



PLANTING FIELDS

Bird Explorers

Learning Kit

Grades 4-9



About Learning Kits

Planting Fields Education Learning Kits are resources for teachers and family members to use in conjunction with facilitated visits to Planting Fields Arboretum State Historic Park and as additional resources. Kits include guiding videos, discussion questions, and activities for students. For a deep dive into one idea, use the kit for a one-day lesson prior to a scheduled visit, or spread videos, discussions, and activities out as needed.

Planting Fields is committed to providing free digital resources for schools and home-schooling families. Please consider sharing examples of the student work and discussions by emailing photos and videos to info@plantingfields.org and completing the program evaluation survey when you finish using the kit.

This Learning Kit

This Learning Kit has been developed in to complement our Bird Explorers school visit/educational program (geared towards children in grades 6-9) but contains additional birding resources and activities that are suitable for all ages.

Learning Goal

Students will investigate the world of birding and learn the skills to become ornithologists who explore and teach others all about birds.



Standard Alignment

This Planting Fields Learning Kit is aligned with New York State Standards in Social Studies/English Language Arts, Next Generation Science Standards, the Common Core State Standards Initiative, and National Art Education Association (NAEA) standards. The following standards are achieved through facilitation of this kit:

Next Generation Science Standards: [Next Generation Science Standards \(nextgenscience.org\)](http://nextgenscience.org)

- ESS2 Earth's Systems
- ESS3 Earth and Human Activity
- LS4 Biological Evolution: Unity and Diversity
- LS2 Ecosystems: Interactions, Energy, and Dynamics

NYS Social Studies Standards: [Learning Standards for Social Studies \(nysed.gov\)](http://nysed.gov)

- Standard 1: History of the United States and New York

Common Core State Standards for English Language Arts & Literacy in Social Studies, Science, and Technical Subjects: [English Language Arts Standards | Common Core State Standards Initiative \(corestandards.org\)](http://corestandards.org)

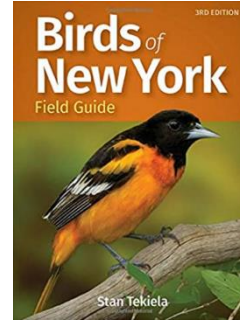
- **Reading: Informational Text**
 - Key Ideas and Details
 - Craft and Structure
 - Integration of Knowledge and Ideas
 - Range of Reading and Level of Text Complexity
- **Speaking & Listening**
 - Comprehension and Collaboration
 - Presentation of Knowledge and Ideas

National Art Education Association (NAEA) standards: [Home | National Core Arts Standards \(nationalartsstandards.org\)](http://nationalartsstandards.org)

- Standard 3: Responding to and Analyzing Works of Art
- Standard 4: Understanding the Cultural Dimensions and Contributions of the Arts

Resources (websites, apps, books) to help identify and Learn about Birds:

- **Audubon for Kids!** – great site with bird identification tools and bird-related activities: [Audubon for Kids | Nature Activities, DIY, Lessons for Home | Audubon](#)
- **Merlin Bird ID** – The Cornell Lab of Ornithology's free app for bird identification: [The Best Bird Identification Apps for iOS and Android | Digital Trends](#)
- **The Cornell Lab of Ornithology main website:** Great website out of Cornell University that provides a plethora of educational materials and resources on birding: [Cornell Lab of Ornithology—Home | Birds, Cornell Lab of Ornithology](#)
- **Tekiela, Stan. “Birds of New York Field Guide”.** Adventure Publications. **2021.** (Publication date). Can be purchased at: [Birds of NY Field Guide Amazon Link](#)
- Moramarco, Donna. “Create a Bird Friendly Garden”. PlantAmerica: [Create a Bird-Friendly Garden Pocket Guide](#)



Welcome to Planting Fields!



Video 1: Let's Talk Birding:

Students are introduced to Planting Fields and to the exciting past time of birding! Learn about how birders observe birds, their habits, and habitats.

[Planting Fields Learning Kit - Bird Explorers - Video 1 \(vimeo.com\)](#)

Video 2: Meet the Coe's

Students meet the Coe's, a bird-loving family who, like many of the birds they loved, would “migrate” to their different homes in Wyoming, Manhattan, the South, and right here on Planting Fields in Oyster Bay, Long Island, based upon the seasons. They were lovers of nature and built their home with optimal views and access to gardens, greenhouses, and riding paths.



Activity: How many bird images can you spot in Mai Coe's bedroom?

Both Mr. William Robert Coe and his wife, Mai Rogers Coe, loved birds; Mr. Coe was endowed a Professorship at Yale in the field of Ornithology (or the study of birds) and Mrs. Coe owned parrots, parrakeets, and macaws¹ (which she kept in her dressing room, next to her bedroom (pictured below). She also loved birds so much that she had her famous artist friend, Robert Chanler, paint this mural below. How many images of birds can you spot in this photo of Mai Coe's bedroom? [Photo of Mai Coe's Bedroom](#)



[ANSWER KEY How many birds in Mai's room](#)

¹ [letter about Mai Coe's Parrots](#) from a 1978 conversation between Robert D. Coe and Thomas R. Hauck
Created by Jocelyn Russo, Planting Fields Foundation Education Manager

Video 3: Best Planting Fields Spots for Birdwatching

Get to know the diverse areas of Planting Fields and decide which locations would be best for birdwatching. Where would you put a Bird Blind to discreetly observe native bird species in their natural habitat?

[Planting Fields Learning Kit - Get to Know Planting Fields- Video 3 \(vimeo.com\)](#)



Activity: Choose a Spot for Birding at Planting Fields

This worksheet lists some of the locations in the video. Which location would be best to put a bird blind or a camouflaged area/shelter for bird watching? Why do you think this is the optimal birding location? [Choose Your Birding Spot](#)

Now Let's Get Birding!

What supplies do I need?

Binoculars



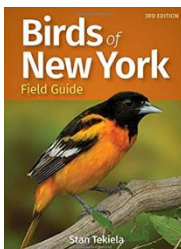
[The Audubon Guide to Buying Binoculars - Budget to Premium | Audubon](#)

Bird Seed (or something to attract birds)



[audubon_guide_bird_feeding.pdf](#)

Field Guide (hard-copy or app)



Nature Journal



See [How to Make and Keep a Nature Journal or Notebook - Rhythms of Play](#) for a tutorial

Bird Blind (or camouflaged shelter) makes bird watching more comfortable and hides you from the birds



*This one is Planting Fields'

Activity: Let's make bird feeders to attract birds!



[25+ Popular Easy DIY Bird Feeders You Need to Make With The Kids - This Tiny Blue House](#)



Activity: How many birds can you spot?

Now you'll try birding at home or at Planting Fields! Check out the bird guide to get a sense of what you might see. Record the time you are starting your count and set a timer for 10 minutes. List the species of birds that you see and keep a tally of how many of each species you count. If you don't know what type of bird it is, you can write "unknown". When the timer goes off record the end time and stop tallying. Add up your tallies to find your totals.

[Bird Tallying Activity](#)

[Planting Fields Area Bird Guide](#)

Planting Fields Area Bird Guide



Activity: Sharing our Planting Fields birding observations



Curious which other bird species other birders have found at Planting Fields? Check out this blog where birders are actively sharing their observations: [Planting Fields Arboretum, Nassau County, NY, US - eBird Hotspot](#)

[\(11\) Introduction to eBird - YouTube](#)

Now, share your own observations using eBird: [eBird - Discover a new world of birding...](#) This free website/app allows anyone from around the world to store their birding observations, their photos, their sound recordings, and make them available to educators, scientists, and birders.

Discussion: Bird Habitats

What was your experience like as a birder? How many birds did everyone count?

- **Can you describe the environment you were birdwatching in?** For example, if you were looking out your window, did you see lots of trees, an open field, buildings, a body of water?
- Based on this information, **what can we guess about what birds need from their habitat** (or the area in which they live)?



Next Steps: Knowing what we know now about what birds look for in their habitats, you're going to get the chance to select what you think would be a good bird habitat.

Activity: Choose the best bird habitat

First, find our school using Google Maps. Look around the area noticing where might be good areas for a bird to find shelter, food, water, and safety. Once you've selected a good spot, take a screenshot, and answer the question, "Where do you think would make the best location for birds to live near school? Why?"

[Activity Bird Habitats at School](#)



Discussion: How can we best observe birds in their natural habitat?

What is a Bird Blind?

A bird blind is designed to help humans observe birds without scaring them off. In other words, they are hiding places for humans within bird habitats.



Let's think back to our bird count during activity:

- Did anyone accidentally scare off a bird?
- Did anyone find a good way to hide from the birds, so you didn't scare them away?

Which of these bird blinds above do you like the best? Why?

Video: Meet Planting Fields' Bird Blind Artists

In this video, we will meet artists, Mark Dion and David Brooks, who create works inspired by nature. They've partnered with Planting Fields Foundation to design an installation that explores the art of birding as an activity as well as examining birders as a distinct group. Mark and David will share their bird blind designs and the decisions they made to come to their final designs, and we'll see their blinds under construction.



[Planting Fields Learning Kit-Meeting Mark and David- Video 4 on Vimeo](#)

We'll get to observe birds in their natural habitat from these two bird blinds when you come for our Bird Explorers program!

Activity: Design your own Bird Blind

Planting Fields has many examples of Bird Blinds. You've already seen the two created by conceptual artists Mark Dion and David Brooks but there are many other places that are good birdwatching spots, like Coe Hall, the greenhouse, or Mai Coe's Tea House. Which of these do you think is best?

Your challenge now is to design a bird blind. Your bird blind should hide a bird watcher from the birds they are trying to watch, and have some elements inspired by what we've seen in Planting Fields.

Consider these questions:

- How big is it?
- How many birders can fit inside?
- What shape is it?
- What does it look like from the outside and what does it look like from the inside?
- How will it help people watch birds?
- How comfortable will you and your fellow birders be while you are using the bird blind?

Now think back to the ideal bird habitat at your school and design a bird blind for that space: [Design your own Bird Blind](#)

Discussion: Who is a birder?

Anyone can be a “birder”. We’ve already met “birders” Mark Dion, David Brooks, and the Coe Family. They all have (and had) a love of birds and a strong desire to observe birds in their natural habitat. The goals and methods of each birder are different though.

- What methods did they use?
- What do you think are their goals?
- What goals will motivate you when you “bird”?

We will be learning about John James Audubon during our trip to Planting Fields. How is he similar to and different from these other birders we’ve “met”?

AFTER YOUR VISIT TO PLANTING FIELDS:

Extension Activities:

- 1) **Research:** As a follow-up session, the teacher (with the help of the school librarian) should give the students time to do research on one or two of the living things (i.e., bird species) they observed outside. Students in older grades can use their observations as a jumping off point to create an experiment.

* Pages 21 and 22 in the nature journal (provided during the school visit) has information/activities relating to the scientific method and designing an experiment following observation

- 2) **Learn about other naturalists:**

- Such as Charles Darwin, Anna Comstock, Alexander von Humboldt, Charles Henry Turner, or Maria Sibylla Merian and compare and contrast one of these naturalists with John James Audubon using a Venn Diagram or other method
- The teacher (with the help of the school librarian) can give the students time to do research one of these other scientists/naturalists. Create a book or comic strip illustrating their life.

- 3) **Learn about evolution** and how the native bird species you observed reflect these evolutionary mutations

- 4) **Learn more about Mark Dion and David Brooks and their works** (the artists who created Planting Fields Bird Blind)

- [Visual Arts Mentor Mark Dion and Alumnus David Brooks '09 in 'The Great Bird Blind Debate' | School of the Arts \(columbia.edu\)](#)

- The Great Bird Blind Debate Planting Fields newsletter: [Great Bird Blind Debate newsletter](#)

5) Have the students design and/or build their own bird blind:

- [Want to Shoot Intimate Bird Portraits? Try a Portable Blind | Audubon](#)
- [\(7\) HOW TO MAKE A SIMPLE NATURAL BIRD HIDE! - YouTube](#)
- [\(7\) How to Make an Easy Bird Blind - YouTube](#)
- [\(7\) Building Blinds: Hiding in Plain Sight - YouTube](#)

6) Complete the rest of the Nature Journal Activities (including the scientific method activities on pages 21-22)

7) Create your own bird-related artwork using different artistic mediums



Share student work:

We want to see the work your students created. Please consider sharing student work with us by emailing photos to info@plantingfields.org. We may want to use the work as examples or display it as part of an online or on-site exhibition and will follow up with you to obtain permission.

Share your thoughts:

Your feedback is crucial to us creating more kits like these that suit your needs in the future. Please take 5 minutes to complete [this survey](#). It will help us understand what you need, and how we can better serve you moving forward.