

Bird Station Support Sheet: Grades K - 5th

There are two parts to the Bird Station!

If your group is large split them into two groups. If the group is small enough have them do the non-scope activity together, then do the scope activity. Each activity should take about **7 minutes**.

The two activities combined will help illustrate to the students that most of these birds are migratory. The scope activity examines nesting sites while the non-scope activity discusses where and what the birds do when they are not nesting.

Scope Activity

Objective: Observe and compare/contrast at least two different birds and their nesting habitat, while discussing their behavior.

Start with a short introduction (keep this as short as possible so they have enough time to observe the bird): **MOST IMPORTANT is to tell them not to touch or move the scopes.** Use “Scope Introduction” page to help.

Observations: Have the students use the scopes and binoculars to observe the birds. Have them verbalize what they seeing.

- What does the bird look like?
- How is it different from the other birds in the other scopes?
- What is the bird doing?/ What do you think it is doing?
- Do you see any birds interacting with each other (in the scopes or look for it with the binoculars).
- Discuss the bird more in depth to the students in line. Show the bird’s eggs (optional).

Tools to Utilize:

- “Scope Introduction” page
- Scope and Binoculars
- Laminated photos of birds
- Bird Eggs

After 7 minutes have the students “migrate” to wintering site (The non-scope activity). Or have them rotate.

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Non-Scope Activity

Objective: Learn how different birds feed and swim while discussing migration.

Three birds we will focus on: Tufted Puffin, Pelagic Cormorant, and Black Oystercatcher

Three Concepts to discuss: Wintering, How they feed, and how they swim.

This is a role-playing/discussion game! Your students and you will be the bird when discussing these concepts. For each of the 3 birds above, say to students, “So you just got done nesting and are headed home for the winter. Lets pretend we are this bird!”

For each bird:

1. Show the students a picture of the bird/ “Does anyone know what this bird is?”
2. Briefly describe their lifecycle/where they are when they are not at Haystack Rock
3. Show them their skull/beak and describe how they feed.
4. Show them their feet and describe how they swim (Note Oystercatchers wade, they do not swim). **Act out how they swim and feed.**

Tools to Utilize:

- “**Bird Information**” Sheet (Has life cycle, feeding, and swimming info.)
- **Laminated photos of birds and important anatomical features (ex: Puffin tongue)**
- **Puffin feet & skull, Cormorant feet & skull, photo of Black Oystercatcher feet & Skull** (Found in “Bird Parts” container)

After 7 minutes have the students “migrate” to nest (The scope activity). Or have them rotate.

Bird Station Support Sheet: High School

There are now two parts to the Bird Station!

If your group is large split them into two groups. If the group is small enough have them do the non-scope activity together then do the scope activity. Each activity should take about **7 minutes**.

Scope Activity

Objective: Observe two of the bird species noting their interactions between individuals of the same species and their interactions with different species.

Start with a short introduction (keep this as short as possible so they have enough time to observe the bird): **MOST IMPORTANT is to tell them not to touch or move the scopes.** Use “Scope Introduction” page to help.

Observations: Have the students use the scopes and binoculars to observe the birds. If they do not see species interacting with other birds in the scopes please encourage students to look for them interacting with the binoculars. Have the students share their observations and add any insights about these observations. Also, discuss the birds in more detail with the students in line.

Tools to Utilize:

- “Scope Introduction” page
- Scopes and Binoculars
- Laminated photos of birds and important anatomical features (like photo of Puffin tongue)
- Bird eggs

After 7 minutes have the students switch to do the non-scope activity. Or have them rotate to the next station.

Bird Station Support Sheet: High School

There are now two parts to the Bird Station!

If your group is large split them into two groups. If the group is small enough have them do the non-scope activity together then do the scope activity. Each activity should take about **7 minutes**.

Non-Scope Activity

Objective: Discuss how human activities impact bird populations, and challenge each student to take personal action to help birds of Haystack Rock.

Introduction: All living things have basic necessities to survive: food, water, shelter, space to raise their young, and space to roam. Today we are going to brainstorm and discuss how humans impact birds' basic needs.

Brainstorming: Have the students brainstorm how humans impact birds. You may want to start with negative impacts but after a few minutes of brainstorming the negative have them think of some positive ways we impact birds.

Use laminated photos (found in the "How Humans Impact Birds" kit) that are related to the students' ideas to visually illustrate the impacts. Attach these to the blue "Brainstorming Board" (in the bird cabinet) to keep track of their ideas (weigh down with red blocks).

Examples of Negative Impacts	Examples of Positive Impacts
oil, pollutants, overfishing, by-catch, trash, dogs off leash, fireworks/noise disturbance, plastic	Keeping dogs on leash, education, creating refuges, pick up debris, research/monitoring, limit human disturbance, recycling, sustainable fishing, rehabilitation

Add any ideas not illustrated by the photos add to the board with a white board pen (also with the board).

Tools to Utilize:

- **"How Humans Impact Birds" Kit** (Red blocks, Western Gull Skull - goes with photo of Western Gull who was attacked by a dog, laminated photos, pen)
- **"Brainstorming Board"**

After 7 minutes have the students switch to do the scope activity. Or have them rotate to the next station.

Bird Station Support Sheet: 6th - 8th

There are now two parts to the Bird Station!

If your group is large split them into two groups. If the group is small enough have them do the non-scope activity together then do the scope activity. Each activity should take about **7 minutes**.

Scope Activity

Objective: Observe two of the bird species noting their interactions between individuals of the same species and their interactions with different species.

Start with a short introduction (keep this as short as possible so they have enough time to observe the birds): See the “Scope Introduction” page on this clipboard to help with the introduction.

Observations: Have the students use the scopes and binoculars to observe the birds. If they do not see species interacting with other birds in the scopes please encourage students to look for them interacting with the binoculars. Have the students share their observations and add any insights about these observations. Also, discuss the birds in more detail with the students in line.

Tools to Utilize:

- **Scope and Binoculars**
- **Laminated photos of birds**
- **Bird Brochure**
- **“Scope Introduction” page**
- **Bird Observation Table**

After 7 minutes have the students switch to do the non-scope activity. Or have them rotate to the next station.

Bird Station Support Sheet: 6th - 8th

There are now two parts to the Bird Station!

If your group is large split them into two groups. If the group is small enough have them do the non-scope activity together then do the scope activity. Each activity should take about **7 minutes**.

Non-Scope Activity

Objective: Explore bird adaptations by examining different features of birds.

Set-up: Get out “Bird Parts” kit from bird cabinet, put out red blocks , and attach the green bird descriptions (running horizontally) and bird photos (running vertically). Put out eggs in middle of table and uncover if it is not raining.

(Very Quick) **Introduction:** Every part of an animal is designed for its environment and way of life. These are called adaptations. Today we will examine eggs, feet, and beaks of seabirds and shorebirds at Haystack Rock.

Start with Eggs: Read the clue for the Black Oystercatcher (Bird #1) first (egg is most different from others). Once they have matched that egg to Bird #1 move onto the clue for Common Murre (Bird #3). If they are unable to choose out of the three remaining quickly read the other clues. The key difference is that Common Murre eggs have distinct markings so they can find/identify their own egg in a dense nesting colony where there are no nests. Pelagic Cormorant and Puffin eggs do not have markings because only one pair occupies a nest or a burrow. After the Common Murre egg is matched with Bird #3. Match the last two eggs.

2nd - Match Feet: After matching eggs put the four pairs of feet on the table. Read the clue for the Black Oystercatcher (Bird #1). Their feet are most different because they are a shorebird. Then read the clue for the Pelagic Cormorant (Bird #4). After they have matched that move onto closely examining and comparing the Common Murre (Bird #3) and the Tufted Puffin (Bird #2) feet. From the description the students should be able to distinguish the Tufted Puffin feet by noticing their long toenails.

Last - Match Skulls: After matching feet put the skulls on the table. If you are running out of time have the students try to guess the bird by looking at the bird photos on the table. Does this help them match skulls? If not use clues if there is time. If you only have a couple minutes reveal the identities of the birds and match their skulls.

Help the students during the activity by giving them hints, NOT the answer!

BIRD ID	Egg	Feet	Skull
Bird #1 = Black Oystercatcher	Matches nesting habitat	Shorebird = no webbing	Long straight bill for probing
Bird #2 = Tufted Puffin	white with no distinguishing marks = lay one egg in their own burrow	Long toenails for digging and cleaning burrow. webbed = seabird	Thick beak for cleaning and digging burrow. Helps hold many fish (rasped tongue holds them in bill).
Bird #3 = Common Murre	Markings to identify from others in dense colony. Show students that its shape prevents rolling off rocky nest area.	webbed = seabird	Beak not as robust as puffin, only hold one fish at a time
Bird #4 = Pelagic Cormorant	white with no markings = build nest and only one pair occupies.	Large and webbed for swimming with feet underwater	Delicate/thin beak (curved at the tip) = swallow fish whole

Tool to Utilize:

- “**Bird Parts**” Kit (Bird skulls, feet, eggs, red blocks, bird clues, and bird photos).
- “**Bird Information**” Sheet

After 7 minutes have the students switch to do the scope activity. Or have them rotate to the next station.