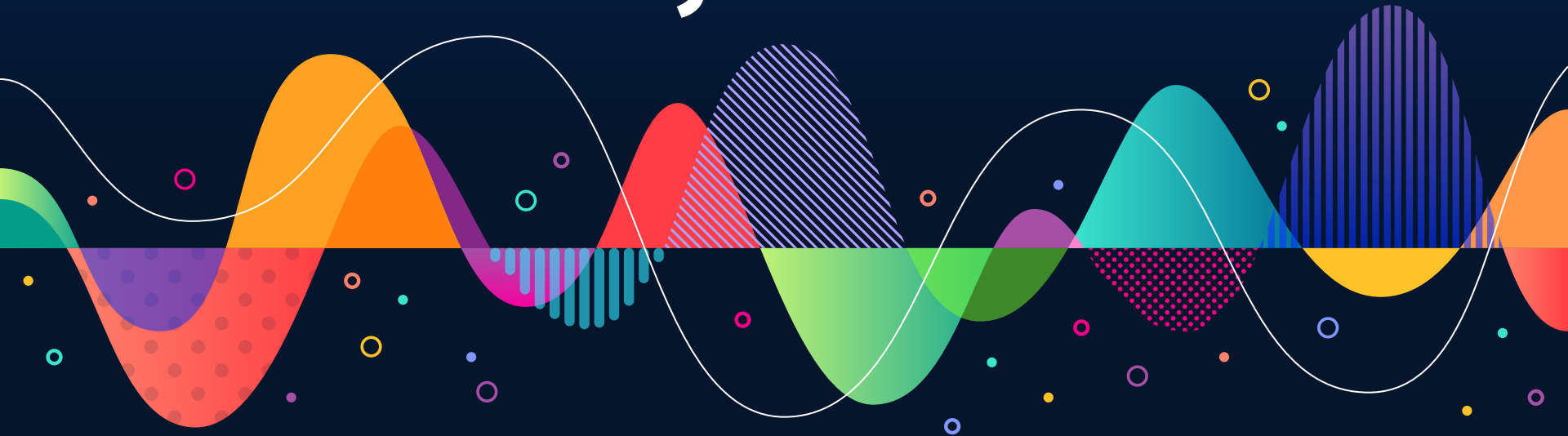


Great Backyard Bird Count



5:00

The egg-stravaganza begins in...

Matthew Ritter



Zachary Rittner



Welcome to our Presentation!

Feel free to reach out with any questions:

mritter@spfk12.org

2

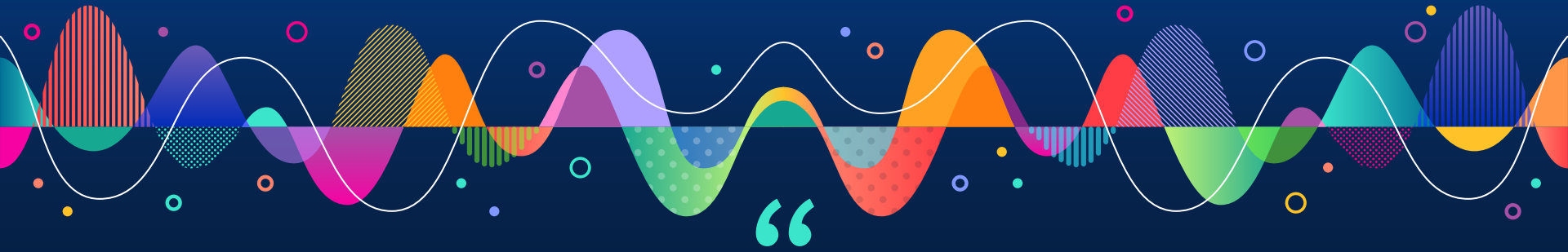
zrittner@spfk12.org

1.

Why Birding?

Let's get bird-brained!





“

I don't feed the birds because they need me; I feed the birds because I need them”

-Kathi Hutton



What is bird watching?

- ▷ Observing the...
 - ▶ Kinds of birds
 - ▶ Behaviors of birds
 - ▶ Changes of birds
 - ▶ Sounds of birds



Benefits of bird watching



- ▷ Contact with nature benefits our...
 - ▶ Mood
 - ▶ Psychological well-being
 - ▶ Mental Health
 - ▶ Cognitive functioning
- ▷ Nature can restore our attention and counter mental fatigue!
- ▷ Learn more [here!](#)

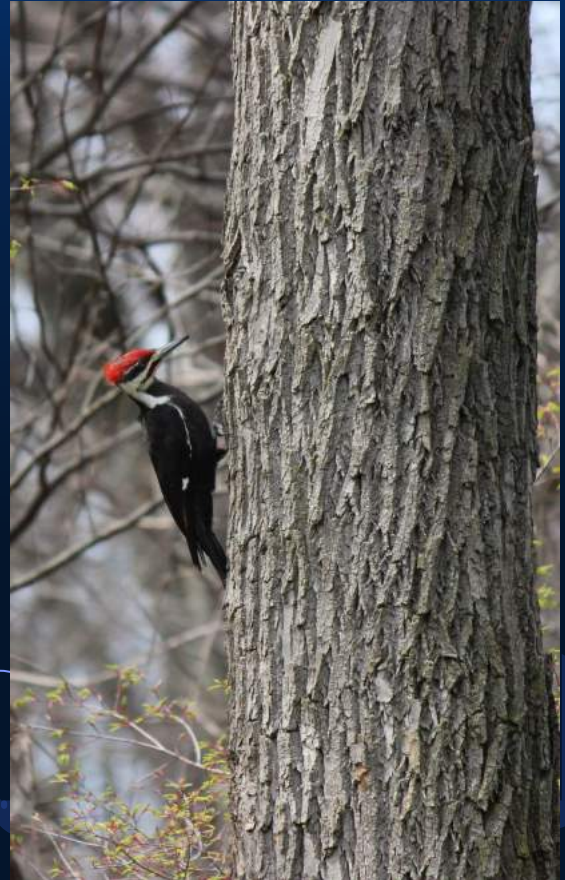


© World Photo Agency

How do I get started?



1. Head outside/ a window
2. Get a guide
3. Invest in binoculars/ gear
4. Seek out new locations
5. Connect with local birders
6. Become a morning person



2.

What Do I Need?



Head Outside



- ▷ Your backyard!
 - ▶ Give yourself distance and time
 - ▶ Feeders help! → Make your own!



Finding a Guide



- Paper
 - Sibley guide to birds
 - Peterson guide to birds
 - National Geographic
 - Usually on sale at B&N
 - Rated well for the field
- Learn more [here!](#)



Finding a Guide



- ▷ Digital
 - ▶ Merlin Bird ID
 - ▶ Audubon App
 - ▶ iNaturalist



What will I need to get started?



- ▷ Desire to see birds
- ▷ Willingness to make mistakes
- ▷ Binoculars
 - ▶ 8 x 42 is usually a good, cost effective balance
 - 8x magnification
 - 42 mm diameter
 - ▶ Bigger difference between mag and lens diameter means sharper and brighter image
 - ▶ Learn more [here](#)

My Standard Gear

- ▷ Binoculars 8x32 or 10x42
- ▷ Sketchbook
- ▷ Water bottle
- ▷ Hat (sunscreen too!)
- ▷ Composition notebook or notepad
- ▷ Chair (not pictured)



Setting up your Birding Spot

- ▷ Give your bird friends space
 - ▶ 30 feet from windows
 - ▶ Window feeders
- ▷ Change your feeders regularly
- ▷ Clean bird feeders regularly
- ▷ Learn more here!



Choosing a Bird Feeder

- ▶ Tray or Platform Feeders
 - ▶ Great for attracting tons of birds!
 - ▶ Needs drainage and to be cleaned
 - ▶ Also attracts other animals



Choosing a Bird Feeder

- ▷ Hopper or “House” Feeder
 - ▶ Protects against weather and bird droppings
 - ▶ Good bird variety
 - ▶ “Squirrel Magnets”



Choosing a Bird Feeder



- ▷ Tube Feeder
 - ▶ Great for attracting tons of birds!
 - ▶ Needs drainage and to be cleaned
 - ▶ A bit more squirrel resistant but not impervious!



Choosing a Bird Feeder

- ▷ Tube Feeder
 - ▶ Great for attracting tons of birds!
 - ▶ Needs drainage and to be cleaned
 - ▶ A bit more squirrel resistant but not impervious!



Choosing a Bird Feeder



- ▷ Suet Feeder
 - ▶ One of my personal favorites
 - Chickadees
 - Woodpeckers
 - Nuthatches
 - Jays



Choosing a Bird Feeder

- ▷ Nyjer (Thistle) Feeder
 - ▶ Fine mesh bags
 - Good for goldfinches
 - Becomes super wet and mold risk is high



Choosing a Bird Feeder



- ▷ Hummingbird Feeders
 - ▶ Make your own nectar
 - $\frac{1}{4}$ cup sugar per cup of water



Picking out food for your feathered friends



- ▷ Different food sources attract different birds!
 - ▶ Learn more [here!](#)
- ▷ Sunflower seeds
 - ▶ Black oil & Striped
- ▷ Safflower
- ▷ Nyjer or Thistle
- ▷ Suet
- ▷ Peanuts
- ▷ Cracked Corn



Connecting with Other Birders



- ▷ Join the Audubon Society
 - ▶ [Click here](#)
- ▷ Join the Cornell Ornithology Lab
 - ▶ [Click here](#)



Audubon

Becoming an early bird!



- ▷ Most birds are most active in the morning!
 - ▶ Want to see a lot of different birds?
 - You have to work around their schedule!
- ▷ Set an alarm well before dawn so you can be out in the field before the dawn chorus begins!



Now What!?!



- ▷ Tons of different things you can do!
 1. Casually observe
 2. Participate in citizen science projects
 3. Nature journal
 - a. Draw, paint, etc
 - b. Write poetry or prose

eBird



- Create an eBird account
 - Upload your lists- real-time submissions!
 - Helps collect data on where birds are abundant and where their numbers are reduced



Seeing beyond

Discover a new world of birding...

▶ Learn more

Get started



Barrow's Goldeneye *Bucephala islandica* © Max Brodie Macaulay Library | eBird

FEATURES



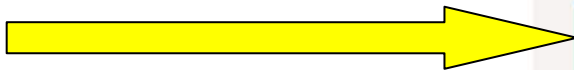
Your account lets you access any of these projects

- Bird Academy
- Birds of the World
- Celebrate Urban Birds
- eBird
- Great Backyard Bird Count
- Macaulay Library
- NestWatch
- Project FeederWatch

If you've already registered with any of these projects, you don't need a new account. [Sign in](#)

Create a Cornell Lab account

First name	Last name
<input type="text"/>	<input type="text"/>
Choose a username	
<input type="text"/>	
Choose a password	
<input type="text" value="Enter at least 8 characters"/>	
Email address	
<input type="text"/>	
<input type="button" value="Create account"/>	



Already have an account?

[Sign in](#)

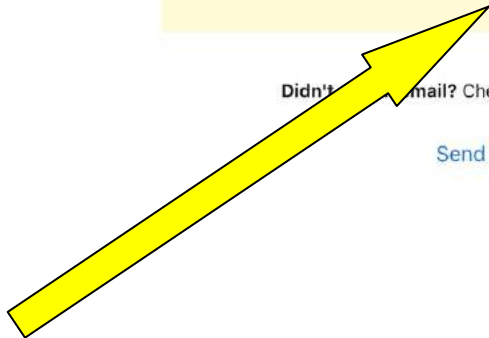
Check your email

We sent a confirmation email to
mritter@spfk12.org

Click the link in the email to activate your account.

Didn't receive an email? Check your spam folder. The email will come from "Team eBird".

[Send email again](#) | [Change email address](#)



Privacy Policy and Terms of Use

To keep your data safe and protect your privacy, we have updated our policy according to new standards in accordance with the General Data Protection Regulation (GDPR).

[Privacy Policy](#)

[Terms of Use](#)

Species name display

Choose how bird names will appear across your account, including eBird.org and eBird Mobile.

Common name translated to English (United States) ▾

Common Names in eBird follow the eBird taxonomy which is based on the Clements Checklist. These names appear as English (United States). Alternate common names are available for English and many other languages and are discussed [here](#).

Scientific name

Both, Common names translated to English (United States) ▾

Real name display

When you submit data, your name is associated with records that are publicly displayed and available for download. Choose how you would like the public to see your name.

"Mr. Ritter"

This is the first and last name from [your account](#).

"Anonymous eBirder"

When this option is selected, you will automatically be opted out of the Top 100.

[Save and accept](#)

Data privacy

Choose these options to restrict the public

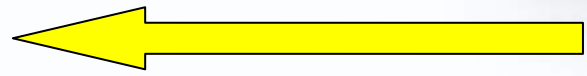
By clicking save and accept, you accept the terms of the [Privacy Policy](#) and [Terms of Use](#).

By checking this [Sign out](#), data will not appear on Recent Visits (as example).

1 2 3 **Where did you bird?**

Identify the location where you made your observations.

Find it on a Map



Use Latitude/Longitude

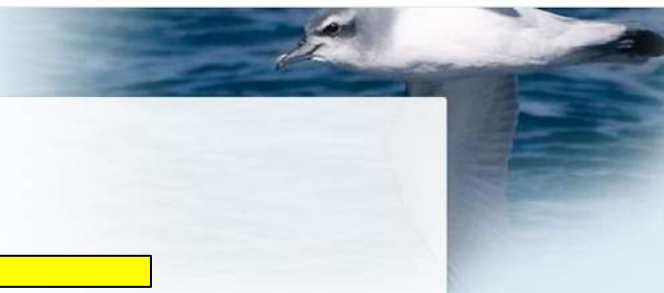
Create a new location using latitude and longitude.

Select an entire city, county, state, or country

If you were birding across a very large area (e.g., an entire state, county, or city) select this option. **Please consider using more precise locations when reporting to eBird so that your observations are more valuable for analysis .**

Import Data

Import data from a spreadsheet, database, or birding program. [Learn how](#)



1 2 3 **Where did you bird?**

Zoom to:

Map Satellite

Green Forest Park

Salescaster Displays Corporation

Scotch Plains-Fanwood High School

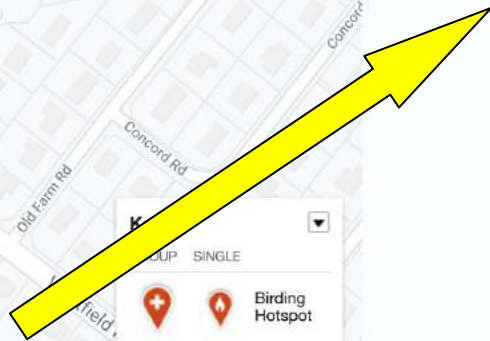
Map controls: +, -, person icon, full screen icon

Map legend: GROUP SINGLE
Birding Hotspot (red pin)
Personal Location (blue pin)

Use the "zoom to" box to zoom to a place name, address, or coordinates in decimal degrees (e.g., 42.4792, -76.45138). You can also click "+" markers to zoom in on groups of birding hotspots or personal locations.

To choose an existing location, click on its marker.

For new locations, **zoom in as far as possible** and click on the map to place a green marker. This marks your new location. To reposition the marker, click anywhere on the map.



1 2 3

Date and Effort

Scotch Plains-Fanwood High School, Union County, N... [Change](#)

* **Observation Date:**

Jan --- 2021 

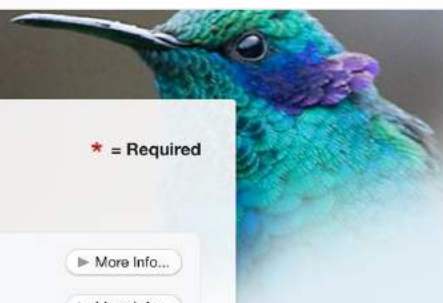
* = Required

* **Observation Type:**

- Traveling** You traveled a specific distance — walking a trail, driving a refuge loop, field birding. [▶ More Info...](#)
- Stationary** You stayed at a fixed location — watching from a window, hawkwatching, seawatching. [▶ More Info...](#)
- Historical** Birding was your **primary purpose**, but you cannot estimate start time, duration, and distance; use Traveling or Stationary if you can estimate these. [▶ More Info...](#)
- Incidental** Birding was not your **primary purpose** — noting a bird while driving or gardening. [▶ More Info...](#)
- Other**



[Continue](#) ▶



* Observation Date:

Feb ▾ 1 ▾ 2021 ▾ 

* = Required

* Observation Type:

- Traveling You traveled a specific distance — walking a trail, driving a refuge loop, field birding. [▶ More Info...](#)
- Stationary You stayed at a fixed location — watching from a window, hawkwatching, seawatching. [▶ More Info...](#)
- Historical Birding was your [primary purpose](#), but you cannot estimate start time, duration, and distance; use Traveling or Stationary if you can estimate these. [▶ More Info...](#)
- Incidental Birding was not your [primary purpose](#) — noting a bird while driving or gardening. [▶ More Info...](#)
- Other ▾

* Start Time (AM/PM):

7 : 20 AM ▾ [Use 24-hour Clock](#)

* Duration:

hrs. 40 min.

* Party Size:

1 Enter the total number of people in your birding party

Checklist Comments:

25F, Overcast, Snowing

WATERFOWL

- Snow Goose
- Domestic goose sp. (Domestic type)
- Cackling Goose
- Canada Goose
- Domestic goose sp. (Domestic type) x Canada Goose (hybrid)
- Cackling/Canada Goose
- goose sp.
- Mute Swan
- swan sp.
- Wood Duck
- Northern Shoveler
- Gadwall
- American Wigeon
- Mallard
- Mallard (Domestic type)
- American Black Duck
- Mallard x American Black Duck (hybrid)
- Mallard/American Black Duck
- Northern Pintail
- Green-winged Teal
- dabbling duck sp.
- Ring-necked Duck
- Lesser Scaup
- Greater/Lesser Scaup
- Bufflehead
- Common Goldeneye

🔍 | [Jump to Species...](#)

+ Add Species

↓ Alphabetic

Show Rarities

Show Subspecies

Group by Most Likely ?

🗪 Shortcuts ⚙️ Preferences

Are you submitting a **complete checklist** of the birds you were able to identify?

Yes

No

?

Submit ▶

Sample List 12/17/20



Matthew Ritter

 Share

Stationary Complete   1  20 min

First snow, 25F, overcast

 **10** Species observed

[Add media](#)

2 Mourning Dove



1 Downy Woodpecker



1 Hairy Woodpecker



2 Blue Jay



2 Tufted Titmouse



1 Northern Mockingbird



2 House Finch



15 Dark-eyed Junco



2 White-throated Sparrow



2 Song Sparrow



Sample List 2/1/21

2/1/21 7:20
→ 8:00
Junco ~~||||~~ 1 day
WTS 11
SS ~~###~~ 1 25° F snowing
Black capped 1
C. Wren overcast
Tufted 11
Jay 1
Cardinal 11
Took 25 min to settle 7:45



8

Species observed 24 individuals

- 2 Blue Jay
- 1 Black-capped Chickadee
- 2 Tufted Titmouse
- 1 Carolina Wren
- 8 Dark-eyed Junco
- 2 White-throated Sparrow
- 6 Song Sparrow
- 2 Northern Cardinal

Citizen Science Projects



- Great Backyard Bird Count
 - February 12 through Monday February 15, 2021
- Christmas Bird Count
 - December 14 through January 5
- Global Big Days
- Project Feederwatch
- And MORE!!



Benefits of Citizen Science



- ▷ Data requires observations
- ▷ Citizen scientists help by...
 - ▶ Increasing observations
 - ▶ Improve research base
 - ▶ Spreading awareness and building trust in science
- ▷ Empowerment of community stakeholders → environmental equity.



Benefits of Citizen Science

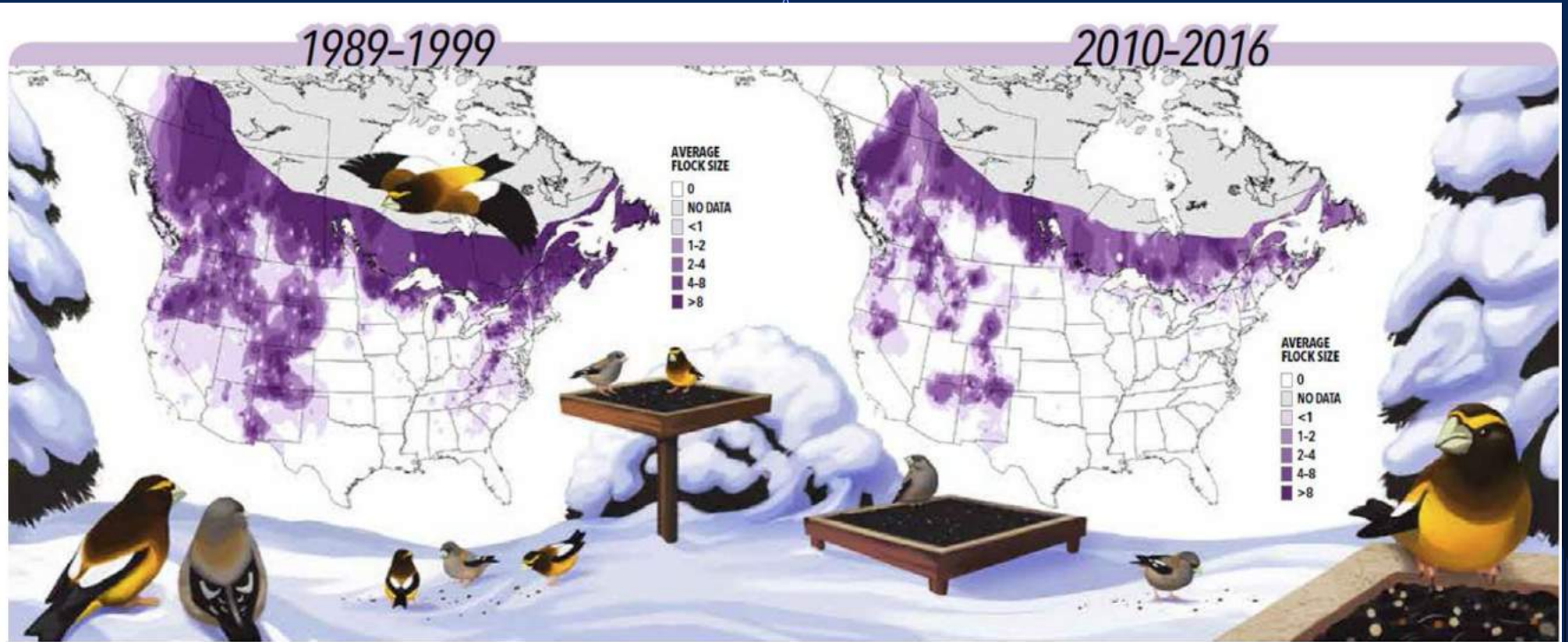
1989-1990

2015-2016



Project FeederWatch data from more than 25 years ago show Northern Cardinals as common backyard feeder visitors through the southern, central, and eastern United States. Today cardinal populations are expanding into the upper Midwest, northern New England, and southeastern Canada. They are also expanding in the Southwest.

Benefits of Citizen Science

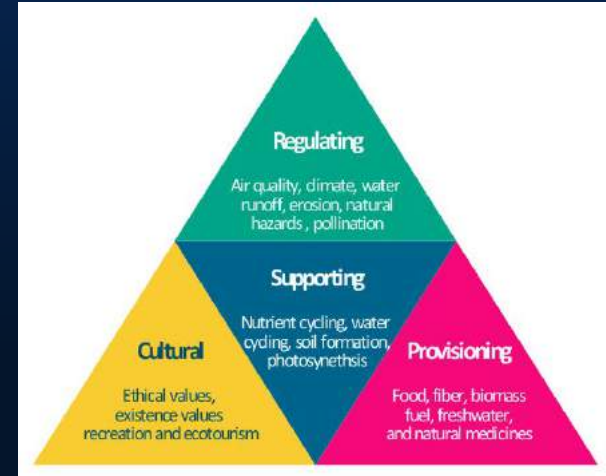


Two decades ago, Project FeederWatch data showed large flocks of Evening Grosbeaks at backyard bird feeders in the mountainous West and in the East during irruption years. Over the past six years, Project FeederWatch data show that Evening Grosbeaks have disappeared as a wintering bird in much of the East and dwindled in the West.

Benefits of Birds



- ▷ Improve biodiversity
- ▷ Provide ecosystem services:
 - ▶ Pollination services
 - ▶ Seed dispersal
 - ▶ Pest control services
 - ▶ Ecosystem engineers
 - ▶ **Cultural Services:** backyard birding is an \$80 billion industry in the U.S. (USFWS)



History of the GBBC



- ▷ Started in 1998 by Cornell Ornithology Lab
 - ▶ Regarded as first online Citizen Science Project
- ▷ Purpose
 - ▶ Gathers local data on bird populations before migration



3.

A Boot Camp for Birding

Get Ready for the Count!





How to Get Started



- ▷ Start by familiarizing yourself with some common species in our area, but be open to meeting new friends.
- ▷ Read up on the GBBC and know the rules.



GBBC Rules



- Watch the GBBC [introductory video](#) and read the [rules](#) (2021)
- To participate you must collect data for at least 15 minutes on 1 or more days from 2/12- 2/15. The best time to view birds is in the early morning with the rise of the sun... think 6:00 to 8:00 AM.
- Always count the maximum number of birds of the same species you see at a given time. This is because birds may leave the area and then return.

Tabulating Your Data during the GBBC



- Example: You see 7 red-winged black birds at 11:00 AM which all leave by 11:05 AM. At 11:15 AM you count 8 red-winged black birds. You would enter 8 for the count, not 15.
- If at 11:20 you counted 15 red-winged black birds, you would adjust the number for the count from 8 → 15.



GBBC Rules



- If you hear a bird you can identify, but cannot see it, you may count it as an X to indicate the species was present but you could not get an accurate number.
- You might want to record your notes on a piece of paper in your notebook prior to submitting your finalized results via eBird. Remember, eBird is geotagged, so submit your results at the location where you collected your data and made the observations.



Where should I go?

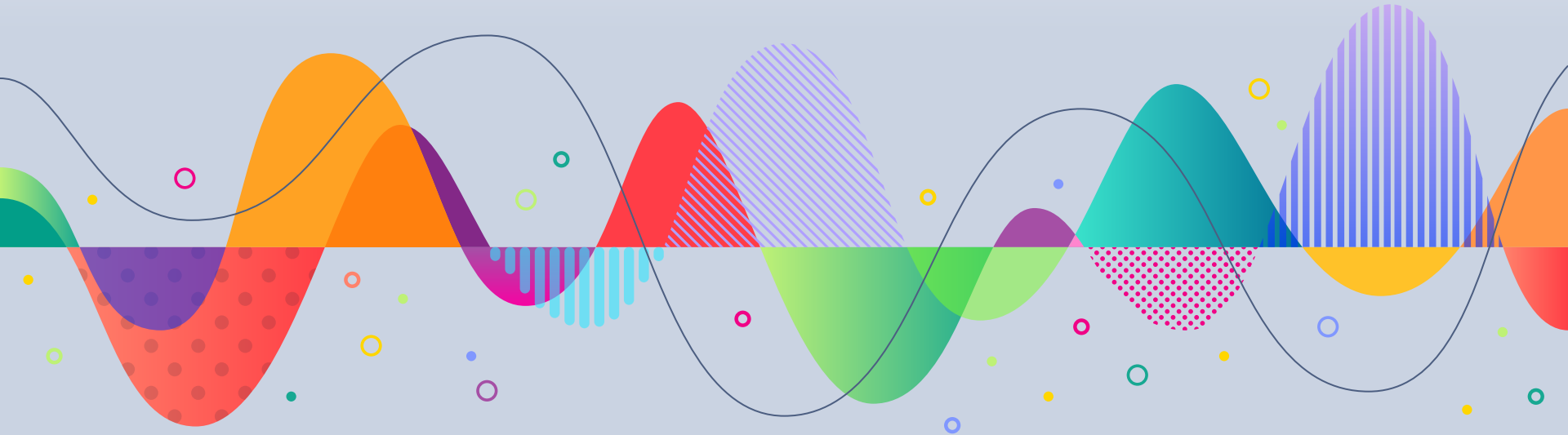


- ▷ Your backyard
- ▷ A local park (e.g. Brookside, Fanwood Nature Center)
- ▷ Watchung Reservation
- ▷ Great Swamp NWR (Finske Visitor Center)
 - ▶ Raptor Trust
- ▷ Scherman Hoffman Wildlife Sanctuary



4.

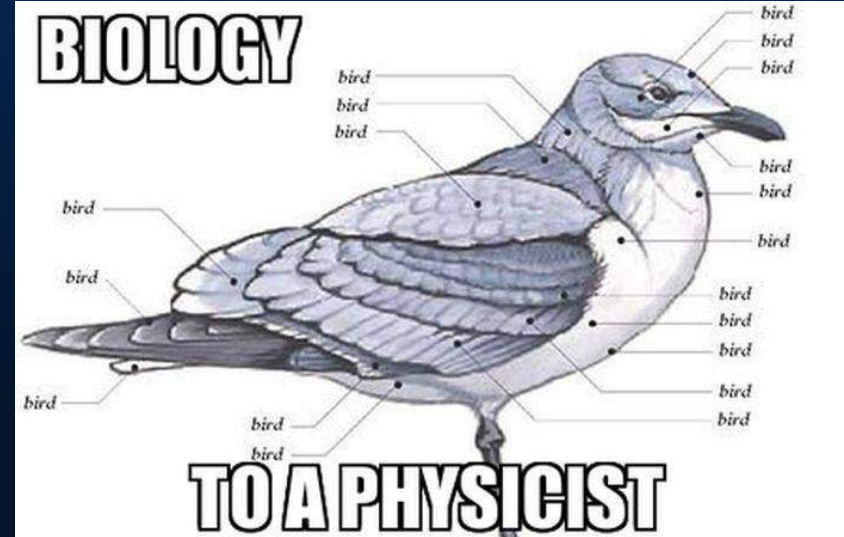
How Can I Learn More?



How to Identify Birds



- ▷ Use a variety of metrics
 - ▶ Group
 - ▶ Behavior
 - ▶ Shape, size, and color
 - ▶ Field markings
- ▷ Allaboutbirds
 - ▶ Quizzes



Birding by ear!



- ▷ Become a better listener!
 - ▶ Birding by ear
 - ▶ Bird Song Hero



Bird Cams!



- ▷ See birds all over the world!
 - ▶ Cornell Lab Cams



Nature Journaling



- ▷ Great way to engage with nature
- ▷ John Muir Laws
 - ▶ Naturalist and nature journaler
 - ▶ Visit his website [here](#)
 - ▶ YouTube videos [here](#)



Morning II 9:00 AM
 June II 9:20 AM
 Jay II 11/17/10
 Tufted II snow,
 Song II 25°F
 Downy Warren, NS
 U.T. 5.

White-throated Sparrow *Zonotrichia albicollis*



Mocking I
 Hare Finch W-S II
 Hair /
 Song Sparrow
 supercilious stripe (light band)
Melospiza melodia



- Qs
- 1) why run/hop on snow?
 - 2) why not heading onto the bird feeder? → choosing instead to dig in snow
 - 3) more sketch of jays?

For Kids!



- ▶ Audubon for Kids
 - ▶ Tons of activities for kids
 - ▶ Drawing birds
 - ▶ Games and crafts too!



Birds and Media



- ▷ I Saw a Bird
 - ▶ Started during Spring Quarantine
 - ▶ Continues once/month
 - ▶ Guest speakers, topics, and updates
 - [Register for episode 17](#)
 - [Previous episodes on YouTube](#)

Birds and Books



- ▷ Kingbird Highway by Kenn Kaufman
- ▷ Genius of Birds by Jennifer Ackerman
- ▷ The Thing with Feathers by Noah Strycker
- ▷ How to Know the Birds by Ted Floyd

Other Resources



- ▷ Birdcast
 - ▶ Like a weather forecast- except for bird migration!
 - ▶ Click [HERE](#)
- ▷ Ask Kenn!
 - ▶ Kenn Kaufman (prominent ornithologist) answers bird-related questions!
 - ▶ Click [HERE](#)
- ▷ BirdNote
 - ▶ Podcasts and more
 - ▶ Click [HERE](#)

Other Resources



- ▷ [Audubon Society GBBC Slideshow](#)
- ▷ [Common SPF Backyard Birds](#)
- ▷ [How to Make a Recycled Bird Feeder](#)
- ▷ [How to Make a Pinecone Feeder](#)
- ▷ [What is Your Bird Name? Activity](#)

Practice with Merlin Bird ID!



- Set the date/location on each slide.
- Some pictures you can estimate, others will have a size provided for you
- Correct answers on the next slide!

Bird #1

- Seen:
 - April 1, 2020
- Location:
 - Scotch Plains, NJ
- Size:
 - Robin-sized



Answer #1



Northern Cardinal



Males are entirely red with black around the base of the bill. Females are brown overall with red tail, red on wings, and red bill. Note distinctive crest in both sexes. Forages mainly for seeds in dense shrubby areas. Regularly visits feeders.



This is my bird!



Bird #2

- Seen:
 - May 12, 2020
- Location:
 - Scotch Plains, NJ
- Size:
 - Robin-sized



Answer #2



Blue Jay



Blue above, light gray below. Black and white markings on wings and tail. Larger than a robin, smaller than a crow. Crest and long tail. Noisy and conspicuous in areas with large trees. Regularly visits feeders.



This is my bird!



Bird #3

- Seen:
 - September 9, 2020
- Location:
 - Scotch Plains, NJ
- Size:
 - Between Robin and Crow-sized



Answer #3



Red-bellied Woodpecker



MALE

Medium-sized woodpecker that is not well named; rarely is the slight red wash on the belly visible! Instead, note the black-and-white barring on the back and wings, plain buffy breast and face, and red nape. On adult males, look for the red extending onto the crown. In flight, look for the white rump. Found in forested and suburban areas, typically pr...



This is my bird!



Bird #4



- Seen:
 - December 23, 2020
- Location:
 - Scotch Plains, NJ
- Size:
 - Between sparrow and robin sized



Answer #4



White-breasted Nuthatch



Frequents backyards, parks, and suburbs; favors mature deciduous trees. White face contrasts with black cap and blue-gray upperparts; belly is slightly grayer with brown on the undertail. Creeps along tree trunks and branches, often upside down, in search of seeds and insects. Small, roughly sparrow-sized with large head, no neck, and long...



This is my bird!



Bird #5

- Seen:
 - October 25, 2020
- Location:
 - Scotch Plains, NJ
- Size:
 - Robin Sized



Answer #5



Eastern Towhee



ADULT MALE

Large, striking, long-tailed sparrow of the eastern U.S. and Canada. Females are browner than jet-black males. White in the wing is limited to one small patch at the base of the primaries. Forages primarily by hopping along ground, scraping away leaf litter. Inhabits scrubby areas and forest edges with thickets. Males sing from atop shrubs and low...



This is my bird!



Bird #6



- Seen:
 - November 23, 2020
- Location:
 - Scotch Plains, NJ
- Size:
 - Sparrow Sized



Answer #6



Dark-eyed Junco



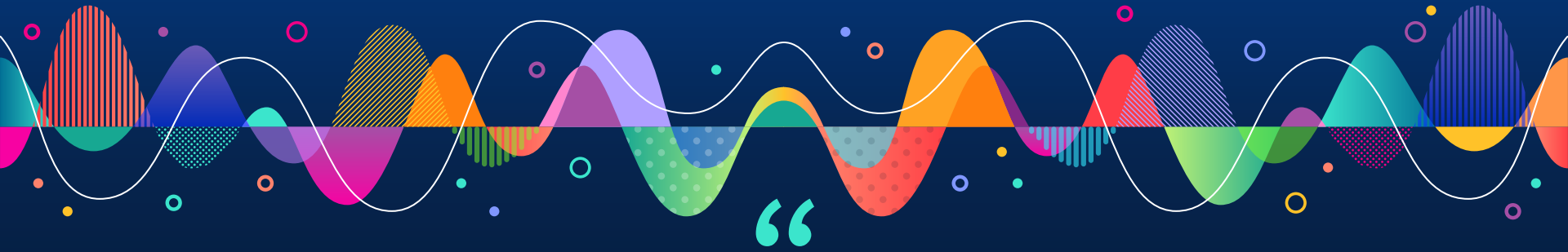
ADULT MALE (SLATE-COLORED)

Sparrow with incredible variation between populations. All have short pink bills and white outer tail feathers. Often in flocks in winter, foraging on the ground for seeds. Visits feeders. Subspecies include: Slate-colored (widespread), Oregon (West), Pink-sided (Rockies), Gray-headed (Rockies), Red-backed (central Arizona and New Mexico)...



This is my bird!





“

Thank you for coming!

Enjoy your birding!

BONUS: Tree-Plenish

- ▶ Support your local community, reduce your carbon footprint, improve local biodiversity and ecosystem services!



Types of trees?

- Eastern Redbud
- Red Maple
- River Birch



Tree-Plenish

SAVE THE DATE:
APRIL 16, 2021

Have any questions?
Contact our presidents of Go Green Initiative
22jlee@students.spfk12.org
22isegarra@students.spfk12.org

Why 240 trees?

In 2018-2019 school year, our school has used about 480 cases of papers, that equates to about 240 trees used!

Help us replenish the SPF community with these beautiful trees to counteract all of our paper waste. Only \$5/tree, we can help reach our goal of selling and planting 240 trees.

