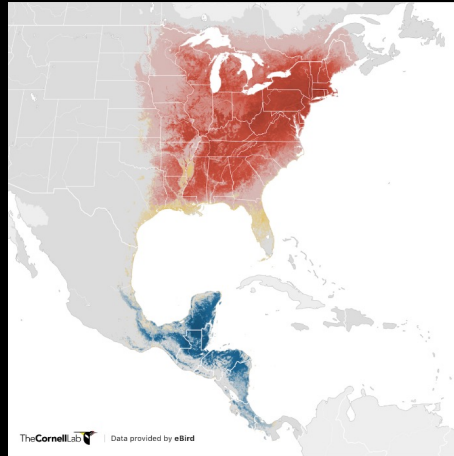


The Power of eBird:

Using information on birds to Amplify Conservation, Stewardship, and Community Outreach



Sara Barker, Cornell Land Trust Bird Conservation Initiative Director
Jenna Curtis, eBird Project Leader

The Cornell Lab  of Ornithology

The background of the slide features a dark silhouette of a person with long hair, seen from the side, looking at a laptop screen. The person's hand is visible near the keyboard. In the upper left background, there are silhouettes of many birds flying against a lighter, hazy sky. The overall tone is dark and professional.

What will you learn from this Webinar?

- Why birds? Using birds to accelerate and amplify land stewardship, planning, and acquisitions
- What is eBird and how to use it to enhance conservation decision-making, bird monitoring, and diverse community engagement
- Demonstration of eBird features and answers to FAQs
- Showcase case study to inspire involvement and learn to take the first steps

Why Are Birds Powerful?

- Easy to see, hear, & count
- Dedicated network of birders & citizen scientists
- Free & accessible tools
- Abundant funding
- Sensitive to multiple environmental factors



Why Are Birds Powerful?

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Greater Sage-Grouse



Red-headed Woodpecker

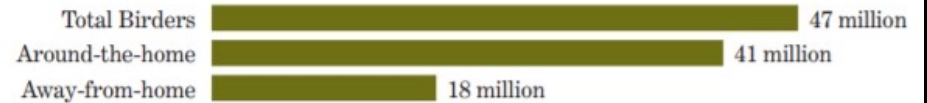


Barn Owl

Why Are Birds Powerful?

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Chart 1. Birders in the United States: 2011
(16 years of age and older.)



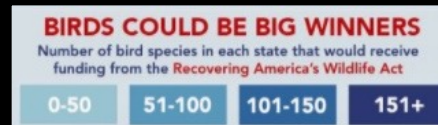
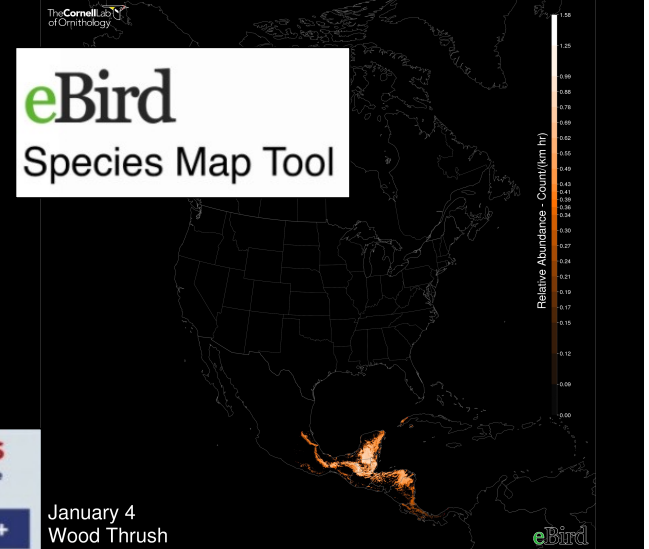
Active Observers of Wildlife in the US

	1994-95	2000-01	2005-06	2010-11	2015-16
Millions of people	54.1	70.4	71.1	71.8	86.0
Percent of adults	27%	33%	31%	29%	33%

U.S. National Survey on Recreation and the Environment

Why Are Birds Powerful?

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Why Are Birds Powerful?

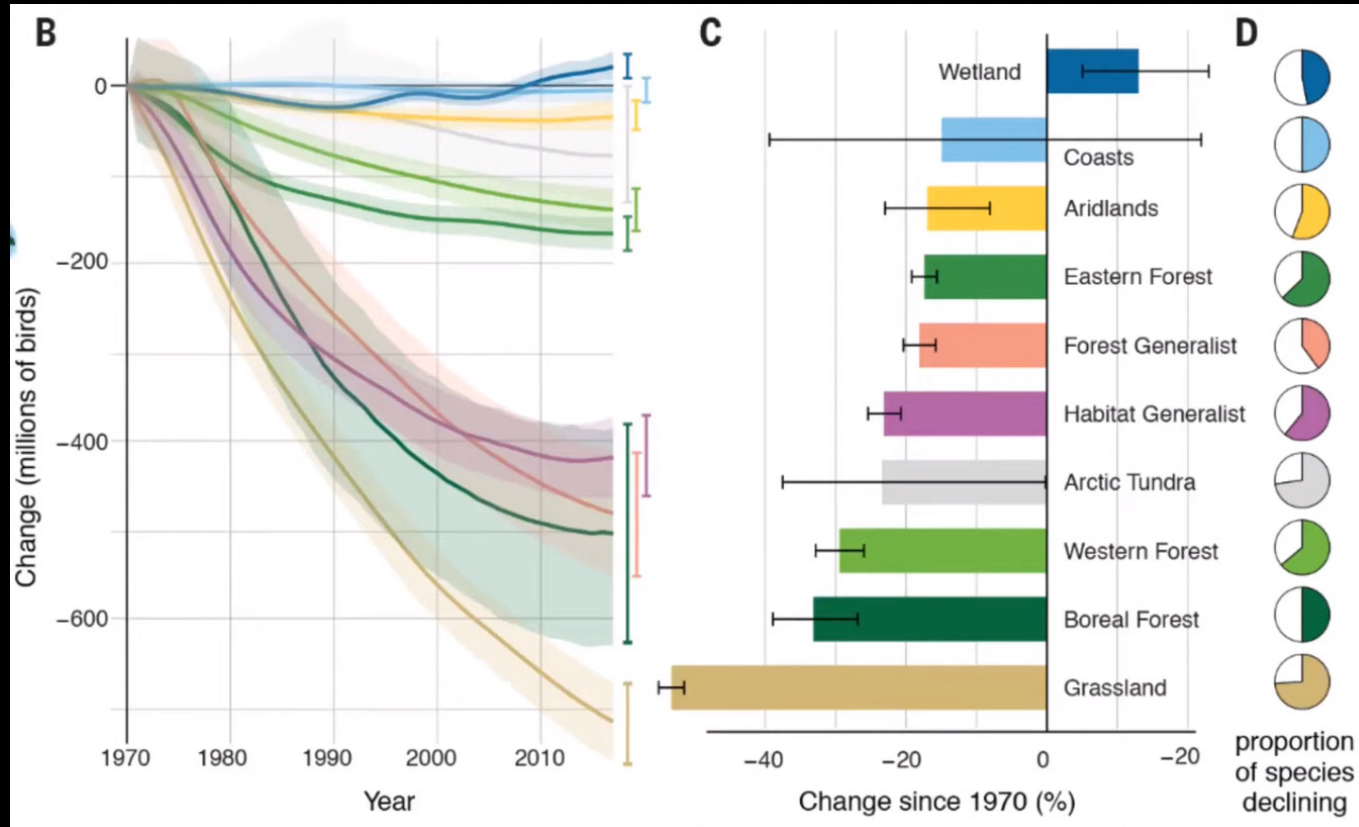
- Easy to see, hear, & count
- Dedicated network of birders & citizen scientists
- Free & accessible tools
- Abundant funding
- Sensitive to multiple environmental factors



Peregrine Falcon



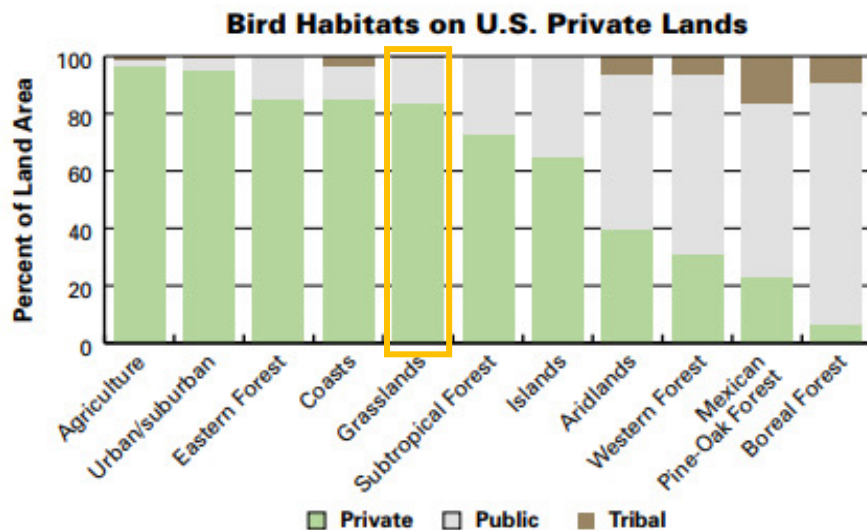
Birds Need Our Help!



3 BILLION
BIRDS
LOST

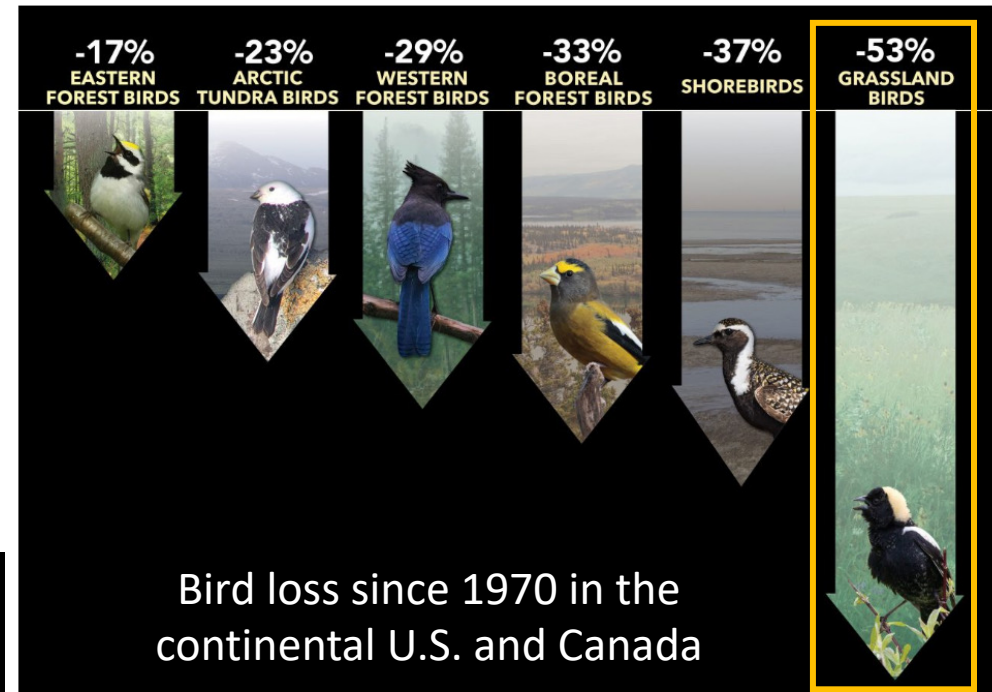


Birds Need Our Help on Private Lands



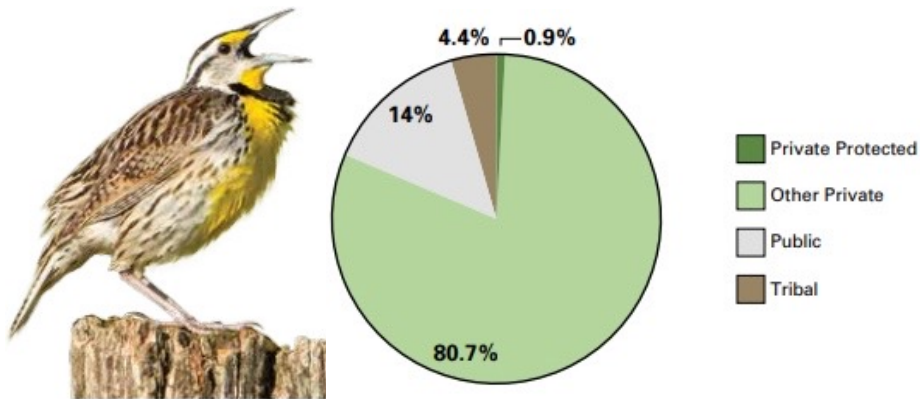
More than 100 bird species are
> 50% reliant on private land

2013 State of the Birds on Private Lands



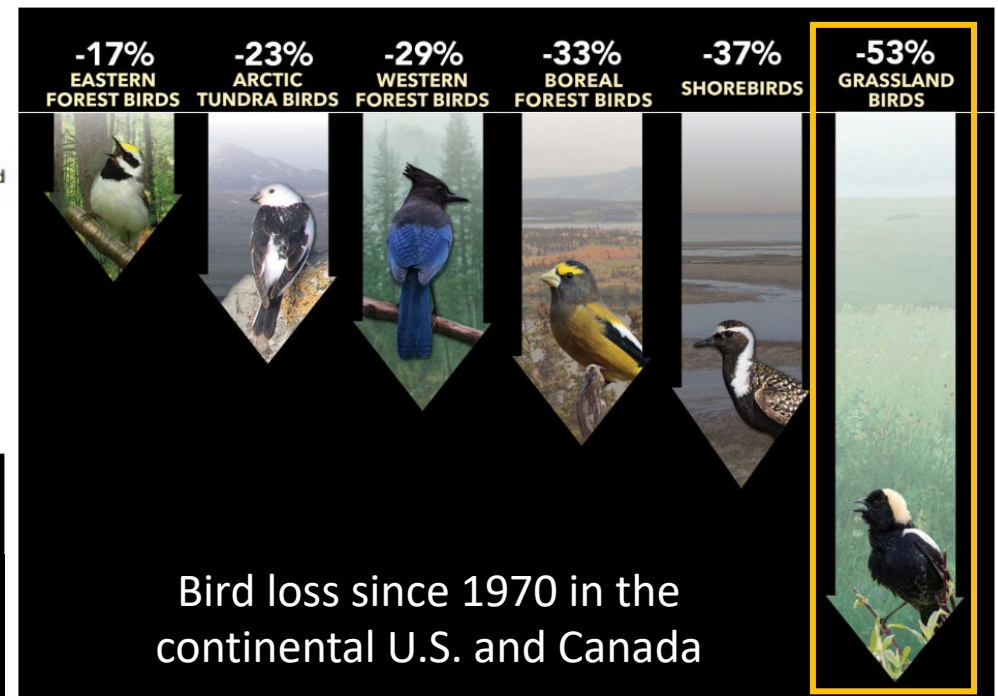
Rosenberg et al. 2019, Science; Graphic by Jillian Ditner

Birds Need Our Help on Private Lands



More than 100 bird species are
> 50% reliant on private land

2013 State of the Birds on Private Lands



Bird loss since 1970 in the
continental U.S. and Canada

Rosenberg et al. 2019, Science; Graphic by Jillian Ditner

Land Trust/Bird Conservation Nexus



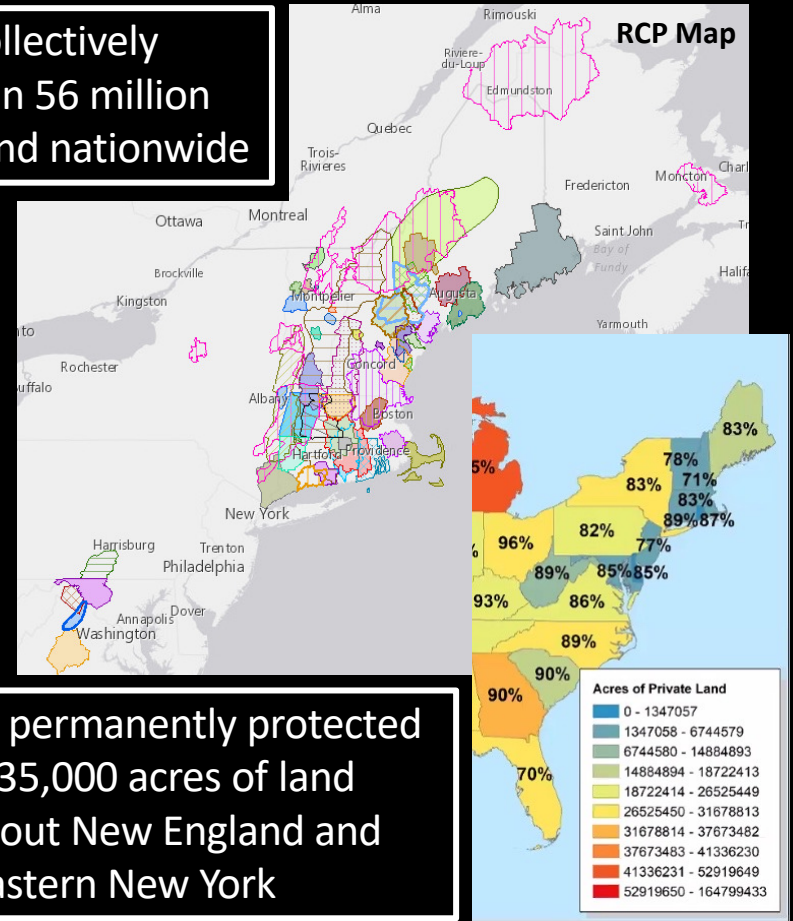
Worm-eating Warbler

Birds are catalysts for capacity building and conservation strategies

Land Trusts collectively
protect more than 56 million
acres of private land nationwide



RCPs have permanently protected
over 335,000 acres of land
throughout New England and
eastern New York



Land Trust National Needs Assessment

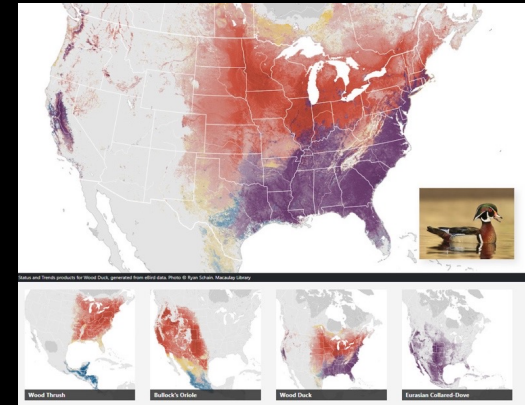
(614 land trusts participated)



Funding



Conservation
Resources



Planning Tools

birdtrust.org

Conservation Resource Directory

- landscape-scale plans/BMPs
- citizen science projects
- joint ventures/Partners in Flight

Fundraising Directory / Land Trust Grants

- bird related funding sources
- \$ for management & capacity building

Workshops & Webinars / Planning Tools

- conservation collaboratives
- success stories
- eBird

Land Trust Bird Conservation Initiative

[Home](#) [About](#) [Land Trusts in Action](#) [Birds on Your Land](#) [Fundraise](#) [Resources](#)

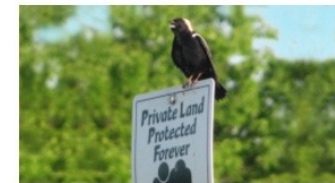
Save More Land

Use birds to strengthen easements
and protect threatened habitats

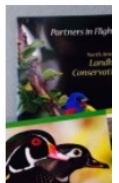
[Learn How](#)



What Birds Can Do



What Land Trusts Can Do

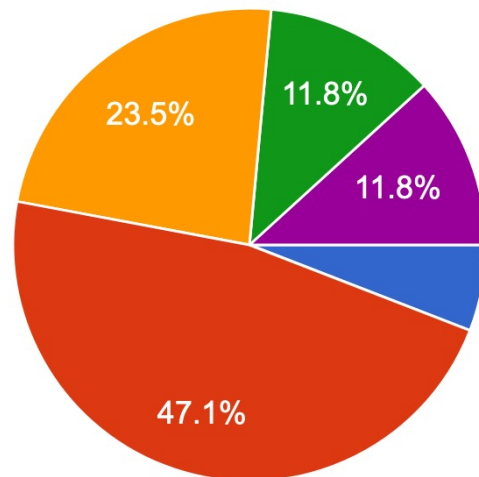


Resources

eBird

Have you used eBird before?

34 responses



- I have not heard of eBird beyond the advert for this webinar
- I have heard of eBird but have never used it
- I have used eBird to record my bird sightings
- I have used eBird data in my work
- I have both entered bird sightings into eBird and used eBird data

What is eBird?





The New York Times

The Birds Are Not on Lockdown, and More People Are Watching Them

Climate and Environment

Amid the pandemic, people are paying more attention to tweets.
And not the Twitter kind.

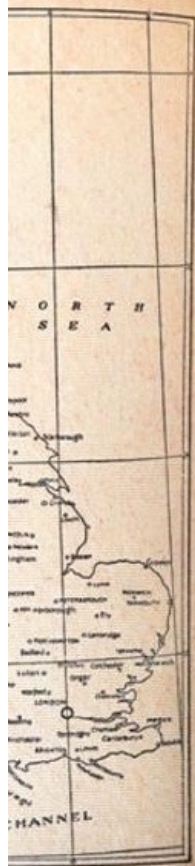


The New York Times

The Birds Are Not on Lockdown,
and More People Are Watching
Them

Climate and Environment

Amid the pandemic, people are paying more attention to tweets.
And not the Twitter kind.



Names of kinds of Birds nests known 1832

Blackbird
Chaffinch
Little Grebe
Hedge Sparrow
Coot
Jackdaw
Moorhen
Nuthatch
Rook
Ringdove
Thrush
Common Wren
Robin
Starling
House sparrow
Linnet
Greenfinch
Bluetit

Where found
Canal bank
in Copse
on Canal
in Woods
in Pond
in Woodery
in Woods
Clondike
in Rookery
in Dell
Canal bank
by School
in Dell
by Canal
by house
in garden
Canal bank
in Woods.

Where found	Where found
under eave of house	heads of Birds nests
in tree	found 1832
in bush	Thrush
in hole in wall	Blackbird
	Rook
	Coot
	Chaffinch
	Hedge Sparrow
	House Sparrow
	Jackdaw
	Long tailed tit
	Alouatta
	Little Gull
	Common Wren
	Coot
	Robin
	Linnet
	Blue tit
	Starling

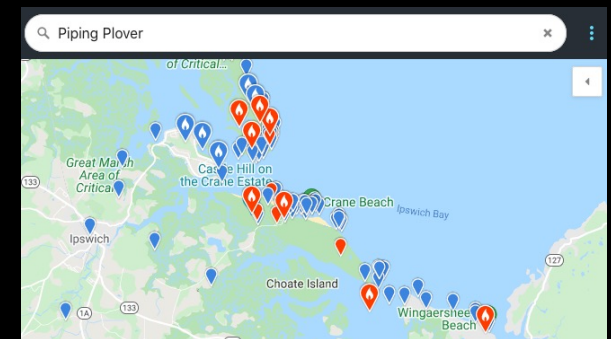
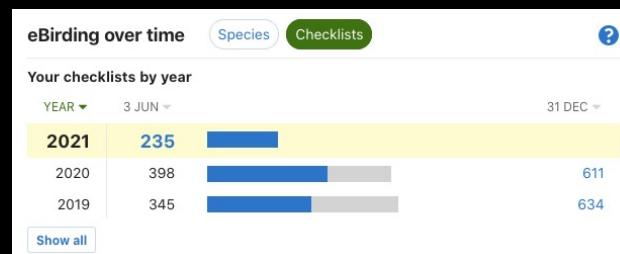
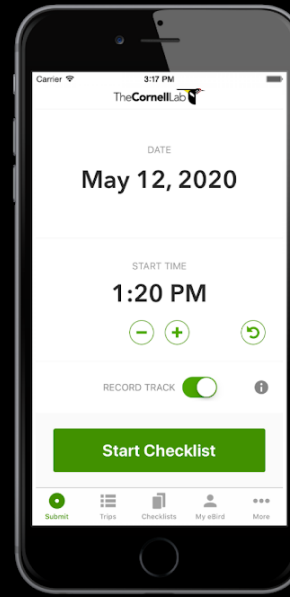
Where found	Where found
March Warbler	in dell
French Blackbird	in Woods
Willow Wren	in Dell
Yellow Hammer	Old Lane
Red Linnet	Canal bank
House Martin	under eave of school
Land Martin	in sand pit
Lesser Whitethroat	near school
Goldfinch	Wort gates
Great Tit	in Woods
Spotted Flycatcher	near school
Greater Whitethroat	Dell lane
Pheasant	in field
Pardalip	in field
Chicken	in farm



Photo credit Chelan-Douglas Land Trust

Personal birding tools

- Enter lists on a computer or smartphone
- Personal birding activity summaries
- Public profiles
- Bird-finding resources (maps, email alerts)





eBird is growing

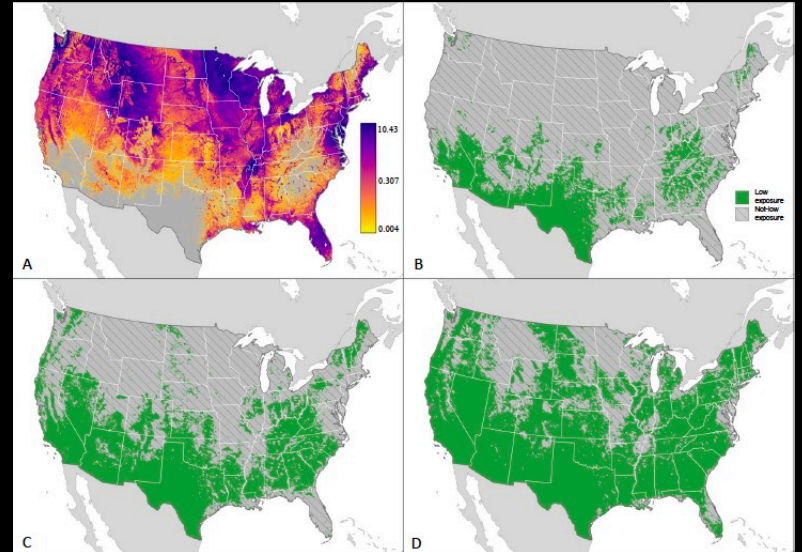
- One BILLION bird observations
- 684,300 all time data contributors
- 78 million checklists
- 10,500+ species
- 60 million hours in the field

Ruffed Grouse (*Bonasa umbellus*) © Jerald Reb / Macaulay Library



An amazing scientific resource

- Data is freely available for download and through APIs
- Valuable insights into bird populations
- Trusted for policy and decision making



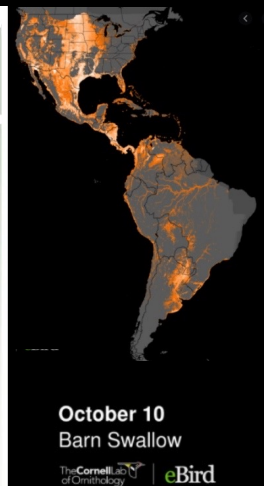
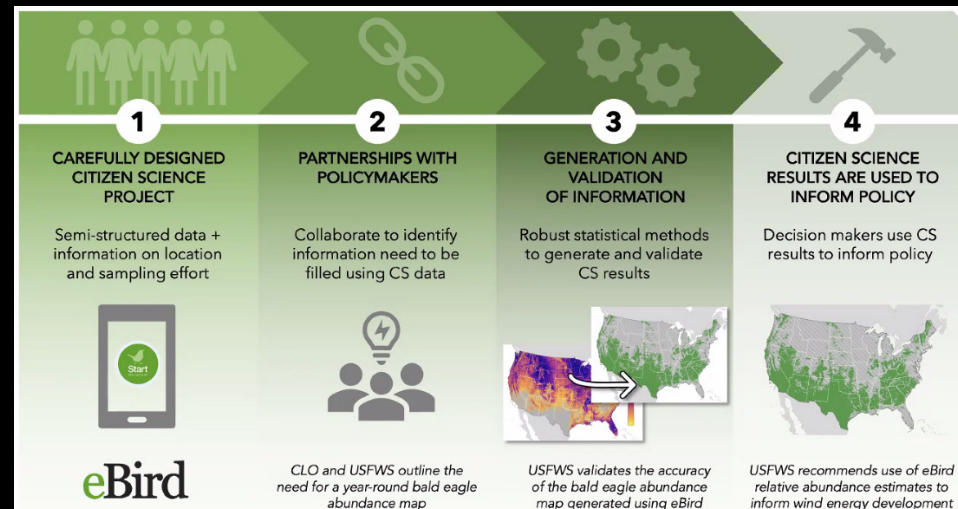
Why eBird.

Workshop tip: give your audience specific examples of how eBird can be useful to them

Build capacity
Build community

Effective Ways for Conservation Partnerships to use eBird

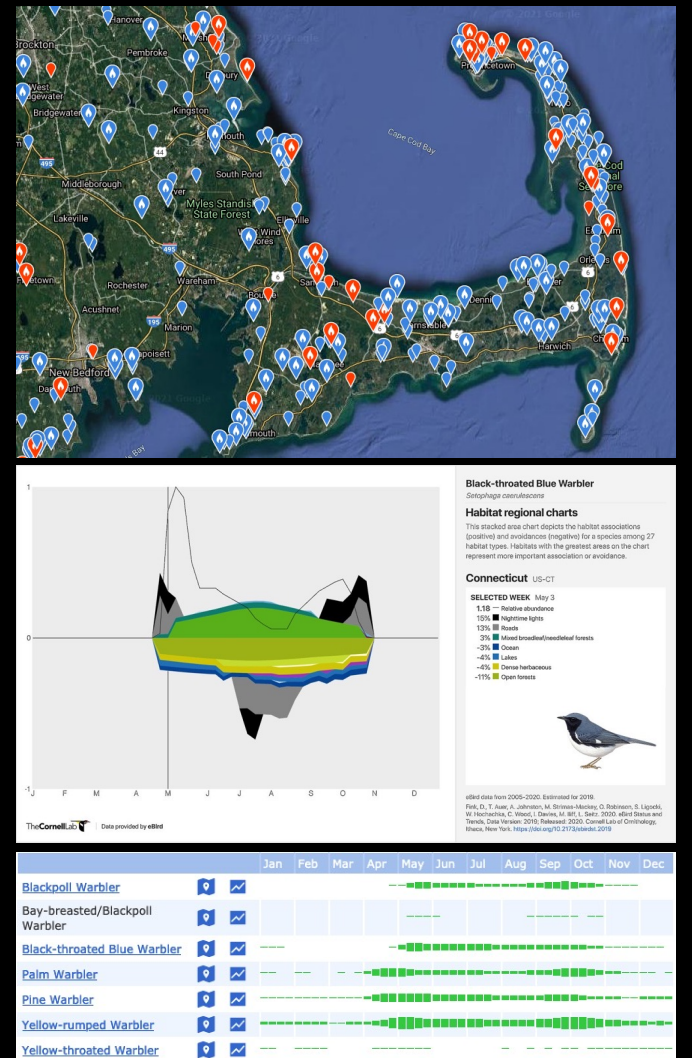
- Long-term online data storage
- Inform grant applications
- Easy entry to citizen science
- Monitoring /stewardship requirements
- Evaluate management
- Support planning & decision making



Why eBird?

Planning & management

- Manage for specific species
- Local bird community composition
- Year-round detection information
- Printable checklists



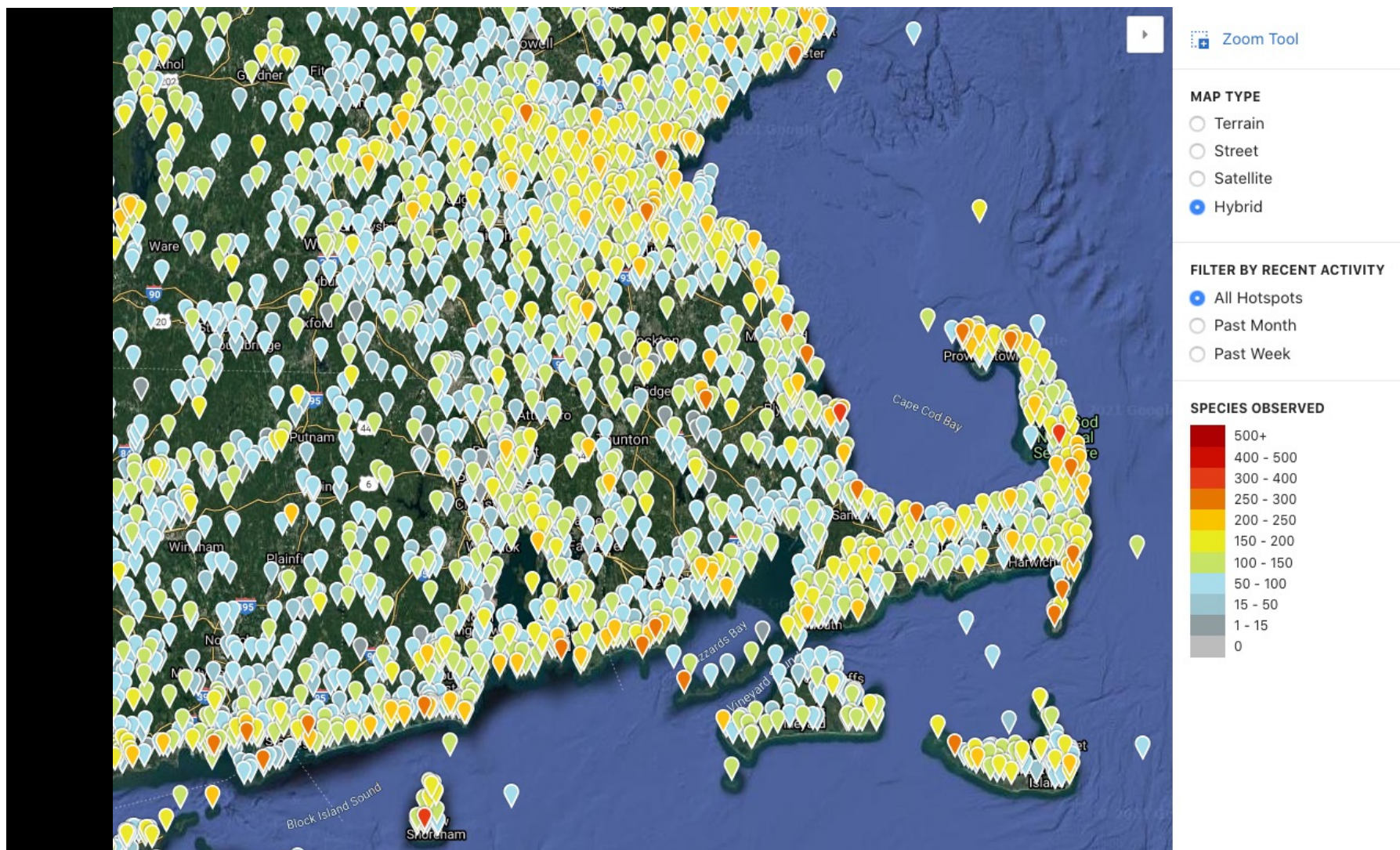
Why eBird?

Community engagement

- Engage volunteers and landowners
- Participation across skill levels
- Track participation through public outputs



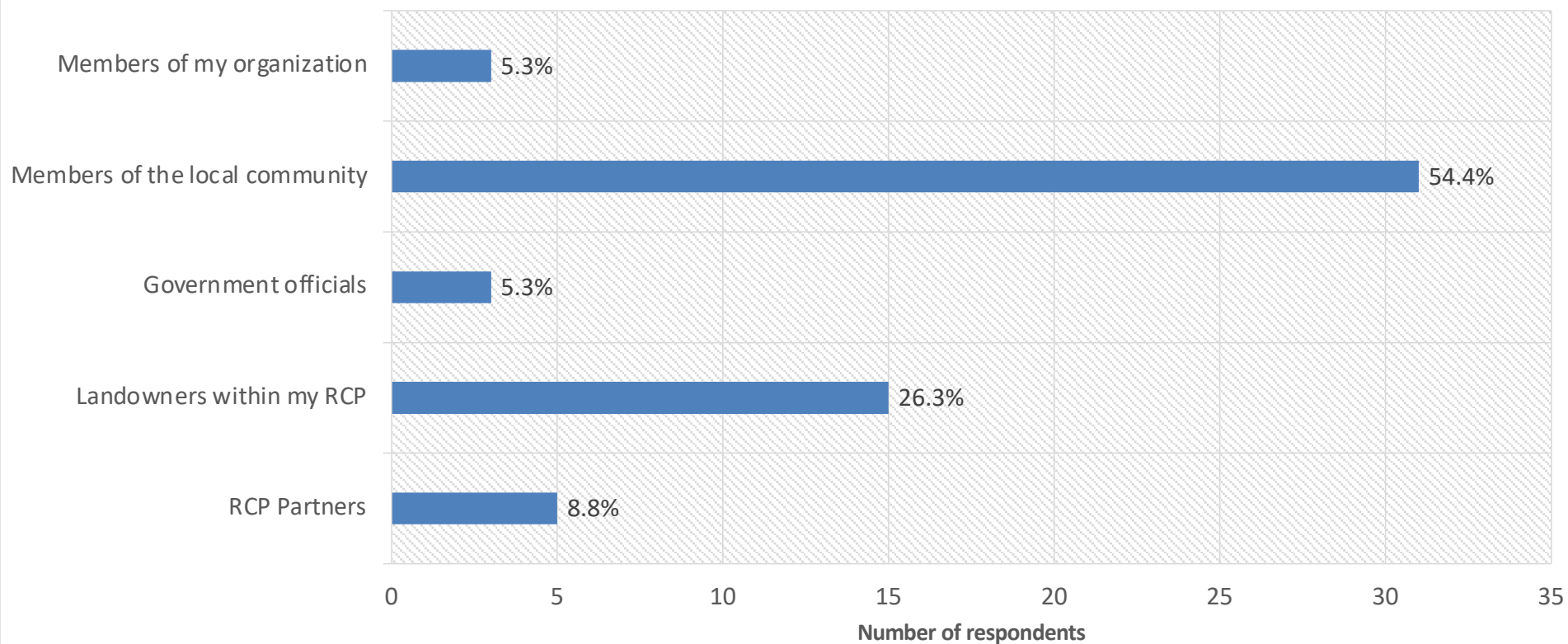
Photo credit Ashley Dayer





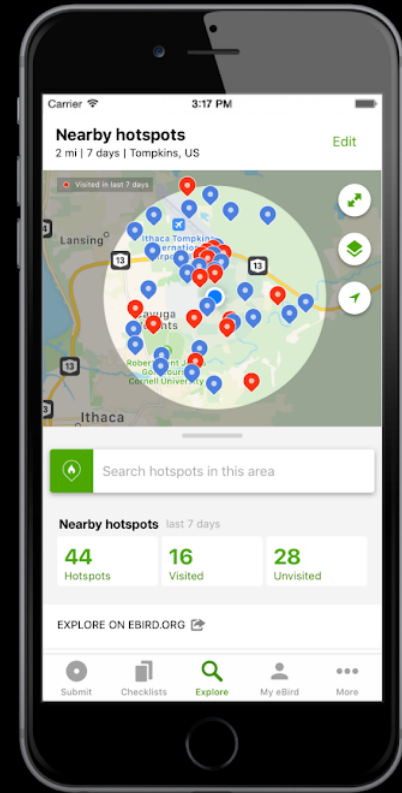
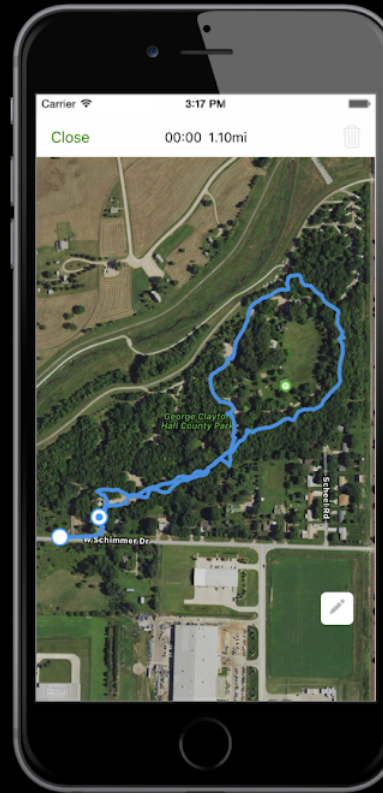
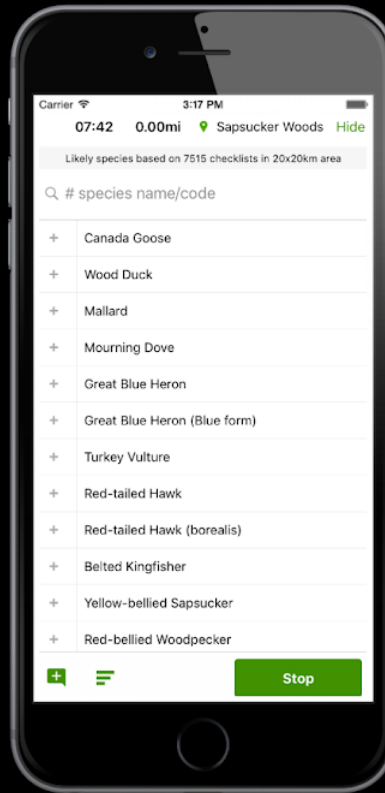
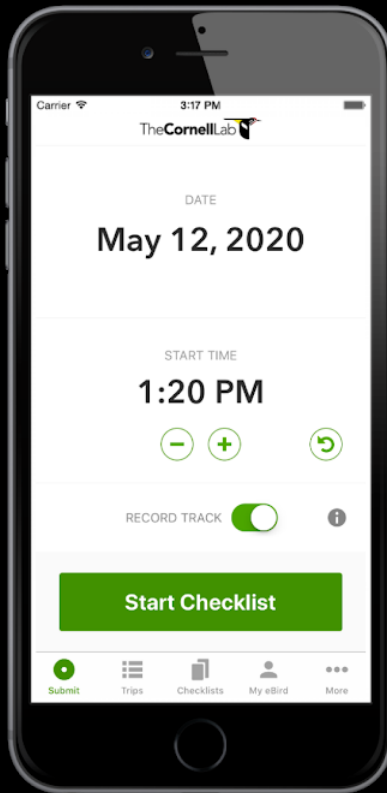
Barn Swallow (*Hirundo rustica*) © Yeray Seminario / Macaulay Library

If you were to run your own eBird workshop, who do you think the audience would consist of?



Find and share birds with eBird

eBird Mobile





eBird Essentials

Cerulean Warbler (*Setophaga cerulea*) © Andrew Simon / Macaulay Library

eBird: A New World of Birding



Show Transcript +

Your How-To Guide

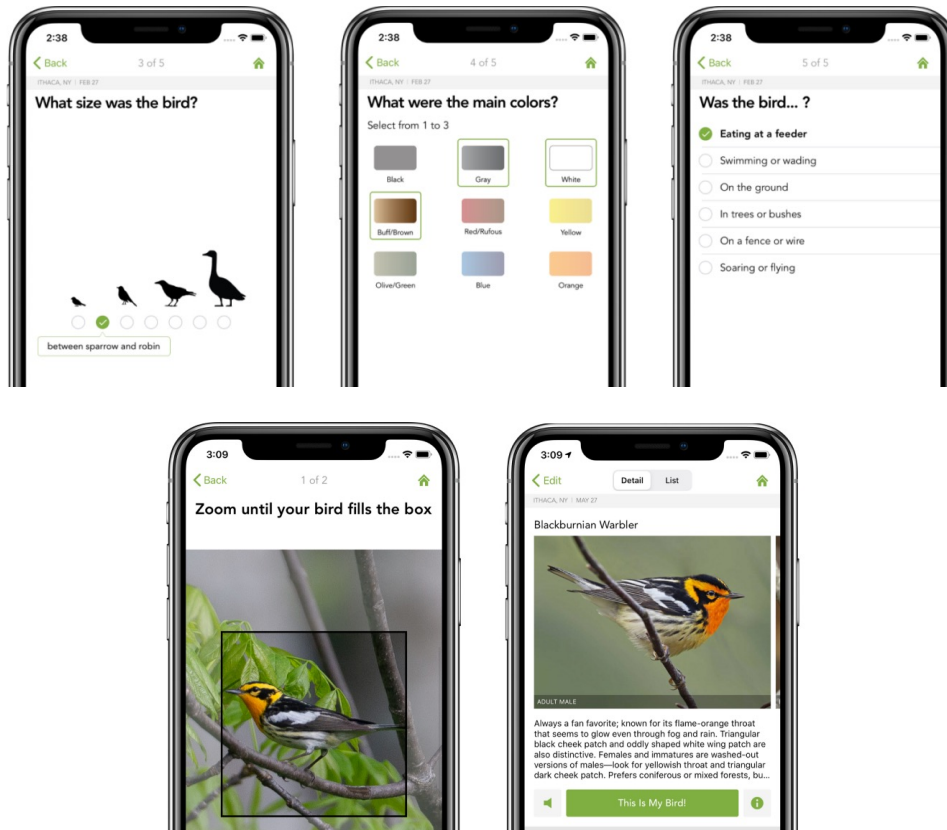
Explore how eBird can help spark new birding adventures.

- ✓ Discover tools that help you find birds wherever you go
- ✓ Gain confidence submitting your sightings
- ✓ Get expert tips for using eBird and joining the community

Frequently Asked Questions

- What if I don't know the birds?
- Why does it matter how long I went birding?
- How can I make my observations even more valuable for science?
- How do we know that the data are reliable?
- How does eBird protect sensitive and at-risk species?

What if I don't know the birds?



TheCornellLab 
Merlin[®]

What if I don't know the birds?

Piping Plover

Charadrius melodus

NT Near Threatened Names (28) Monotypic

Elise Elliott-Smith and Susan M. Haig
Version: 1.0 — Published March 4, 2020
Text last updated November 1, 2004

SEEN PHOTO AUDIO



The **Cornell** Lab of Ornithology
Birds of the World

Introduction

Appearance

Systematics

Distribution

Habitat

Movements and Migration

Diet and Foraging

Sounds and Vocal Behavior

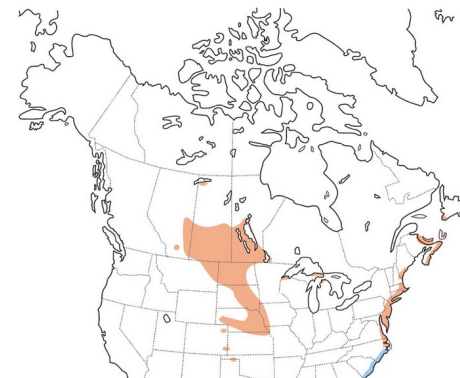
Behavior

Breeding

Demography and

The Piping Plover is a threatened and endangered shorebird that inhabits wide, open beaches, alkali flats, and sandflats of North America. It breeds primarily along the Atlantic coast from North Carolina to eastern Canada and the French Islands of Saint Pierre and Miquelon, inland along rivers and wetlands of the northern Great Plains from Nebraska to the southern Prairie Provinces, and along portions of the western Great Lakes in the U.S. and western Ontario. In winter, most individuals are found on coastal beaches, sandflats, and mudflats from the Carolinas to Yucatan; some scatter through the Bahamas and West Indies.

This plover is divided into two subspecies based on geographic distribution, presence or absence of complete neck bands, and mitochondrial DNA (SMH). Numerous studies have been conducted across the species' range, and conservation efforts are well organized in breeding areas across North America. Several recent efforts have also focused on winter areas. Its coexistence with human use of beaches is increasingly dependent on management: fencing nests, restricting off-road vehicle access, and predator control. Fewer than 3,000 breeding pairs of Piping Plovers were detected in the U.S. and



What if I don't know the birds?



All About Birds

Birds ▾ Live Cam

Bird **Academy**

Welcome To Your Online Guide To
Birds And Bird Watching

🔍 Search

Or [Get Instant ID Help](#)



I ♥ BIRDS

Transform Your Understanding of Birds

[Create Your Free Account Now](#)

Photo: Andy Chilton



Be a Better Birder: Sparrow
Identification

The most comprehensive online course on
sparrows. Covers all 49 species in the U.S.
and Canada. Practice for the field with
SnapID.

36

Why do birding details matter?

- Single calendar date
- Single location
- Protocol (= observation type)

*Necessary details for more
advanced statistical models*



Wood Thrush *Hylocichla mustelina*

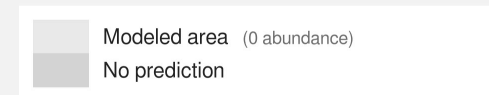
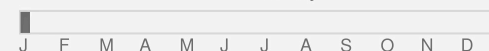
Abundance

Estimates of relative abundance for every week of the year animated to show movement patterns. Relative abundance is the estimated number of individuals detected by an eBirder during a traveling count at the optimal time of day for each species.

RELATIVE ABUNDANCE



WEEK OF THE YEAR January 4



eBird data from 2005-2020. Estimated for 2019.

Fink, D., T. Auer, A. Johnston, M. Strimas-Mackey, O. Robinson, S. Ligoeki, W. Hochachka, C. Wood, I. Davies, M. Iliff, L. Seitz. 2020. eBird Status and Trends, Data Version: 2019; Released: 2020. Cornell Lab of Ornithology, Ithaca, New York. <https://doi.org/10.2173/ebirdst.2019>

Is eBird data reliable?



Dogbird



Catbird

- Automated data quality filters flag rarities in real time
- Volunteer reviewer network - 1900 experts
- Checklist and media review

Protecting sensitive species



Great Gray Owl

1

Sensitive

Great Gray Owl (*Strix nebulosa*) © Sulli Gibson / Macaulay Library

Adding scientific value to eBird checklists

- Submit complete checklists
 - Report every species you can identify
 - Include birds seen and/or heard
- Count birds
- Limit the length and duration of each list
- Document rarities



The power of eBird

Land Trust Small Grant Awardee Success Story

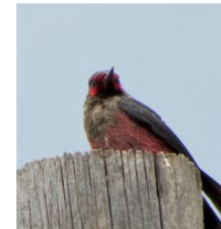
- eBird citizen science monitoring platform
- Community engagement via workshops & trainings
- Data overlaid with parcel ownership & land use
- Inform prioritization of acquisitions / easements
- Maximize conservation dollars

Lewis's Woodpecker Project



Help report Lewis's Woodpecker sightings in Central Colorado

We need your help! Central Colorado Conservancy has been awarded a grant from [Cornell Laboratory of Ornithology](#) to record old-growth cottonwood habitat usage by Lewis's Woodpeckers. We are asking for your help to record as many sightings as possible. Through this data gathering and research, the Conservancy aims to conserve old-growth cottonwood habitat and Lewis's Woodpecker populations throughout our six-county service area in Central Colorado. We are interested in all sightings, whether they occur in a cottonwood habitat, ponderosa, pinyon-juniper, aspen, or at your bird feeder.

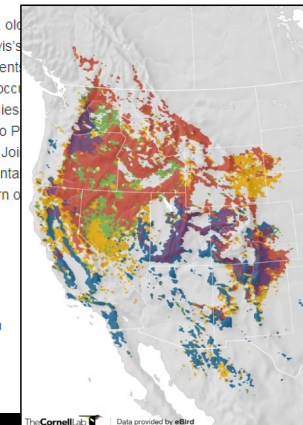


Why is this important?

In Central Colorado, old-growth cottonwood habitat is a necessary requirement for Lewis's Woodpeckers. Species data collection has occurred in the Intermountain West for a species of continental conservation concern.

About Lewis's Woodpeckers

Head, back, wings, and tail are metallic greenish-black. The collar and breast are gray and the belly is pinkish-red. The face is dark red framed in greenish-black. Male and females look alike. Juveniles are more brownish-black on back, lacking extensive gray, red, and pink coloration of adults, but colorings can be highly variable.



Lewis's Woodpecker *Melanerpes lewis*

Range

The range map depicts the boundary of the species' range, defined as the areas where the species is estimated to occur within at least one week within each season.

OCCURRENCE

- Year-round
- Breeding season May 24 - Jul 27
- Non-breeding season Nov 16 - Apr 12
- Pre-breeding migratory season Apr 19 - May 17
- Post-breeding migratory season Aug 10 - Nov 9

Note: Seasonal ranges overlap and are stacked in the order above; view full range in season maps.

SEASONS TIMELINE



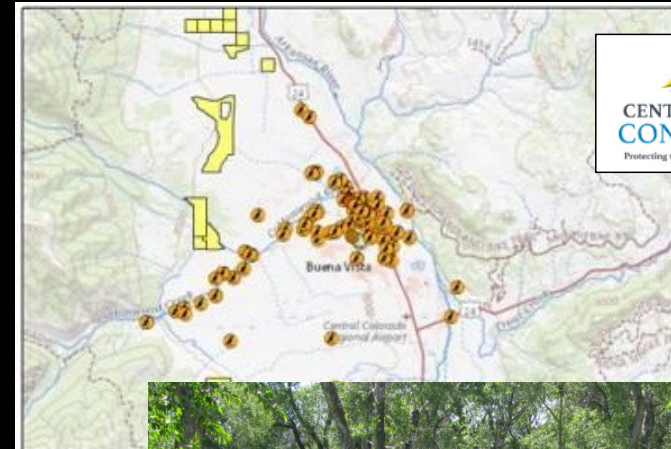
Modeled area (0 abundance)
No prediction

eBird data from 2005-2020. Estimated for 2019.
Park, D., T. Auer, A. Johnson, M. Stierman-Markley, D. Robinson, S. Logothetis, W. Hochstetler, C. Wood, I. Davies, M. M. L. Bell, 2020 eBird Status and Trends, Data Version: 2019. Released: 2020. Cornell Lab of Ornithology, Ithaca, New York. <https://doi.org/10.2173/ebird.2019>

The Cornell Lab of Ornithology Data provided by eBird

Land Trust Small Grant Awardee Success Story

- eBird citizen science monitoring platform
- Community engagement via workshops & trainings
- Data overlaid with parcel ownership & land use
- Inform prioritization of acquisitions / easements
- Maximize conservation dollars



Lewis's Woodpecker





"Besides our moral imperative to maintain the earth's beauty and bounty for future generations to enjoy, it is important to view birds as accessible indicators of the health of our lands and waters....In short, healthy bird habitat makes for healthy human habitat."

*John W. Fitzpatrick, Cornell Lab of Ornithology,
New York Times Op-ed, Aug. 29, 2014*

www.ebird.org

Jenna Curtis, jc2585@cornell.edu

www.birdtrust.org

Sara Barker, sb65@cornell.edu

Sarah K. deCoizart
Perpetual Charitable Trust

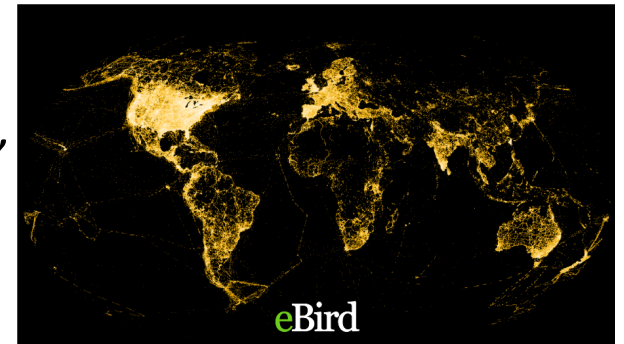
A close-up photograph of a bright red bird, likely a Red Tanager, perched on a brown tree branch. The bird has a bright red head and body, with black feathers on its wings. It has a long, pointed, light-colored beak and dark eyes. The background is a soft-focus green, suggesting foliage. The text "Questions and Discussion" is overlaid in yellow on the right side of the image.

Questions and Discussion

Linda Petersen

Thank you!

- **eBird Webinar #2: June 15 from 1-2:00 pm ET –**
“Conservation applications of eBird data and products”
 - eBird Workshop Toolkit & Resources
 - eBird Workshop mini grants



- **Save the Dates: Forestry for the Birds Webinar –**
September 15, 22, 29 & October 13, 2021

- Interested in getting involved in the
Northeast Bird Habitat Conservation Initiative?
 - Email **Katie** kblake@highstead.org or **Sara** sb65@cornell.edu

