



Nature at Home: Bird Watching Activity Midpeninsula Regional Open Space District

Audience:

This activity can be experienced and enjoyed by participants of all ages. Complete this activity alone or in small groups. For younger participants (age 9 and younger) it is best to go birding with an adult to help provide safety and guidance. For participants age 10 and older, this can be an independent activity with permission from a guardian. This activity can be used to supplement science curriculum and instruction.

Purpose and Overview:

You will take part in Field Research to collect your own observations while learning the basics of birding near where you live. You can do this activity in many places, like looking out of your window or on a walk through your neighborhood. Be curious and let your discoveries guide you. Observation and identification skills can be used for today's activity, as well as for future visits to parks and open spaces. Be on the lookout for docent-led birding hikes offered at Midpeninsula Regional Open Space preserves to continue to learn and practice your birding skills: https://www.openspace.org/activities



Materials Needed:

Pencil or pen, printed Exploration Worksheet or notebook for recording observations; a clipboard may be useful, and binoculars if you have them. If you don't have binoculars, you can make them from materials you may have in your home: https://www.audubon.org/news/diy-craft-how-make-cardboard-binoculars-kids

Duration:

Plan on 30 minutes to several hours for the activity, over one day or multiple days, depending on participants' interest. You are likely to see the most birds in the morning or evening, as this is when most birds are active. You are encouraged to repeat this activity as many times as you like!





PART I: Invitation

Discuss these questions with a partner. Or, think to yourself and write your responses.

Other than pets and garden plants, what kinds of living things live in or travel through your home? Your neighborhood? Think about indoors, a nearby tree, a telephone wire		
Perhaps one of the animals you listed above was a bird. Where specifically have you seen birds around your home or in your neighborhood? List as many places as you can.		
What do you know already about birds? What do they do? What do they need to survive?		
What arrestions do you have about binds in very pointed and 2 list as many as you are think of		
What questions do you have about birds in your neighborhood? List as many as you can think of.		



Observation Tips

Birds are your traveling neighbors. Sometimes you see the same birds in the same location throughout the year, but many birds travel to other areas (some near and some far) during the year to find food and have a family. You can use your senses to make observations of everything in nature, including birds. Making close observations is a skill that everyone can learn and practice. You can use your observations to identify birds that call your neighborhood home or are just visiting.

Parts of a Bird:

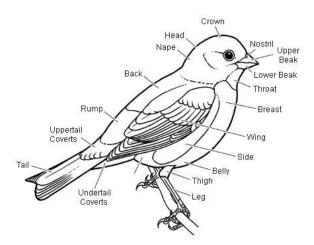


Image by Charles Ripper/Cornell Lab

Field Marks: Field marks are physical features that can be observed and are useful for people to distinguish one kind of bird from another. Different types of birds might have special coloring, patterns, spots, or stripes on their bodies. Looking at a bird's field marks, sizes, and overall shape can help you identify it later. At the end of this activity, you will find some resources to help with identification.

Bird Behavior: When you yawn, you are showing signs that you are sleepy. Birds exhibit behavior, too! The way birds eat, fly, and walk can provide clues about how they survive, and can help you identify them. Some examples of bird behaviors you might see are flight patterns, movements, posture, and flocking (whether the bird is by itself or in a group).

Bird Calls and Songs: You might not always get to see birds, but often you can hear their calls or songs. Some birds make calls when they sense a predator or vocalize a song when they are defending their territory. You can make observations about what you hear and even learn the calls of common birds.

Bird Watching Tip: Say your observations aloud to yourself! Have you ever wondered how to recall all those little details? Saying your observations aloud helps you remember and to learn with different parts of your brain. It's also a fun way to help kids develop language skills.



Bird 1 **Drawing**:

PART II: Exploration Date:

Observations about the bird's **body**:

Use this worksheet to record your observations. Print this page or write and draw in a notebook.

	Observations about the bird's behavior :		
	Description of where I found this bird:		
Based on your observations, write a creative name for this bird:			
Bird 2 Drawing :	Observations about the bird's body :		
	Observations about the bird's behavior :		
	Description of where I found this bird:		
Based on your observations, write a creative name	for this bird:		



PART III: Connection

Use your observations and the references below to try to identify your birds. They can help you identify and learn more about the birds you saw. Record the bird names here or in your notebook.

Your Creative Bird Name	Common Name (ID)	Scientific Name (Genus species)

Identification Resources:

General birding references:

Birding Books: https://www.audubon.org/news/six-kid-friendly-bird-guides

Merlin: https://www.allaboutbirds.org/guide/Merlin/id

San Francisco Bay Area birding references:

SF Bay Wildlife Common Birds: https://sfbaywildlife.info/species/common_birds.htm iNaturalist Common Birds of SF Bay Area: https://www.inaturalist.org/guides/1262

San Jose Mercury News, 10 most common birds: https://www.mercurynews.com/2019/12/16/meet-the-

neighbors-10-common-bay-area-birds-part-i/



PART IV: Reflection

Discuss these questions with a partner. Or, think to yourself and write your responses.

What did you notice about the birds that surprised you? What did you notice that you haven't noticed before? Think specifically about the behaviors and body parts that you observed.		
Review the observations you made about your birds and compare them. What did your birds have in common? What was different?		
You observed some birds today, but what about tomorrow? Next week? Next month? What		
reasons would a bird move from one place to another?		
What can you do to help birds survive and thrive in your neighborhood? Think about where the birds might live, how they protect themselves from weather, what they eat, and what might		
threaten them.		



How Midpen Protects Birds in Your Ecological Neighborhood

In this activity, you observed birds near where you live. Birds, other animals, plants, and humans are all a part of this ecosystem.

Midpeninsula Regional Open Space District has preserved nearly 65,000 acres of public land and manages 26 open space preserves. The preserves provide important habitats for many species to survive and thrive, including birds. Some birds are permanent residents staying year-round, including the Ridgway's Rail and California Thrasher. Some birds migrate many miles and stay in the preserves seasonally during their travels, including the Barn Swallow and Lazuli Bunting.

MIDPENINSULA REGIONAL OPEN SPACE DISTRICT MISSION STATEMENT:

To acquire and preserve a **regional** greenbelt of **open space** land in perpetuity, protect and restore the natural environment, and provide opportunities for ecologically sensitive **public** enjoyment and education.

Part V: Continuation

What questions do you still have about birds? There are many resources to help continue your adventure.

Learn more about bird behavior: https://www.allaboutbirds.org/news/bird-id-skills-behavior/

Midpeninsula Regional Open Space District Birding Resources Videos of Birds in the Midpen Preserves:

Hummingbird Energy Video: https://www.youtube.com/watch?v=sgT2_3eG0bw

Birding Year Round: https://www.youtube.com/watch?v=p6oZVxwVDe4

Midpen Birding Page: https://www.openspace.org/visit-a-preserve/plants-wildlife/birds

Midpen Bird Bingo: Download Bird Bingo

Correlations to the Next Generation Science Standards:

The Next Generation Science Standards (NGSS) were developed by educators, scientists, and engineers and adopted by California in 2013. Educators use the three dimensions below to create cohesive learning experiences and help students make connections across different subjects in science and beyond.

Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
Analyzing and Interpreting Data:	LS4.D: Biodiversity and Humans. There	Patterns: Patterns in the natural and
collect, record, and share observations.	are many different kinds of living things	human designed world can be
Use observations to describe patterns	in any area, and they exist in different	observed and used as evidence.
in the natural world in order to answer	places on land and in water.	
scientific questions.		

NATURE NOTES

Many species of birds travel great distances during seasonal migrations from northern breeding areas in summer to the warmer climates found in the southern United States, Mexico, and Central America for winter. Most people think of ducks and songbirds migrating.

It is not surprising that many people don't know that thousands of birds of prey, also known as RAPTORS (primarily hawks and eagles) travel too during annual fall migrations - hugging the land mass of the Santa Cruz Mountains as they fly south through the Bay Area in search of more abundant prey.

Silhouettes In the Sky: Raptors
The north-south ridges that punctuate the

District's preserves and the intermittent highpoint vantages along the ridges will provide

opportunities to look for representatives of this flying entourage.



Red-Tailed Hawk Buteo jamaicensis (BUTEO)

American Kestrel Falco sparverius (FALCON)

FALCON



Small to medium bird; long pointed wings; long, tapered tail; strong rowing wing beats.





Small to medium bird; short, wide, rounded wings; long tail; flap-flap-flap-glide flight.





Medium to large bird; broad wings and broad, rounded tail; often seen soaring in wide circles high in the air.



Sharp-Shinned Hawk Accipiter striatus

(ACCIPITER)

When you see a large bird flying it is likely to be a raptor. If you want to try to identify it, study its silhouetted shape, and how it flies.

Winter Vacation at "Club MidPen"

After spending the summer in Alaska and Canada, some migratory birds travel south along the Pacific Flyway to spend the winter right here in the Bay Area – where the weather is warm and the eating is good. See if you can spot any of these avian sojourners as you wander through the different habitats of the preserves.

Grassland

Say's Phoebe Sayornis saya 7.5" Perches on fences or hovers over open fields to catch insects.



Merlin Falco columbarius 11" Relies on speed (30-45 mph) and surprise to catch prey.

Pacific Flyway

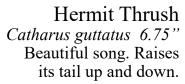


Brush

Cedar Waxwing

Bombycilla cedrorum 7"

Sleek-looking, feeds on berries and other wild fruits.





Woods

Townsend's Warbler Dendroica townsendi 5" Forages in the lower levels of dense foliage.





Red-breasted Sapsucker *Sphyrapicus ruber* 8.5" Drills rows of shallow "wells" in trees, then returns later to drink the sap and eat insects trapped in it.



Open Space Parliamentarians

As winter settles on to District preserves some winged inhabitants ready themselves to "court and spark" well before spring enlivens the behavior in other animals. Here are three types of owls commonly found in open space that begin breeding as early as January...listen for their calls to each other dawn and dusk. A group of owls is called a "parliament".

- Males & females hoot and bow to each other.
- Mostly use nests of other birds, like hawks.
- Extremely aggressive when defending nest.
- 2-4 eggs laid; incubated by female only.
- Very long lived owl, 20+ years; few predators.

Western Screech Owl

Megascops kennicottii 7.5-10"



- Male & females use short tremulous hoots during courtship.
- Mate for life; often use same nest year to year.
- Cavity nesters primarily; also conifer snags.
- Clutch size 2-5 eggs; male brings food to nest.
- Lifespan about 10-13 years.



Great Horned Owl

Bubo virginianus 18-25"





- Will breed anytime of year, sometimes twice/year.
- Short screeches and chattering by males during courtship.
- Nest in high tree cavities or old buildings; 3-6 eggs.
- Short-lived bird, about 1-8 years.



www.openspace.org