

# Organizing and Executing a Citizen Science Project



<https://ssec.si.edu/stemvisions-blog/mobile-apps-citizen-science>

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# Schedule

- 9-10am: Volunteer Involvement & Recruitment (Who?)  
with Mike Kautz
- 10-11am: Data Collection (How?)  
with Nolan Doesken
- 11am-noon: Community Data Analysis (What does it mean?)  
with Luis Olmedo

**Worksheet to help keep track of different projects**

# Volunteer Involvement & Recruitment: E-Bird

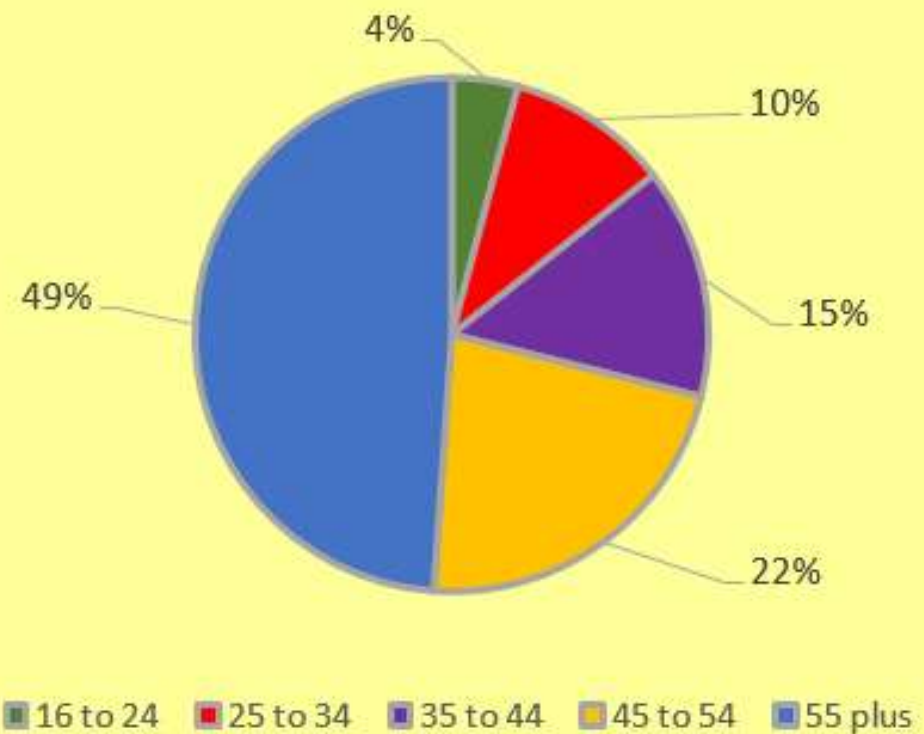
- Citizens document the presence or absence of bird species online through checklist data.
  - Intuitive web-interface for entering data
  - Tens of thousands of participants
  - Tools to help visualize data with interactive maps, graphs, and bar charts
  - Available in English, Spanish, and French
- Data quality filters were developed by local bird experts to review all submissions before adding them to the database.
- Observations are shared with an international community of educators, land managers, ornithologists, and conservation biologists.

Source: <http://ebird.org/content/ebird/about/>

Bird Watchers Help Science Fill Gaps in the  
Migratory Story

# Birder Demographics

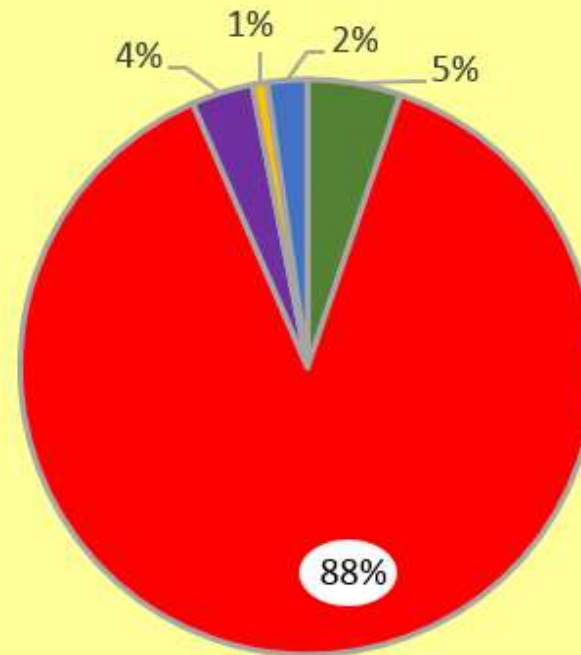
- In 2011, there were 47 million birders, 16 years of age or older.
- Most birders had more than **44** years of age.



Source: <https://www.fws.gov/southeast/economicImpact/pdf/2011-BirdingReport--FINAL.pdf>

## Birder Demographics (continued)

- Though birders are roughly evenly split by gender (44% male, 56% female), they are not racially or ethnically diverse.
- Data are from the U.S. Fish & Wildlife Service, 2011.



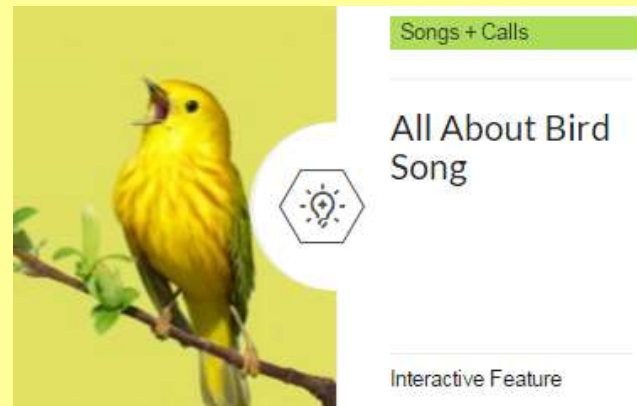
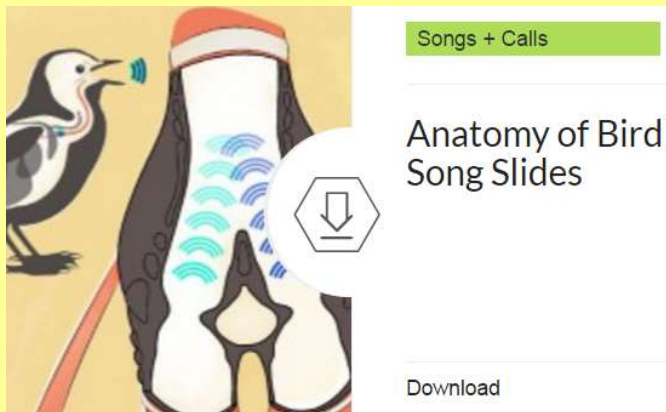
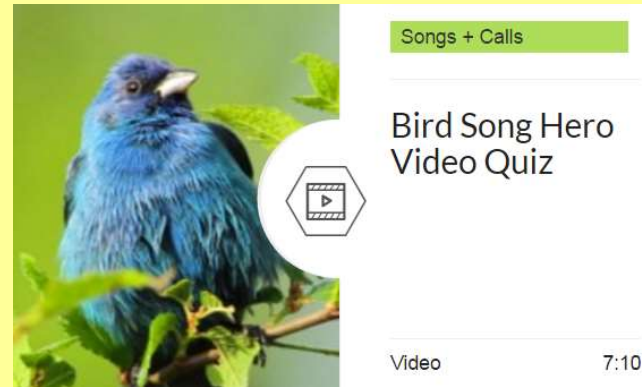
■ Hispanic ■ White ■ African American ■ Asian ■ Other

Source: <https://www.fws.gov/southeast/economicImpact/pdf/2011-BirdingReport--FINAL.pdf>

# How can we encourage birding among younger age groups and minority populations?

- Make birding information freely available online.
- Incorporate birding into middle school lesson plans.
- Reach out to communities unfamiliar with birding.

# Examples of Online Outreach Efforts:



Source: <https://academy.allaboutbirds.org/media-library/>