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# CITY NATURE CHALLENGE 2019 - HALIFAX

*Environment and Sustainability Standing Committee, HRM Council - March 7 2019*

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## TALK OUTLINE (10 minutes)

- Three stories:
  - Marketing Science
  - The Rise of Citizen Scientists & iNaturalist
  - #CityNatureChallenge

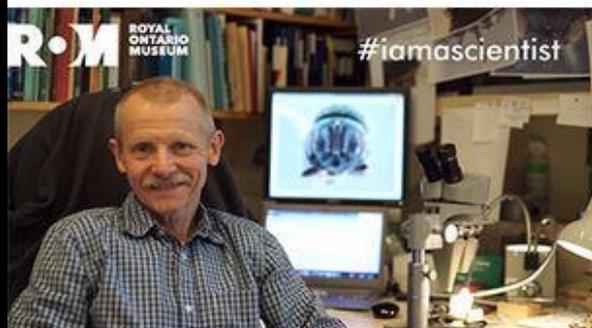
Dave Ireland  
@davehireland  
Davehireland.com



## Managing Director, Natural History

- new position - to connect biodiversity, and the curators/scientists who study it, to the public through programs, exhibitions, galleries and community projects (2011-2018)







Citizen science is a global movement through which scientists and non-scientists alike make observations, collect data, and help answer some of our planet's most pressing questions.

To protect biodiversity, we need to know more about it. Academy scientists travel the globe in their efforts to learn more, but they can't be everywhere—we need your help!

Citizen scientists' collective observations of plants and animals, wherever they're found, are beginning to create an important global record: what biodiversity is found where, how healthy populations are, and what's changing in the environment. By crowd-sourcing this kind of data collection and analysis, the citizen science movement helps science to answer some of the biggest questions we face today.



#### Academy Projects

Learn more about our Bay Area projects, biodiversity surveys, and grassroots bioblitzes—what we've found, why we're looking, and how to get involved.

[Go local](#)



iNaturalist

#### Share This



#### Documenting Biodiversity Blog

Keep up with our day-to-day efforts by following the *Document Biodiversity* blog, maintained by members of the Academy's Citizen Science department.

[Follow along](#)

#### Citizen Science Contact

Have questions about our citizen science programs? Want to get involved? Please feel free to email us at [citizenscience@calacademy.org](mailto:citizenscience@calacademy.org).

#### Visit the Naturalist Center

Located on Level 3, the Naturalist Center is the Academy's home of interactive learning. Touch specimens, ask questions, or join one of our daily programs, all free with admission.

[Become a naturalist](#)



# THANKS CANADA FOR GOING WILD OVER BIOBLITZ!

**IN 2017** we set out to take Canada's nature selfie during BioBlitz Canada 150, a Canada 150 Signature Project coordinated by the Canadian Wildlife Federation and partners in conservation. Our goal was to inventory as many species as we could from coast to coast in this massive citizen science project.



## HERE'S WHAT CANADA'S "NATURE SELFIE" LOOKS LIKE!

- **9,935** people took part in the 35 BioBlitz Canada 150 events
- **39,759** observations were recorded on iNaturalist.ca
- **556** observations of species at risk
- **7,510** species were catalogued including:
  - 370** species of birds
  - 151** species of fish
  - 99** species of mammals
  - 2,629** species of insects
  - 604** species of fungi and lichens



You can BioBlitz year-round using the iNaturalist Canada app. Download for free today.





# iNaturalist.org



1

Record your observations



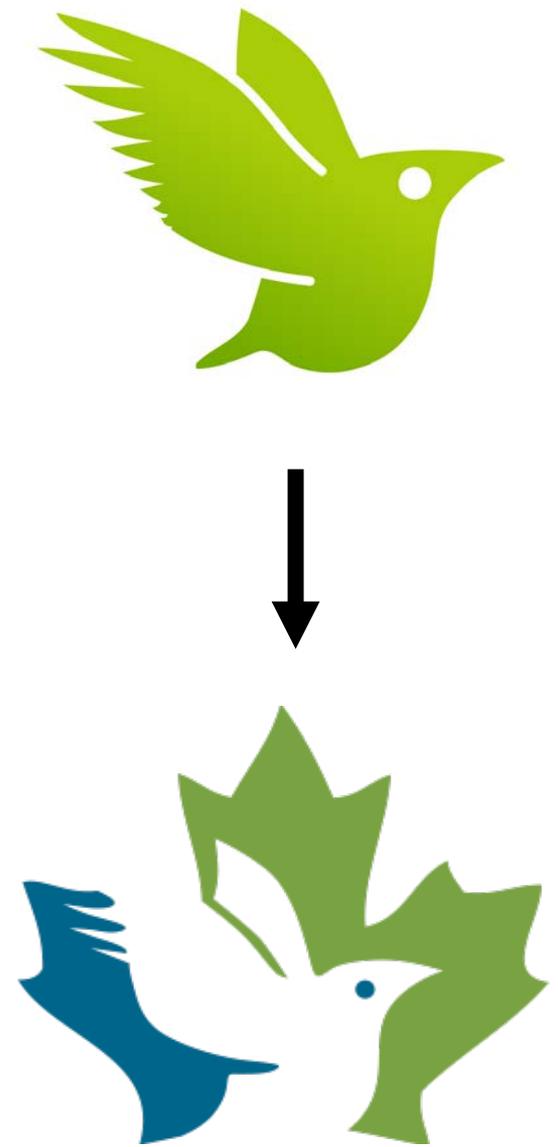
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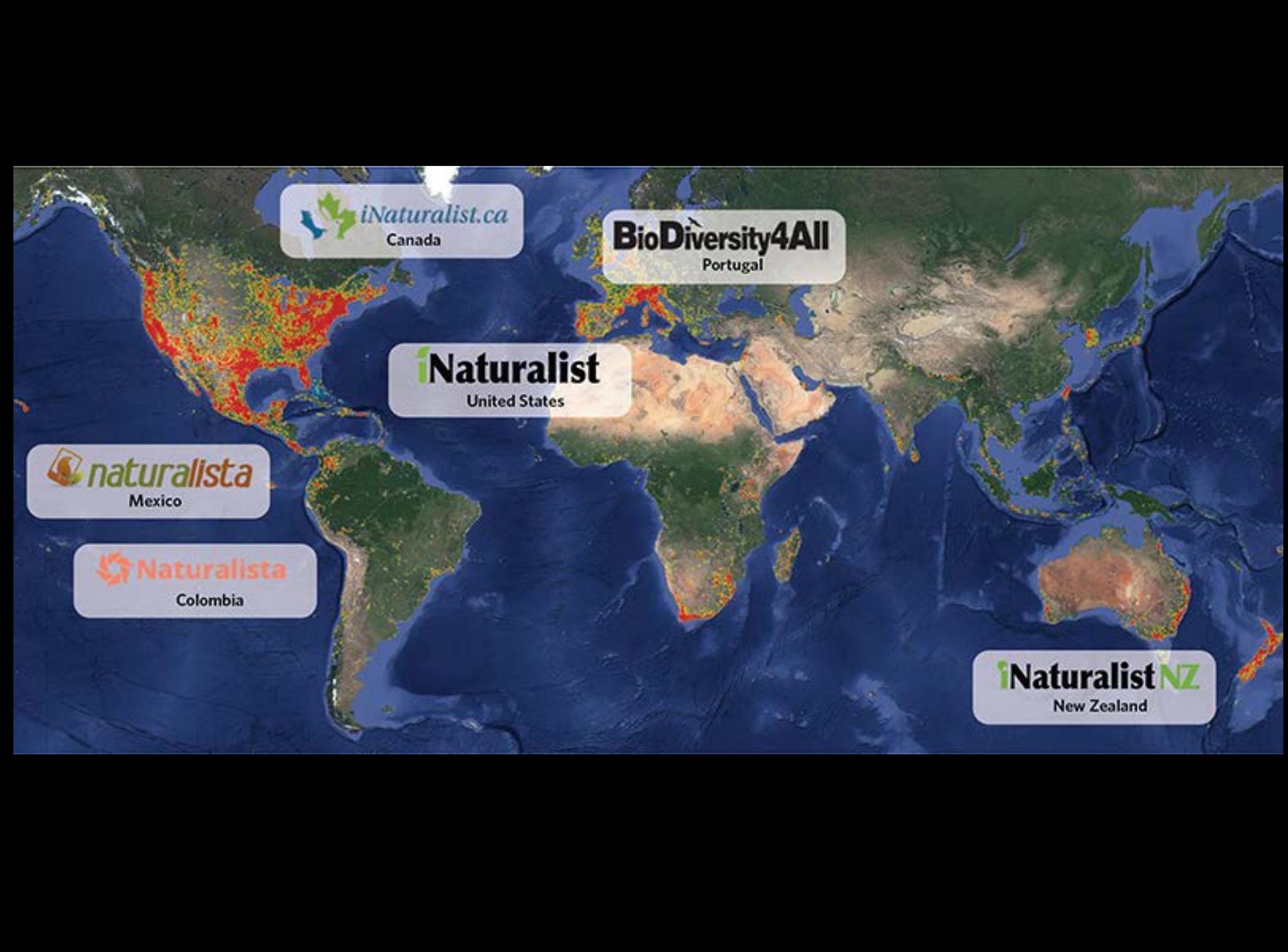
Share with fellow naturalists



3

Discuss your findings



A world map showing the distribution of various iNaturalist projects. The map is overlaid with numerous small colored dots (red, orange, yellow, green) representing data points. The dots are most densely clustered in North America, Europe, and parts of South America and Africa. Several callout boxes are placed over the map, each containing a project logo and name.

 **iNaturalist.ca**  
Canada

**BioDiversity4All**  
Portugal

**iNaturalist**  
United States

 **naturalista**  
Mexico

 **Naturalista**  
Colombia

**iNaturalist NZ**  
New Zealand

# iNat Photos Used to Study Correlation Between Dragonfly Wing Coloration and Temperature

**Blue Dasher Dragonfly – 13,500 obs included in study.**



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*EAC WILDERNESS COMMITTEE – January 17 2019*

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  - **#CityNatureChallenge**

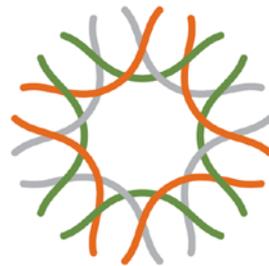
Dave Ireland  
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Take the  
**City  
Nature  
Challenge  
2019**  
April 26–29



CITY NATURE CHALLENGE IS ORGANIZED BY



CALIFORNIA  
ACADEMY OF  
SCIENCES

**NATURAL  
HISTORY  
MUSEUM**  
LOS ANGELES COUNTY

# Take the City Nature Challenge 2019

April 26–29

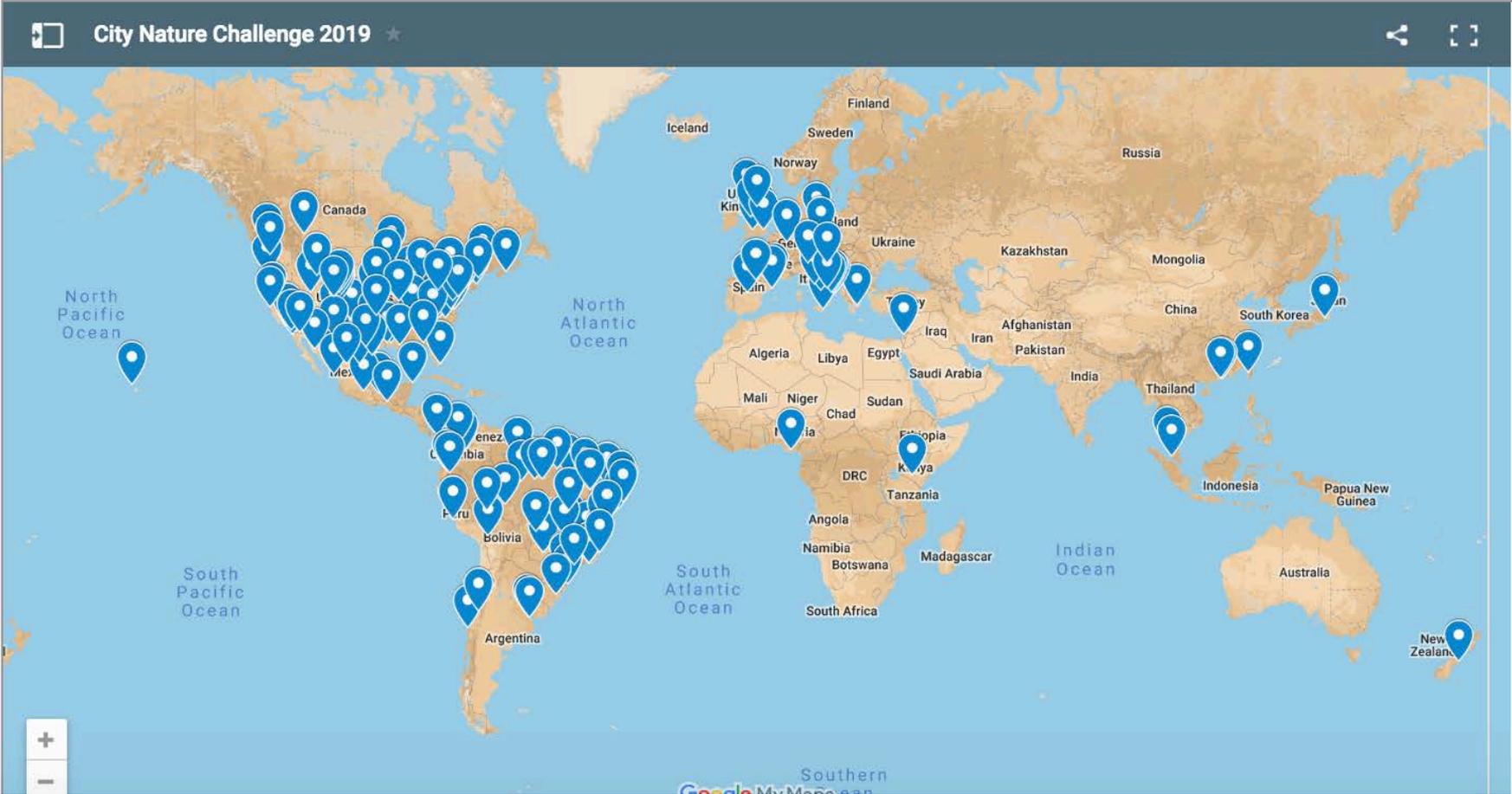


- **April 26 – 29** : Observing Nature
- **April 30 – May 5**: Identifying observed species
- **2018 Champion: San Francisco**
  - 41,737 observations
  - 1532 Participants
  - 3211 species identified

# 2019 Participating Cities

See full list of 2019 participating Cities and Collaborating Organizations

\* 3 Canadian Cities currently: Calgary, Halifax, & Richmond



# Naturalists wanted!

- o birds
- o mammals
- o reptiles and amphibians
- o fish
- o Insects and arachnids
  - o Further split into 6x sub-groups
- o invertebrates (non-insect)
- o fungi
- o mosses
- o plants
- o lichens





**iNaturalist** @inaturalist · Feb 18



Happy **#MarineMonday**! Today's Observation of the Day is this Sea Raven **#sculpin**, seen in **#Canada** by **sempleimages!**

More details at: [inaturalist.org/observations/2...](https://inaturalist.org/observations/2...) **#OOTD** **#ichthyology** **#fish** **#marinebiology** **#citizenscience** **#nature** **#naturephotography** **#diving** **#iNat** **#animals** **#wildlife**



© Bob Semple





Nova Scotia - Parks Canada

@ParksCanada\_NS

Following



#WildlifeWednesday @ParksCanada recently partnered with Dr. @TroyMcMullin from @MuseumofNature to complete a survey of the #KejiSeaside for rare lichens. Success! 300+ new individuals of COSEWIC listed species were found, including 12 new records of endangered Vole Ears Lichen!



- First “lichenologist” at Canadian Museum of Nature
- Studied at Dal and loves NS
- NS is a global hotspot for lichen



2016 - First peer-reviewed publication stemming from Ontario BioBlitz work!  
2019 – Another one...

**HALIFAX WILL COMPETE WITH 165+ CITIES AROUND THE WORLD.**

# City Nature Challenge 2019

**APRIL 26 -29**

## HOW IT WORKS:

- ✓ DOWNLOAD THE INATURALIST APP
- ✓ SNAP A PHOTO OF ANYTHING IN NATURE
- ✓ UPLOAD AND SHARE BETWEEN APRIL 26-29 BIOBLITZ!

## INATURALIST WORKSHOPS:

APRIL 6, 10AM:  
FAIRBANKS CENTRE, DARTMOUTH

**GET OUTSIDE  
OBSERVE NATURE  
HAVE FUN!**

**LEARN MORE AND WIN PRIZES!**

[f /CityNatureChallengeHFX](https://www.facebook.com/CityNatureChallengeHFX)



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MUSEUM  
LOS ANGELES COUNTY

**COINAtlantic**  
COASTAL AND OCEAN INFORMATION NETWORK

Photo Credit: Acorn Art & Photography