



An Introduction to eBird

By Paul J. Hurtado





eBird

Where Birding
Meets Science



Talk Overview

- What is eBird?
- Navigating the eBird website:
 - Exploring the data
 - Contributing and organizing your own observations
- Additional resources
- Q&A





Christmas Bird Count

- Since 1900
 - From 25 to 2000 count circles over 100 years
 - Currently 50,000 participants

Breeding Bird Survey

- Since 1966
 - From 600 to 3700 routes over 40 years
 - Several thousand participants





eBird

Gather

- Internet-based checklist program
 - Tool for gathering observational data
 - Tool for maintaining personal records

Archive

- Persistent archive of bird observations
 - Gathers baseline data on bird distribution and abundance

Disseminate

- Public tool for data visualization
- AKN, conduit for observational data





eBird

- Worldwide monitoring program
 - **All** species & field identifiable forms
 - Year-round!
 - Advanced geo-referencing
 - Broad user-base



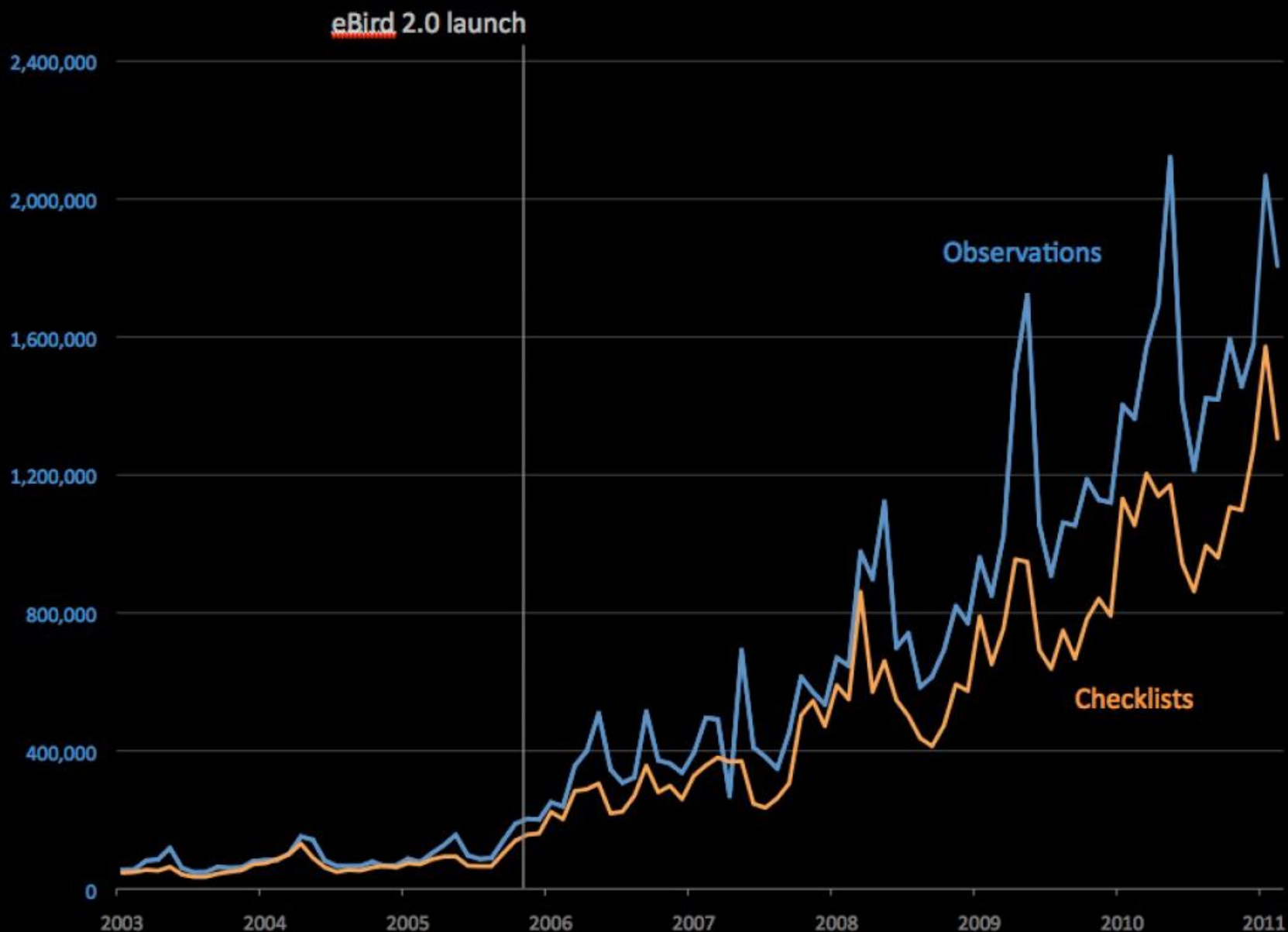


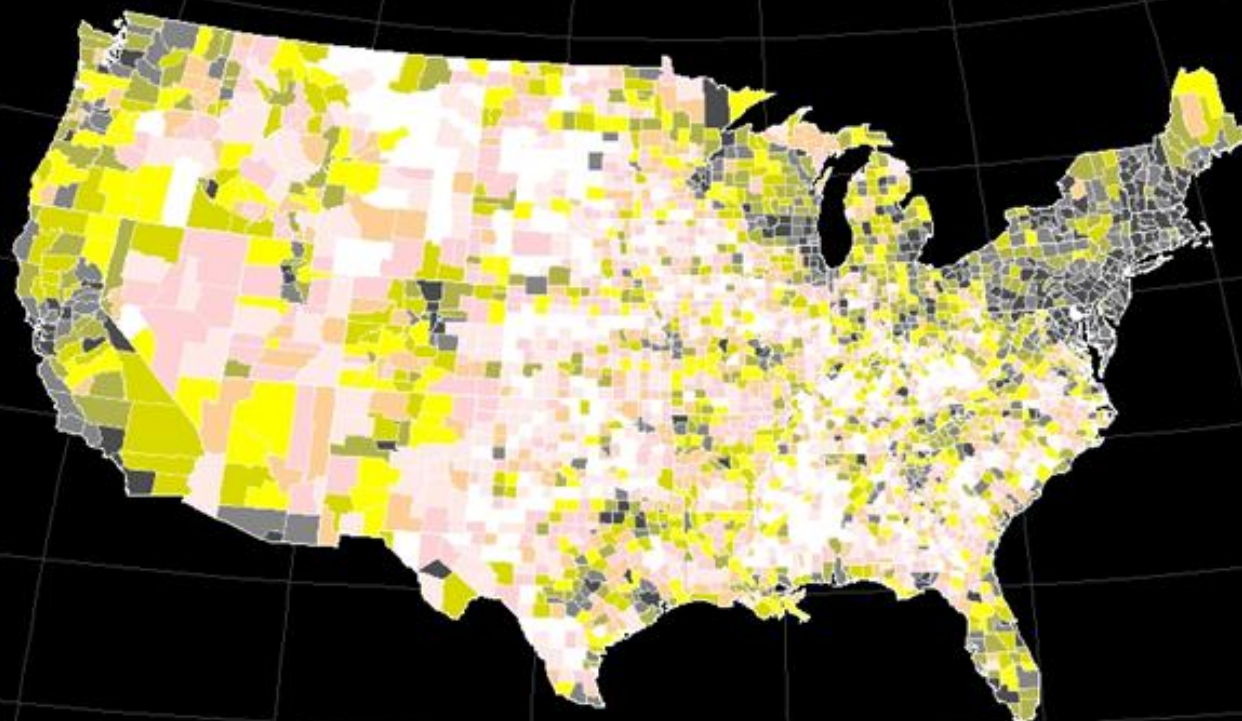
eBird

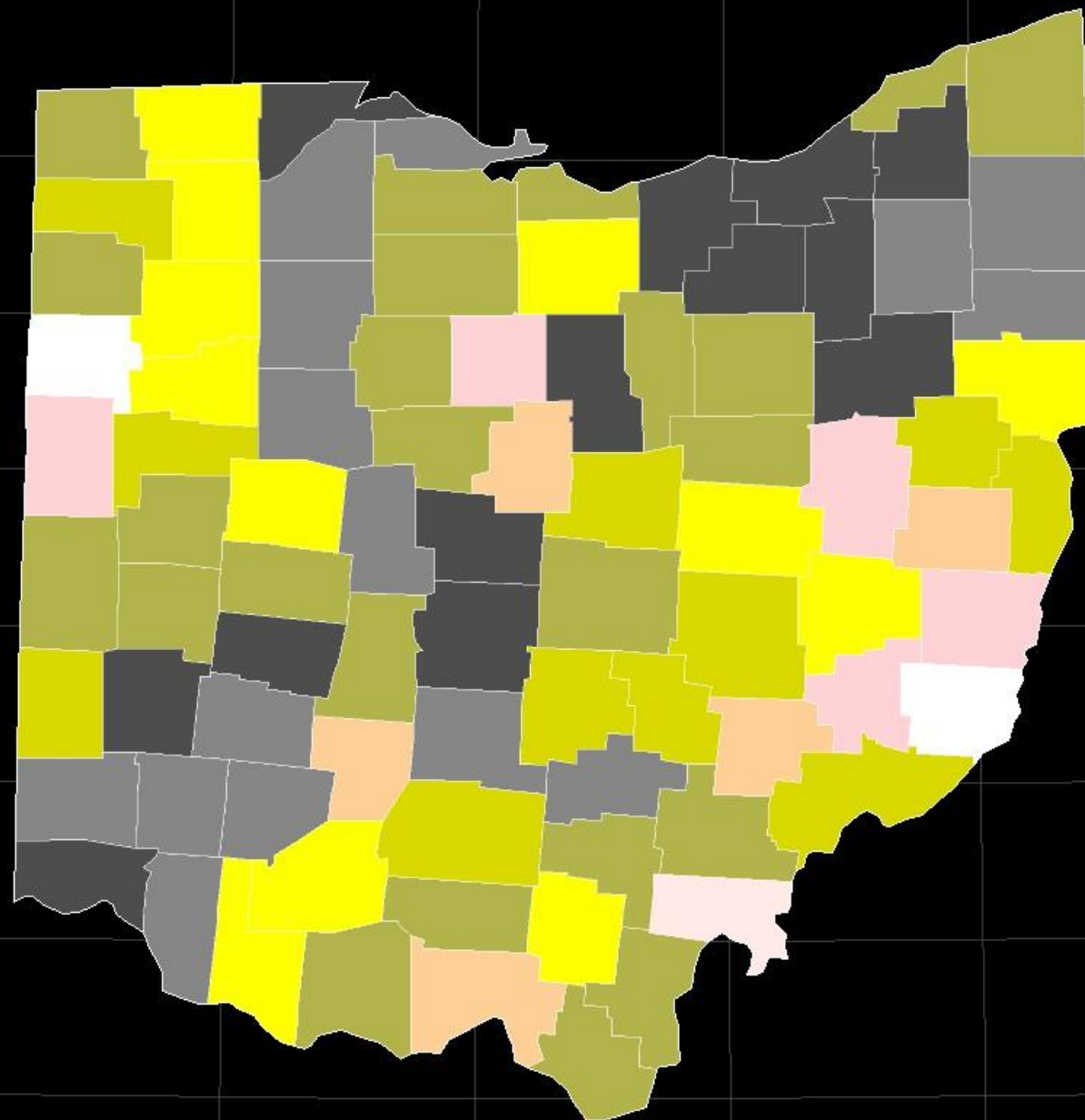
- ~70,000 account holders and growing
 - ~300,000 site visitors
 - 230 countries/territories
 - >5,000,000 checklists submitted
 - 9,152 species reported
 - ~70 million observations reported



Growth in eBird Observations and Checklists

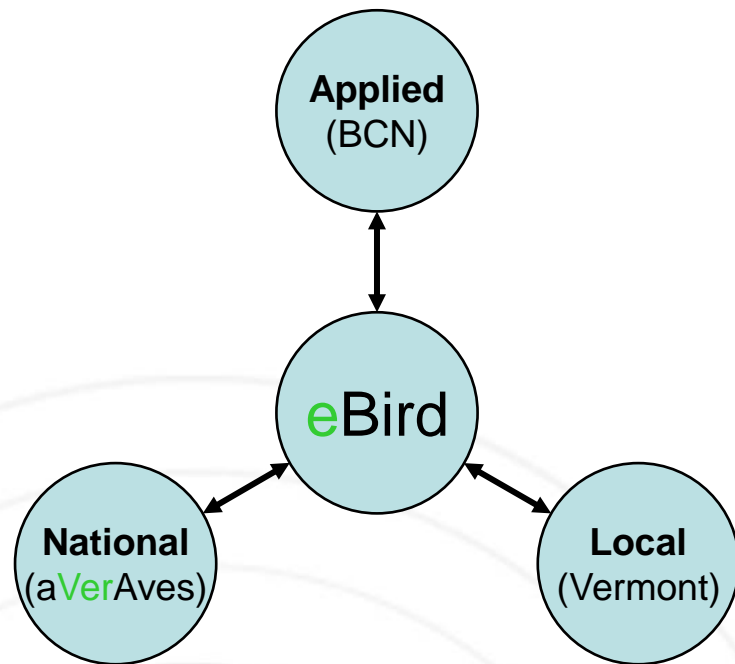








Encouraging Participation - Integration





Hola Chris Wood. [Salir](#)

[Contacto](#) | [Preguntas frecuentes](#) | [Glosario](#)

[Inicio](#) | [Acerca de aVerAves](#) | [Envia Tus Observaciones](#) | [Ver y Explorar Datos](#) | [Mi aVerAves](#)

Mi aVerAves

Personaliza tu cuenta de aVerAves, maneja tus localidades y observaciones y guarda tus listados personales.

Tu listado de por Vida: **785 Especies**

Tus estadísticas

	de por Vida	Anual	Mensual	
Total de especies	785	698	259	
Total de Listados	625	253	22	
Total de marcas por Estado	1886	1336	77	

Tus listados

[Regiones Mayores](#) | [Estado/Provincia](#) | [Condado/Municipio](#)

	de por Vida	Anual	Total de marcas por Condados/Municipios	
Colorado	375	233	3168	
Jalisco	267	267	--	
Illinois	258	205	1622	
Chiapas	228	228	--	
Veracruz	222	205	--	

Mis observaciones

[Resumir mis observaciones](#)
Calcular frecuencias, abundancias y elaborar cuadros con mis observaciones.

[Administrar mis observaciones](#)
Ver, editar, imprimir o bajar mis observaciones.

[Administrar Mis Localidades](#)
Agrega localidades nuevas o edita las existentes.

Datos de tu cuenta

[Editar mi perfil](#)
[Mis Preferencias de aVerAves](#)



Regional Applications – Empowering Local Birders

aVerAves



nabci

Puerto Rico
eBird



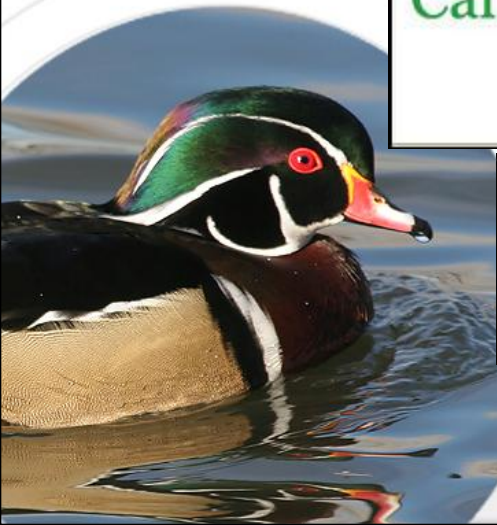
aVerAves
Hispaniola



California
eBird



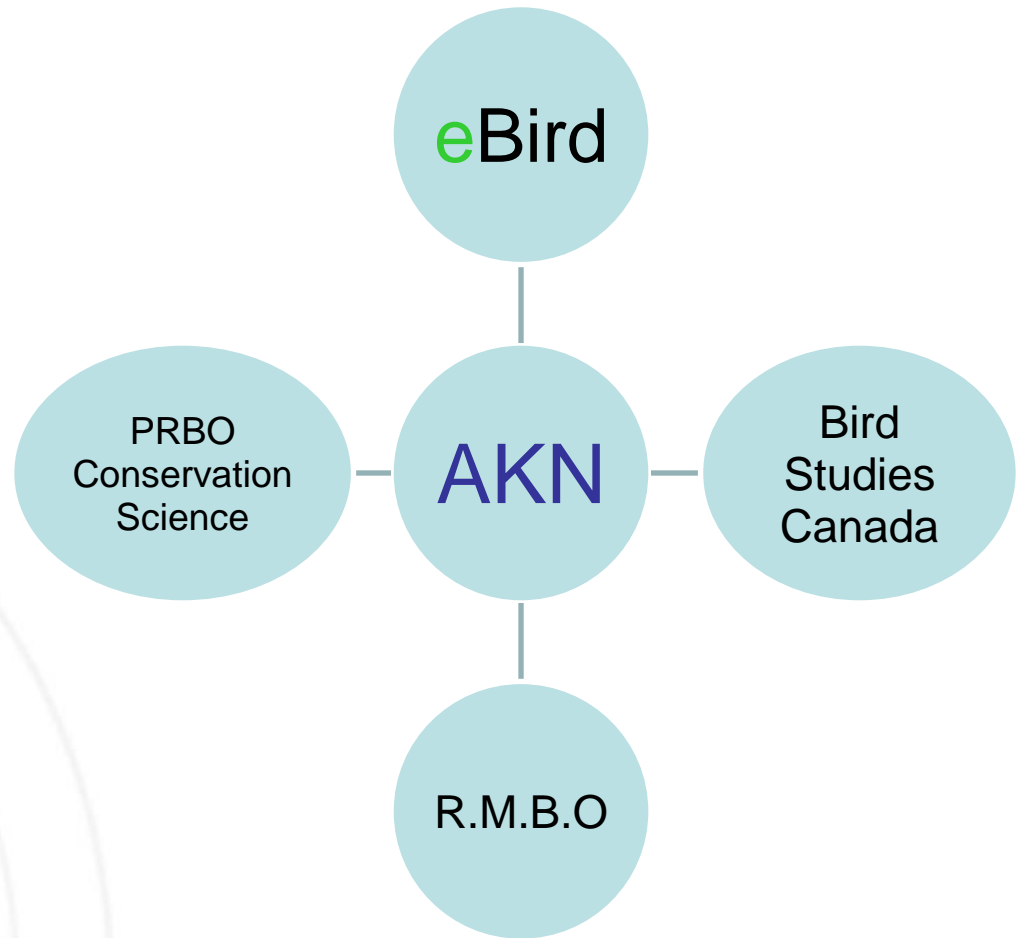
DATAves
Colombia





What Happens to the Data?

- eBird data go global
- Combine with other datasets
- Available for download
- Analysis tools
- Visualization and exploration





Every record submitted to eBird goes through some level of data verification

- Rarities
 - Aseasonal reports
 - Unusually high counts
 - Network of 500+ reviewers
 - Goal: one per county
 - Help them: leave comments!





eBird—Data Entry—Age, Sex, Species Comments

☒ Confirm

15

Red-throated Loon *Gavia stellata*

Hide Details

Comments:

Swimming with Pacific Loons offshore of sandy beach. Photos at:
www.briansullivanphotography.com.

X

Breeding Code:

Choose the highest possible code...



Help...

X

Add data for...

Choose the highest possible code...

NY Confirmed--Nest with Young

NE Confirmed--Nest with Eggs

ON Confirmed--Occupied Nest

FL Confirmed--Recently Fledged Young

FY Confirmed--Feeding Young

CS Confirmed--Carrying Fecal Sac

CF Confirmed--Carrying Food

DD Confirmed--Distraction Display

PE Confirmed--Brood Patch and Physiological Evidence

NB Confirmed/Probable--Nest Building

CN Confirmed/Probable--Carrying Nesting Material

T Probable--Territory Held for 7+ Days

C Probable--Courtship, Display or Copulation

N Probable--Visiting Probable Nest site

A Probable--Agitated Behavior

P Probable--Pair in Suitable Habitat

S Possible--Singing male

H Possible--In appropriate habitat

F Flyover

WATERFOWL

Brant *Branta bernicla*

Brant (Black) *Branta bernicla*

Canada Goose *Branta canadensis*

Canada Goose (n)

Wood Duck *Aix sponsa*

Gadwall *Anas strepera*

Mallard *Anas platyrhynchos*

Cinnamon Teal *Anas cyanoptera*

Northern Shoveler *Anas platyrhynchos*

Northern Pintail *Anas acuta*



What about me?!

eBird

So... why contribute? What's in it for me?

- Make your observations count!
- eBird keeps helps you organize your observations, lists.
- It makes me a better birder.
- Makes birding even more accessible, social, & fun!








Keep Track of Your Lists Using My eBird

- Maintain and manage lists
- Regional, state and county
- View your eBird stats
- Manage your data
- View and manage profile





We make it visible.

[Home](#) [About eBird](#) [Submit Observations](#) [View and Explore Data](#) **[My eBird](#)**

Hello Brian Sullivan. [Sign Out](#)

My eBird

Manage your personal lists, observations, locations, and account settings.

Your email address: heraldpetrel@gmail.com [\[edit\]](#)

Your Life List: [737](#) Species

Your Stats

	Life	Year	Month	
Total Species	737	204	139	
Total Checklists	3025	70	26	
ABA Area Total Ticks	1946	222	139	

Your Lists

[Major Regions](#) **[My State/Province Lists](#)** [My County Lists](#)

	Life	Year	Total County Ticks	
California	447	186	1506	
New Jersey	259	0	472	
New York	209	0	512	
Arizona	203	19	351	
Baja California	194	0	--	
Virginia	161	0	228	

My Observations

[Summarize My Observations](#)
Create frequency, abundance and other tables of my observations.

[Manage My Observations](#)
View, edit, print or download my observations.

[Manage My Locations](#)
Edit existing locations.

[Import Data](#)
Import your observations from *National Geographic Handheld Birds*

[Manage Imported Data](#)
View, fix, and submit your imported data

Account Settings

[Edit my profile](#)
[My eBird Preferences](#)



www.ebird.org



The ebird website is organized into 5 sections:

- 3 of 5 sections can be used by anyone (no account/sign-in is required to browse the data)
 - [Home](#): News feed and a few resources on the sidebar.
 - [About](#): The links listed on the right **are a goldmine of eBird “HowTo” information!**
 - [Explore Data](#): Data visualization tools
 - **Maps & Barcharts** are most useful
 - Also see the “Listing” links (in the box) and the arrival/departure links.
 - Maps: single species; easy to specify regions, timeframes
 - Barcharts: Visualize all (species) observations by region, timeframe
 - **“Download histogram data”** link allows user to open data as a spreadsheet; Great for doing *even more* with eBird data!
 - For beginners/students: Use Maps, Barcharts with AllAboutBirds.org
- 2 of 5 are for contributing users (requires login)
 - [Submit Observations](#):
 - [My eBird](#): manage observations, view lists.
 - (see next slide for details)

(... continued)

- 2 of 5 are for contributing users (requires login)
 - [Submit Observations](#): Where birders enter sightings
 - Mandatory data: **location, date, time of day**
 - Two types of data collected: **Effort & Observations**
 - **Effort** = Stationary count? Traveling/walking?
How far? Time duration? # Observers?
** Helps eBird give you a list of expected species for submitting...*
 - **Observations**: Species? Number or presence ("X")?
Optional: Comments/notes, age, sex, breeding status
 - [My eBird](#): manage observations, view lists, etc.
- **For more on entering (valuable) checklists? → [About](#)**
 - [eBird Tutorial](#) (includes registering, entering checklists)
 - [Making checklists more valuable](#)
 - [Improving your eBird reporting skills](#)
 - [Embedding photos, video in checklists](#)
 - [Breeding Codes](#), etc.



Your bird observations can be more valuable to science if collected in a particular way

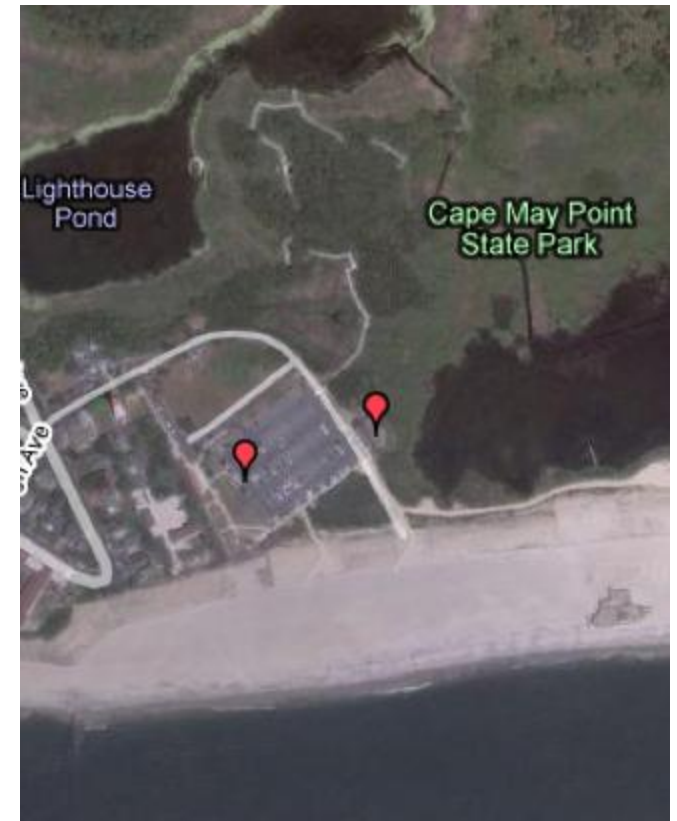
- Be precise when recording your location
 - Tell us what kind of birding you did
 - Estimate numbers for all the birds you see
 - Submit complete checklists each time you go birding
 - Seek out under-birded areas
 - Do a standardized count once a week
 - Document your rarities





eBird Rule of Thumb: refined locations are always better than broad-scale locations

- Always be precise!
 - Use the 'Find it on a map' tool to plot your location
 - Use 'Hotspots' where appropriate
 - Use a GPS for lat/long
 - Avoid entering state and county level data for new observations
 - Merge big locations into smaller ones





eBird Rule of Thumb: effort-based observations always trump casual observations

- Understand the different types of birding
 - Describe your birding event
 - Use traveling, stationary or area counts
 - Traveling counts should be short (<5 mi)
 - Record time spent in the field
 - Note the number of observers





eBird Rule of Thumb: estimating numbers is always better than putting an 'X' to indicate presence

- An 'X' could be 1 or it could be 1,000,000 or more!
- Numeric estimates allow study of relative abundance
- Realize that estimates are just that – 'estimates'
- Be exact when possible, conservative always
 - Use 'X' for historic data where numeric estimates are lacking





The value of the “complete” checklist

eBird Rule of Thumb: always report all the species you see or hear, not just the highlights of your day

- Understand, and answer ‘yes’ to the “All species reported” question
 - Helps gather baseline data on all bird species
 - Makes birders more attentive



- Allows us to map birds more accurately by showing presence (green) and absence (gray)





eBird Rule of Thumb: birding in under-birded regions provides important new information

- eBird data density is tied to human population density
- Seek out new birding locations
- Conduct effort-based observations when you get there





eBird Rule of Thumb: rare and unusual birds should be accompanied by written details and photos when possible

- eBird rarities include: vagrants, aseasonal reports, and high counts
 - If eBird asks you to confirm your sighting, the species or count is unusual for the area
 - Please submit such records with care and use the comments field to provide a description, links to photos, etc.
 - Network of 500+ reviewers looks at each such record individually and may get in touch!





Want to learn more about contributing to eBird? More about bird observation, identification & behavior?

- **Share** photos, recordings:
 - [FlickrR](#), [Picasa](#) (Google), YouTube, [SoundCloud.com](#)
- **Audio ID:** [AllAboutBirds.org](#), [Xeno-canto.org](#)
- **Documenting Obs.:** [OOS Website](#)
 - BirdLog (smartphone app)
 - **[“Birding Ohio”](#)** on Facebook
 - [www.ebird.org](#)





Questions?

