



The Great Backyard Bird Count

Creating Messaging that Motivates Citizen-Science Engagement

by Becca Rodomsky-Bish, Big Data Acquisition
rbr75@cornell.edu



Overview

- What is citizen science?
- What is GBBC?
- Why do people do citizen science?
- What is the goal of this research project?
- Creating messages that motivate engagement.

Great Backyard Bird Count

23rd Annual • Feb 14-17, 2020

Count birds in your backyard, local park, or wherever you spot a bird, and submit your observations online.

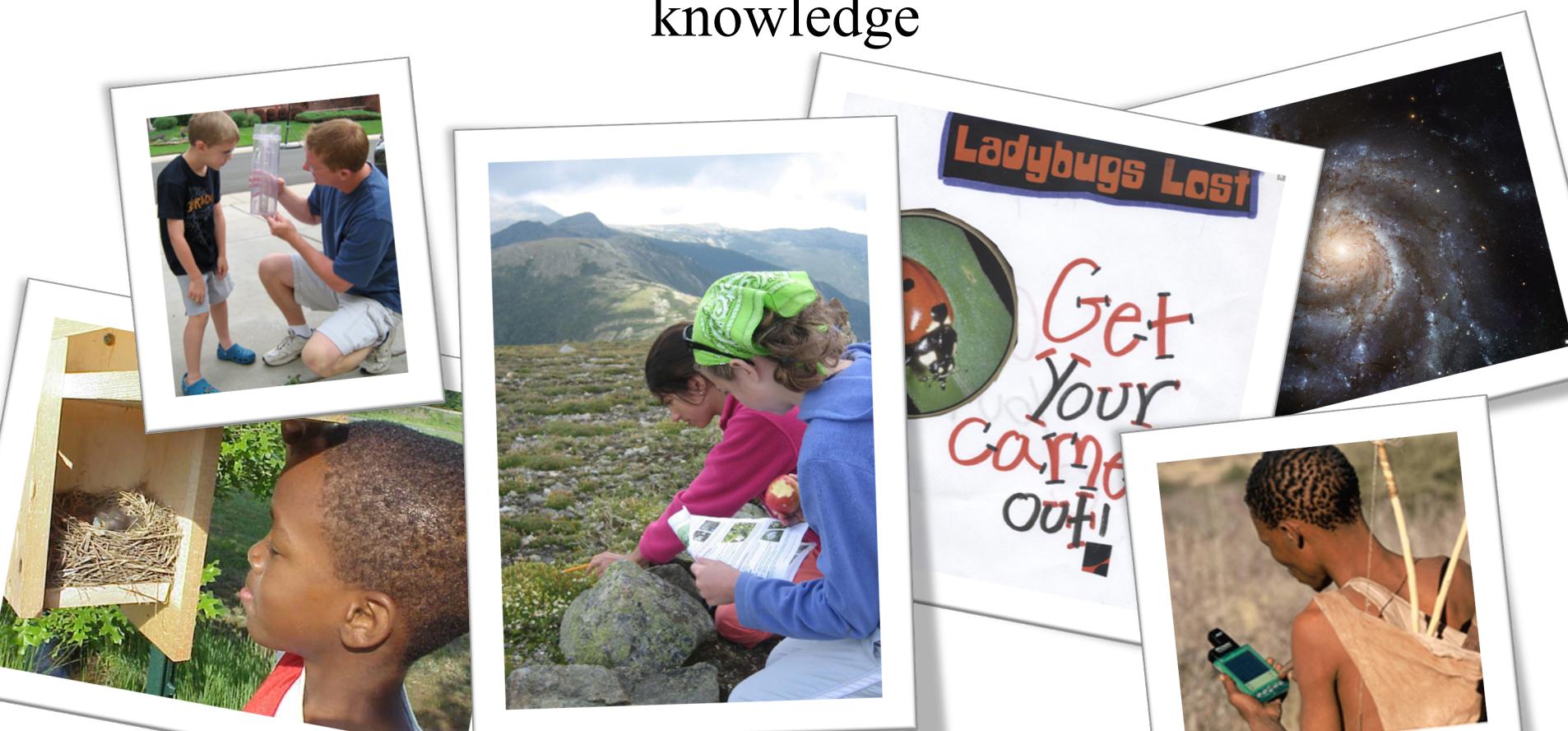
birdcount.org



California Quail. Photo: Joanie Christian/Great Backyard Bird Count

Citizen Science

Intentional collaborations in which members of the public engage in authentic research to generate new science-based knowledge





Citizen-Science Learning Outcomes



Engage critical thinking



Science learning, bonding



Environmental action; social networks



Social capital



Improved policy

Citizen-Science Research Outcomes

Documenting range shifts



Identifying potential mismatches



Identifying vulnerable species



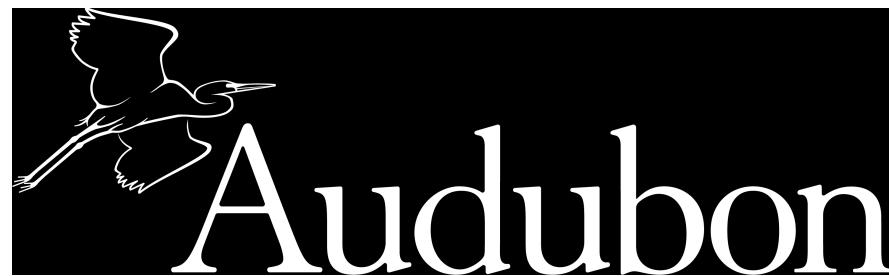
Health planning



Anticipating effects on water sources



What is GBBC?



- A partnership among the Cornell Lab, Audubon, and Birds Canada
- 20+ year running (1998) International Bird Survey
- Runs in February for 4 days, a long weekend
- Entry level “Gateway” citizen-science Project

What Do Participants do?

- Count birds anywhere for 15 minutes
- One or many counts
- Estimate of number of individual species
- Record data online



Photo credit top left to bottom, GBBC 2019:

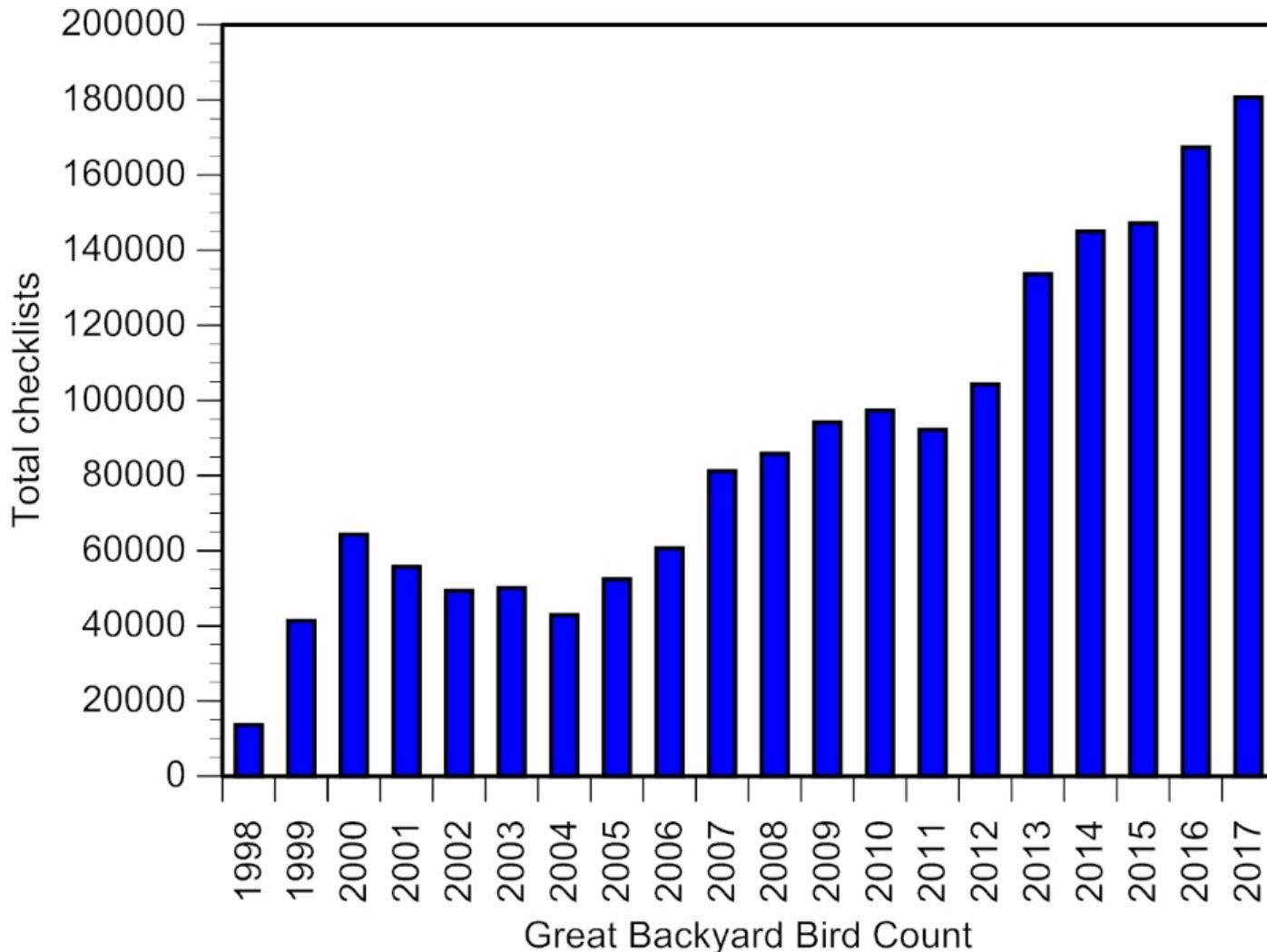
- Kristen Lothspeich, KY, USA
- AnuragVishwakarma, Seijosa, India
- Debayan Gayen WestBengal, India

Why is it important?



- Big spatial and longitudinal data sets are critical for conservation
- Scientists can't be everywhere all the time
- Document year to year changes over time
- Long-term trends
- Glimpse at migration patterns
- Environmental alarm systems

Interest is growing...



Almost
250,000
participants
in 2019

Why do people do citizen science?

- Personal Values (science, conservation)
- Contributing to a greater cause, have time (retired)
- Individual Goals (contributing, local threats)

Personal



How do we transform one GBBC list into longer-term participation in citizen science?

The Great Backyard Bird Count



- Project +30 years
- Pay \$18 yr.
- Nov-April
- APP (new)
- Unique protocol
- 20,000-24,000 a year US and Canada



- Started 2002
- FREE
- Year Round
- APP
- 1 list anywhere
- International
- 100 million bird sightings a year

Subscribe

Past Issues

Translat



The Great Backyard Bird Count



Art by Charley Harper

Headline

GBBC eNewsletter

February 17, 2019



Red-breasted Nuthatch by Ruth Blair, Ontario, Canada, 2019 GBBC.

Count Update

The checklists are pouring in for the Great Backyard Bird Count and as of Sunday morning in the United States, more than 67,000 tallies have been entered. Those lists include more than half the bird species in the world with about 5,500 species reported!

There's a lot to explore. To get started, click on "[Explore](#)

The GBBC is
February 15-18, 2019
BirdCount.org



Participation Certificate

Don't forget to download and print your participation certificate to commemorate your participation in the GBBC this year. The certificates are available in [English](#), [French](#), and [Spanish](#). It's a formal way of recognizing your contribution and another way to say, thank you!

Call to Action

What types of messages influence successful Headlines and Calls to Action?



A Laysan Albatross with a stomach full of plastic. Photo by Chris Jordan. © U.S. Fish and Wildlife Service Headquarters.



Photo by Dale Collier. © GBO

The Cornell Lab of Ornithology works on behalf of birds every day of the year. Take your impact farther by supporting the Cornell Lab with a year-end gift. Go to: birds.cornell.edu/yearend or return the enclosed envelope.



159 Sapsucker Woods Road • Ithaca, New York 14850-1999

birds.cornell.edu

Printed on Recycled Paper

The Cornell Lab uses © Printed on 50% Certified Paper - A202



Photo by Dale Collier. © GBO

Simple Ways to Live a Bird-Friendly Life...



Many windows reflect light and can reflect off of glass and kill birds. Photo by Gertjan Pollet via Creative Commons.

1. Make Windows Safer

The challenge: Up to 1 billion birds are estimated to die each year after hitting windows in the U.S. and Canada.

The cause: By day, birds perceive reflections in glass as their own reflection. At night, migrating birds are drawn by city lights and can collide with buildings.

These simple steps save birds: Install window screens, or break up reflections on windows using film, paint, or string spaced no more than 2 inches apart.

Add native plants, watch birds come in.

Native plants add beauty to your yard and provide shelter and nesting areas for birds. The nectar, seeds, berries, and insects sustain hungry birds and other wildlife.

2. Keep Cats Indoors

The challenge: Each year, outdoor cats kill about 2.4 billion birds in the U.S. and Canada—many of which are songbirds. This is the leading cause of bird death. It's the top human-caused reason for the loss of birds, after habitat destruction.

A simple fix for cats and birds:

Outdoor cats live 2-5 years on average while indoor cats may live for more than 15. Save birds and keep cats healthy by keeping cats indoors.

3. Reduce Lawn, Plant Natives

The challenge: Birds have fewer places to survive their migrations and raise their young.

The cause: Lawns and pavement don't offer enough food for birds to survive their long flights. More than 63,000 square miles of lawn in the U.S. alone, there's huge potential to support wildlife by replacing lawns with native plants.

4. Avoid Pesticides

The challenge: More than 1 billion pounds of pesticides are used in the U.S. each year. Common weed killers used around homes can be toxic to wildlife.

The cause: Birds are harmed by pesticides through direct contact, or by eating contaminated seeds or prey. Pesticides also reduce the number of insects that birds eat.

A healthy choice for you, your family, and birds:

Purchase organic food and reduce pesticide use around your home.



Photo by Gertjan Pollet via Creative Commons.

5. Drink Shade-Grown Coffee

The challenge: The coffee industry often forces farmers to destroy forest habitat to grow coffee in the sun—forests that birds and other wildlife need for food and shelter.

The cause: Shade-grown coffee preserves a forest canopy for migratory birds to survive the winter, but coffee companies create a bigger demand for it.

Enjoy shade-grown coffee! Shade-grown coffee helps

more than 40 species of North American migratory songbirds that winter in coffee plantations.



Photo by Irene Meij via Creative Commons.

6. Avoid Pesticides

The challenge: More than 1 billion pounds of pesticides are used in the U.S. each year. Common weed killers used around homes can be toxic to wildlife.

The cause: Birds are harmed by pesticides through direct contact, or by eating contaminated seeds or prey. Pesticides also reduce the number of insects that birds eat.

A healthy choice for you, your family, and birds:

Purchase organic food and reduce pesticide use around your home.

Information vs.

Emotion



Photos from BirdShare
Bare-throated Tiger Heron Juan D.
Canyon Towhee, [Collins Cochran](#)

1 in 4
Birds Gone
Since 1970



Graphic by Jillian Ditner/Cornell Lab of Ornithology

Loss
vs.
What
you can
do?



Photos permissions Habitat



Personal vs. General





Thank you!

Looking forward to seeing your creative ideas.

Contact: rbr75@cornell.edu

Photo by Sandy Scott,
BirdShare