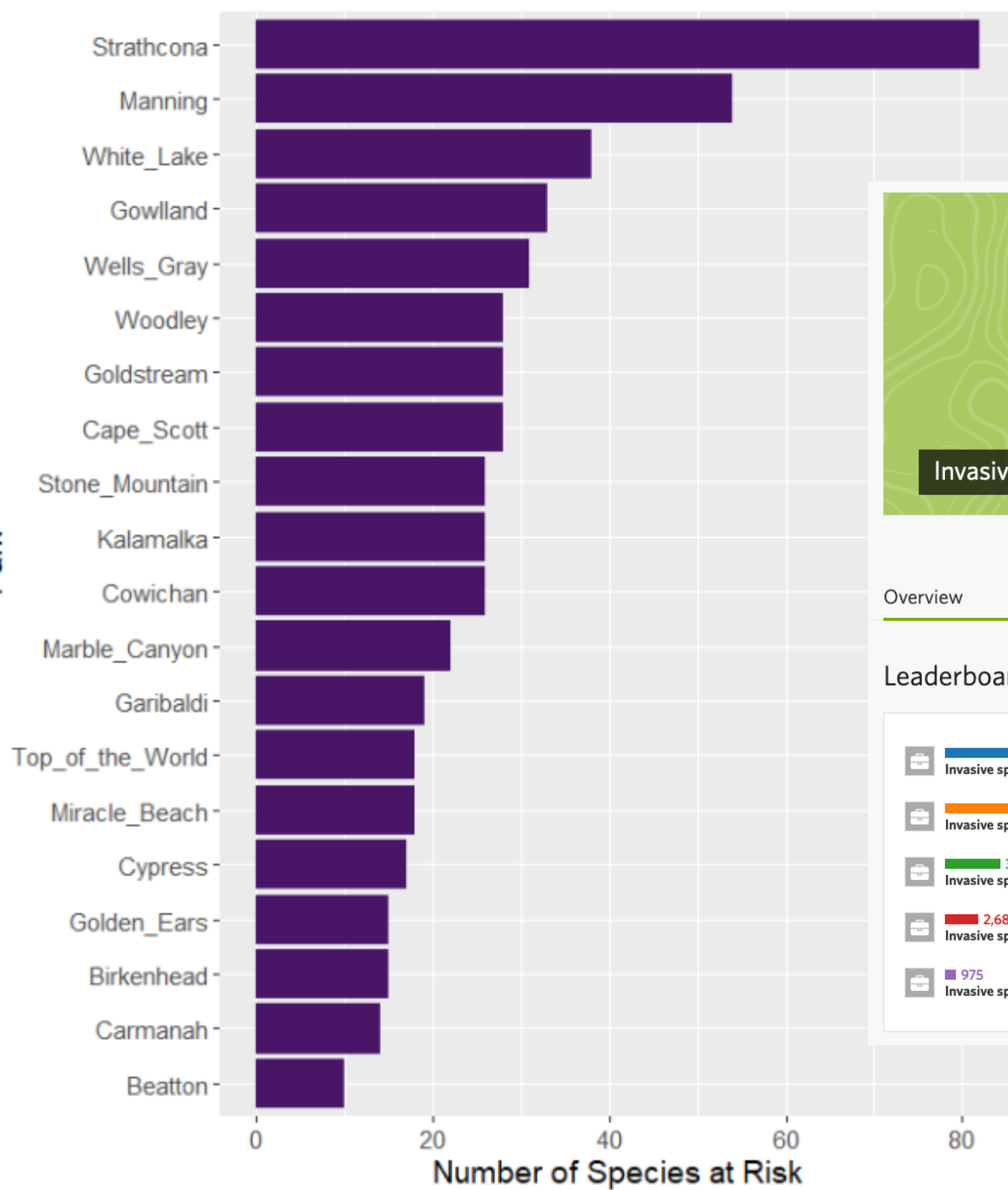
4,175
IDENTIFIERS

6,910
OBSERVERS

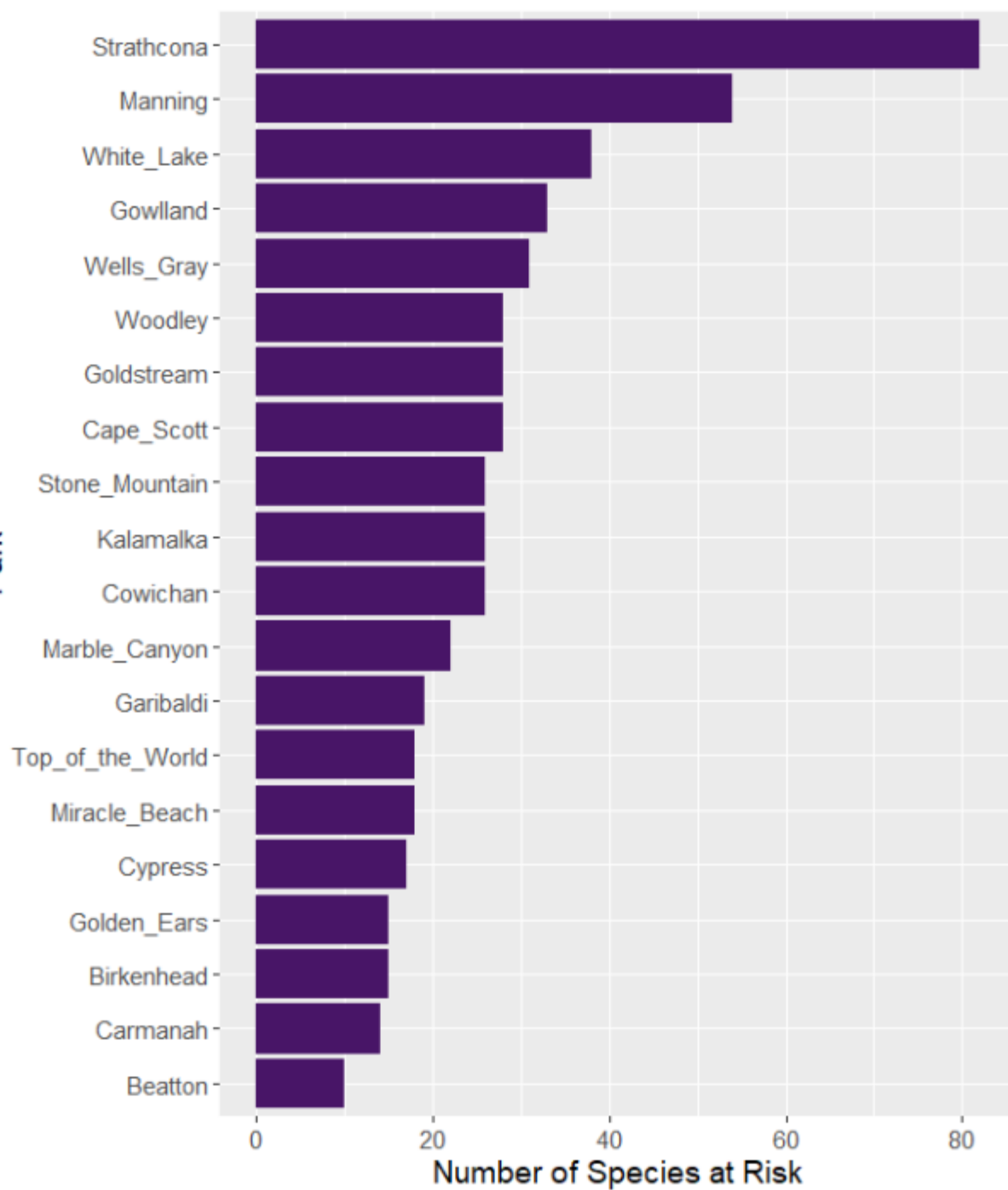
 **Stats**



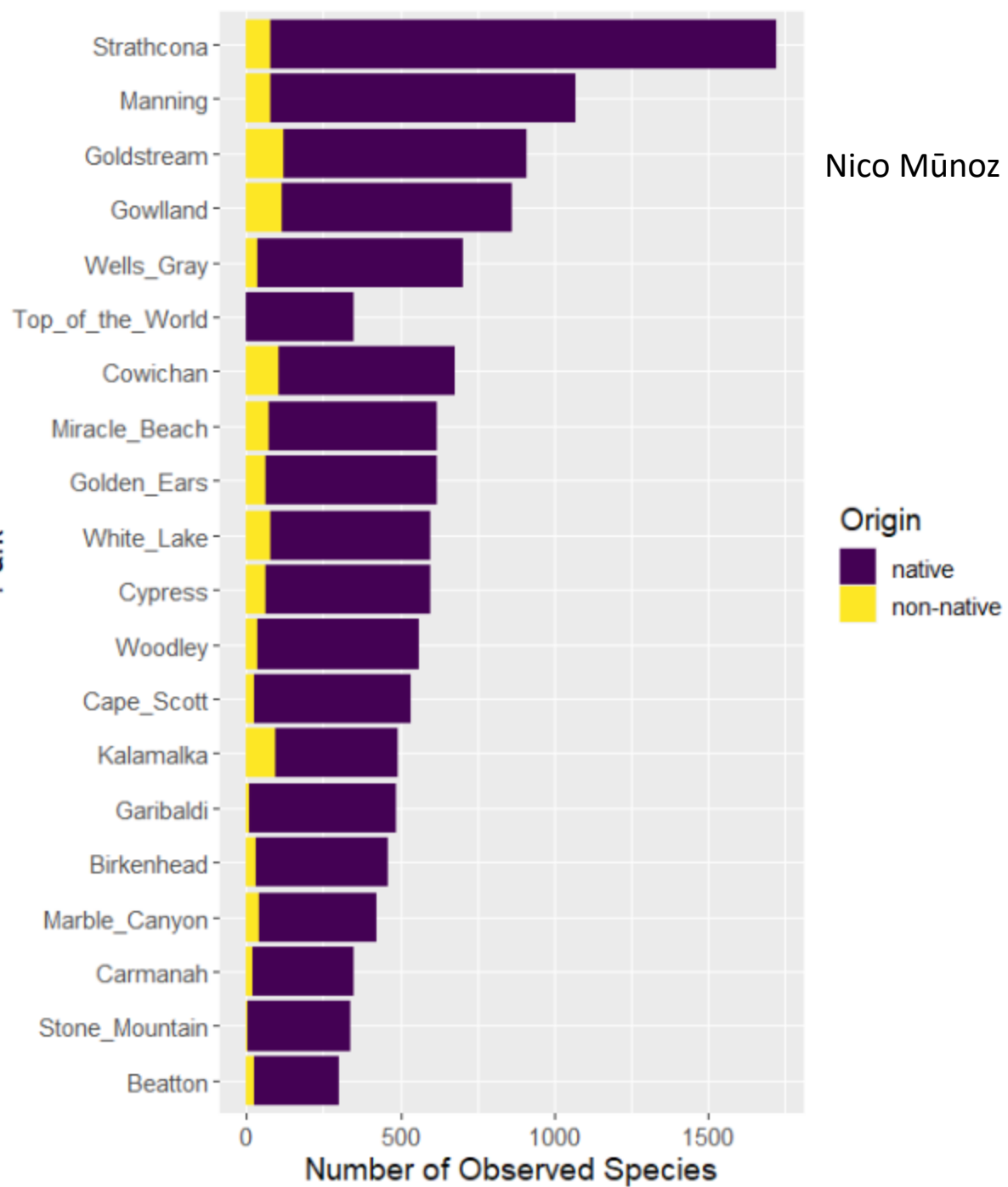
Park



Park



Park



Nico Muñoz

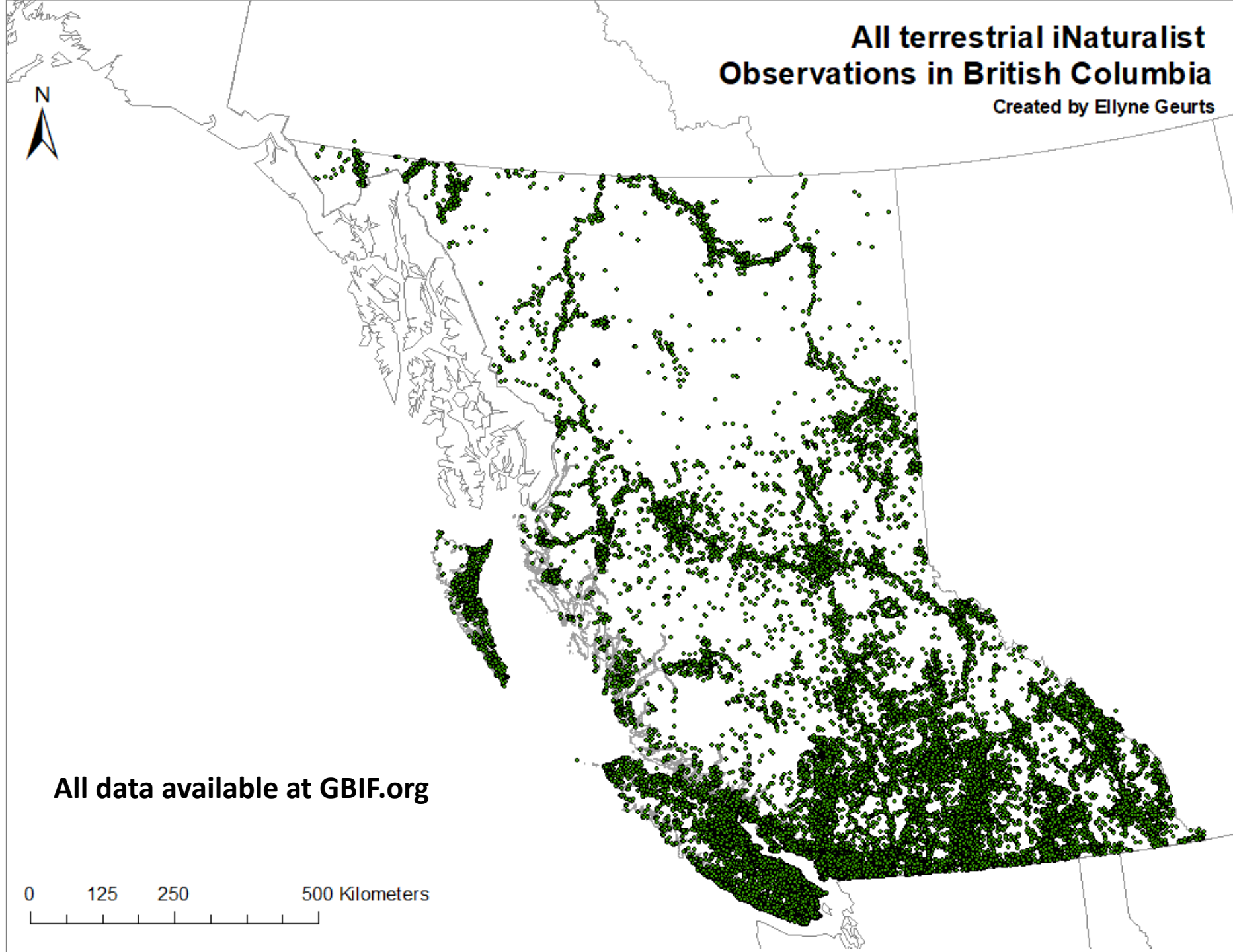
All terrestrial iNaturalist Observations in British Columbia

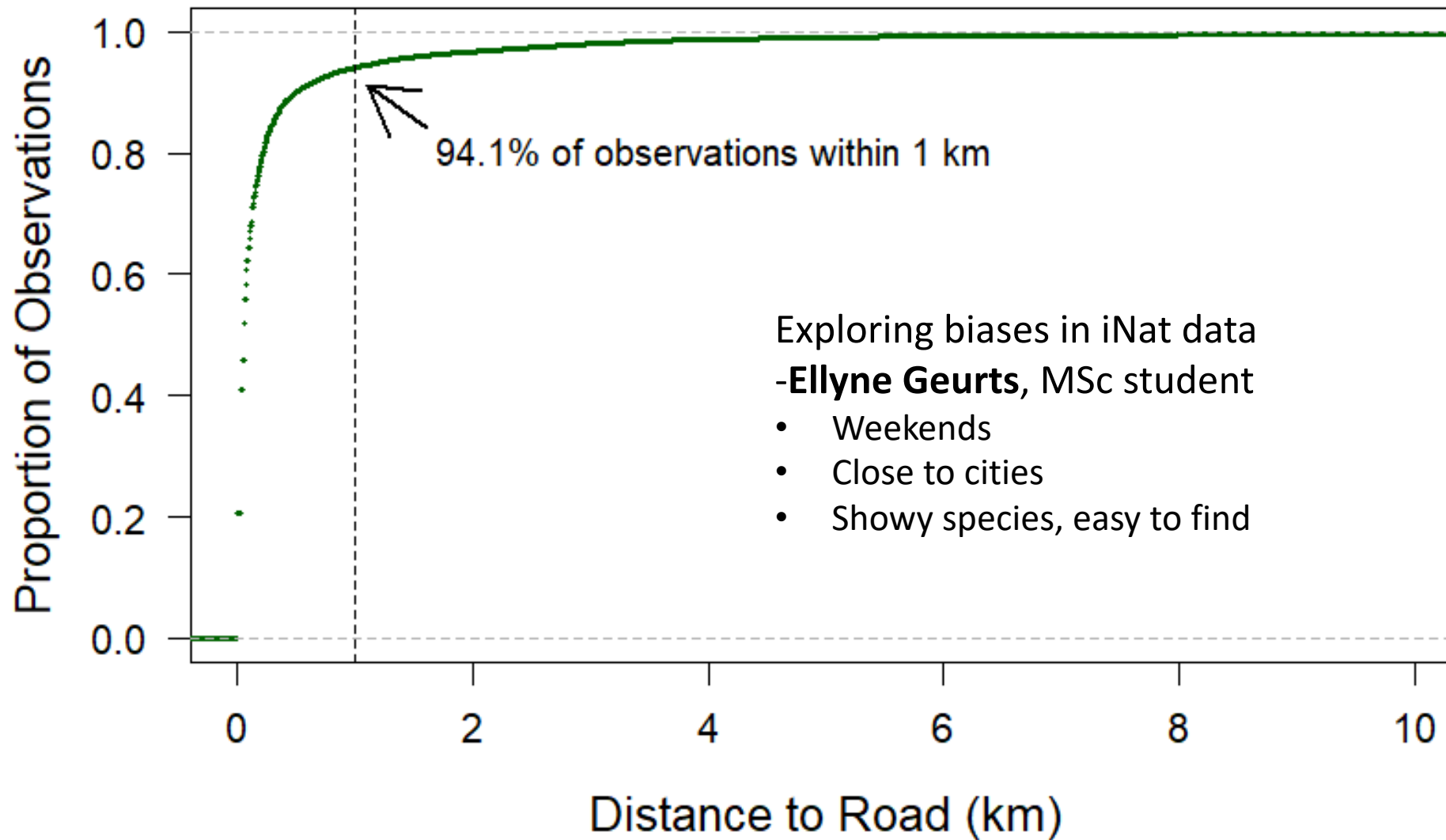
Created by Ellyne Geurts



All data available at [GBIF.org](https://www.gbif.org)

0 125 250 500 Kilometers





Quantiles	0 %	25 %	50 %	75 %	100 %
Distance (km)	0 km	0.025	0.05 km	0.158	47.6

Closing Thoughts

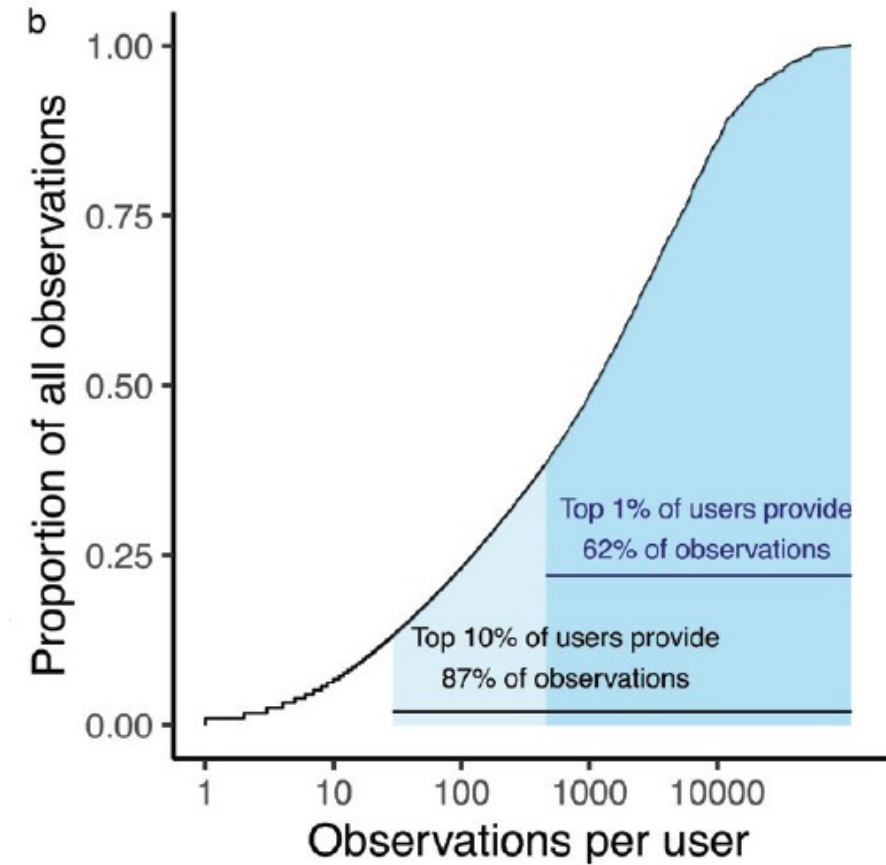
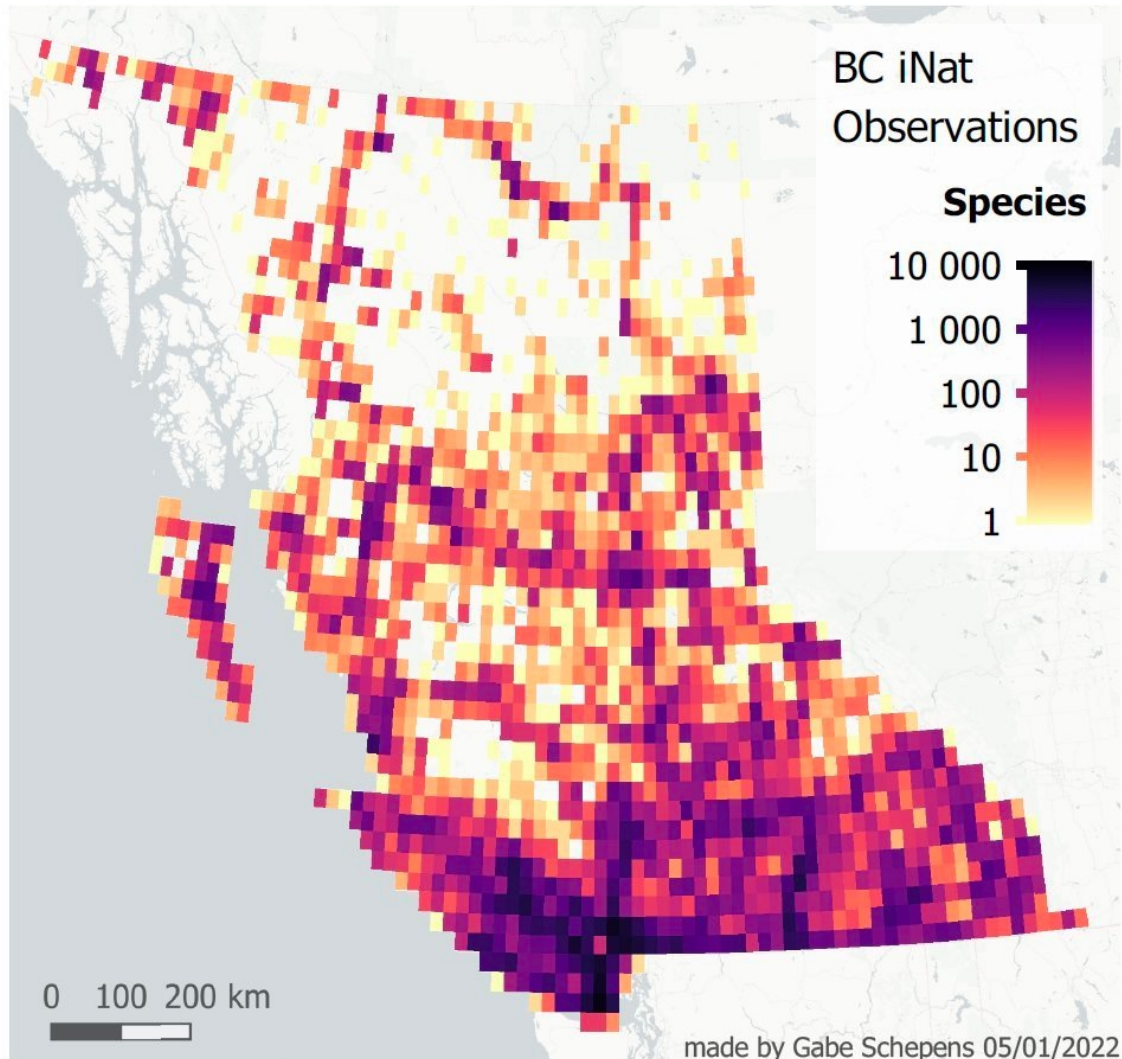
Strengths of Community Science

- Cheap!
- Lots of discoveries – rare, invasive species, disease
- Sample sizes and scales open up new questions, analyses
- Long-term monitoring possible
- Community engagement & enthusiasm



Limits and Biases

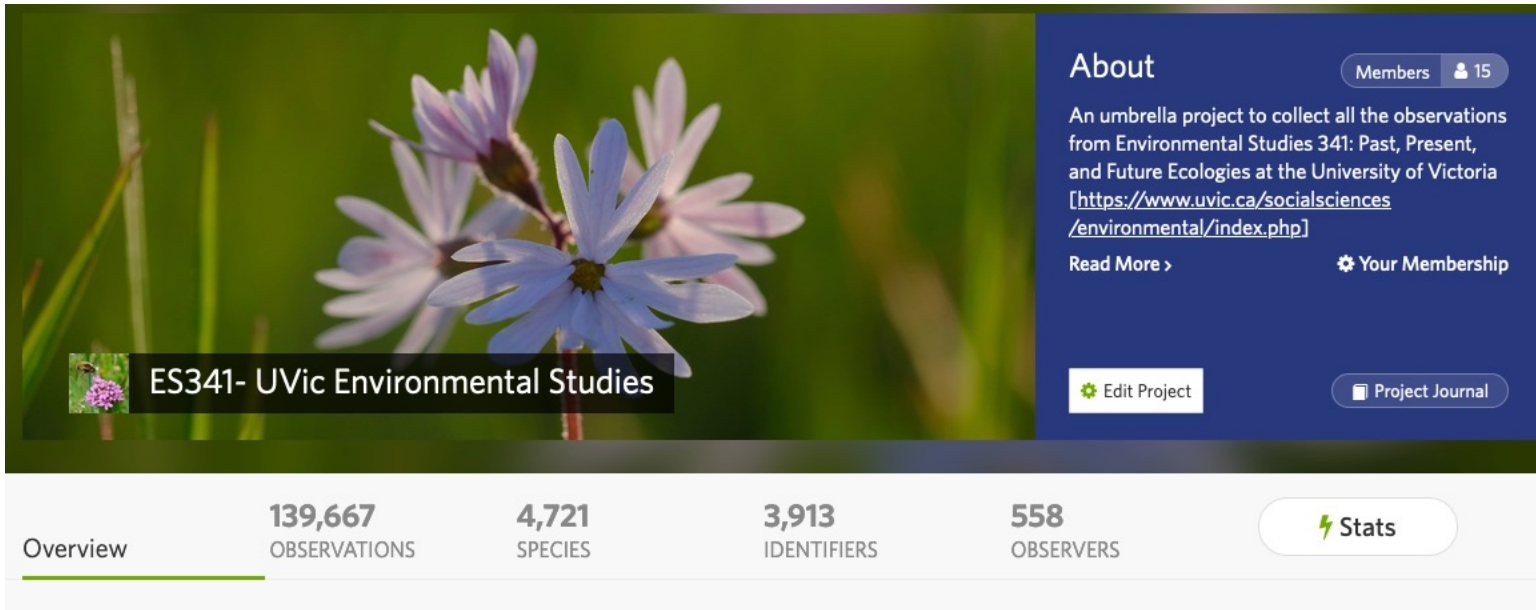
Does it include effort data?



Di Cecco et al. 2021

Community science

- Should *supplement* professional work
- More work on analytics to deal with biases
- Reduce skew in observations per person?
- Study how and why people get involved



ES341- UVic Environmental Studies

About Members 15

An umbrella project to collect all the observations from Environmental Studies 341: Past, Present, and Future Ecologies at the University of Victoria [<https://www.uvic.ca/socialsciences/environmental/index.php>]

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[Edit Project](#) [Project Journal](#)

Overview **139,667** **4,721** **3,913** **558**

OBSERVATIONS SPECIES IDENTIFIERS OBSERVERS

[Stats](#)

Thanks!

Especially to BC Parks colleagues Jen Grant, Sharilynn Wardrop, Stephen Ban, James Quayle

Funding:
BC Parks Living Lab
License Plates funds
CESI
FLNRORD
NSERC
Canada Fund for Innovation
Sitka Foundation
Tula Foundation
Ian McTaggart Cowan
Professorship

BC Parks Foundation

Get in touch if you have any questions, data needs, suggestions, etc.

starzom@uvic.ca

