



# SCIENTIST IN RESIDENCE PROGRAM™

**Science Unit**

**Bird Diversity**

**Lesson 4**

***Create an Imaginary Bird and its Habitat***

## Summary

Students create an imaginary bird that has the real bird features we learned about in our earlier lessons (i.e. beak and feet shapes). Students then create habitat for their bird so that it has all of the resources it needs to survive based on the essentials and its beak and feet adaptations.

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Grade level	2–7
Class time needed	Multi-day art project
Delivery date	May 26 <sup>th</sup> , 2017

## LEARNING OBJECTIVES

1	Revisit what we learned in our earlier lessons.
2	Create imaginary birds with beaks, feet, wings and adaptations inspired by lessons 1-3.
3	Think about what type of resources our imaginary birds need to survive. Create habitat dioramas for our birds.

## SUPPLIES

- Book: *On Meadowview Street*
- Art supplies and natural materials (i.e. sticks, leaves, grass, pebbles, etc.)

## BACKGROUND INFORMATION

Like us, birds rely on things to survive. These things are called resources. The resources we rely on include oxygen, water, food, clothing, shelter, and family. Where we find these resources is our habitat. The resources birds rely on include oxygen, water, food, roosts, and nest sites. Birds may occupy quite small areas of habitat or very large areas.

Resident birds, such as black-capped chickadees, northern flickers and the northwestern crow, live in the same place all year long and therefore occupy smaller habitats than migratory birds.

Migratory birds travel long distances to seek resources. Some birds migrate south to find food to nourish them through the winter. They then migrate back north in the spring to nest and raise their young where there is an abundance of food.

Without habitat birds can't survive. A bird's habitat might be found in a variety of ecosystems. While ecosystems aren't separate, homogenous units (and they can be categorized in a variety of ways), it's helpful to think about the general types of ecosystems a bird lives in. Introduce students to different types of ecosystems, such as desert, wetland, alpine, rainforest, intertidal, etc. so they can think about what type of ecosystem their imaginary bird might live in. They can think about if the resources their bird needs are available in these ecosystems.



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## THE LESSON

Hands-on Activity 1	<ul style="list-style-type: none"><li>Use our earlier lessons to have students create an imaginary bird (i.e. a drawing, collage or sculpture). Before the students start have them fill out the attached sheet to brainstorm their bird's feet, beaks, wings and adaptations.</li></ul>
The Hook	<ul style="list-style-type: none"><li>Read <i>On Meadowview Street</i></li><li>Discuss: what resources do our birds need to survive? Where would our birds find these resources?</li></ul>
Hands-on Activity 2	<ul style="list-style-type: none"><li>Students create a habitat diorama that shows the resources their bird needs to survive. Before the students start have them fill out the attached sheet to brainstorm the resources, habitat and ecosystem their bird relies on.</li></ul>
Wrap Up	<ul style="list-style-type: none"><li>Students share the story of their bird and its habitat.</li></ul>

## VOCABULARY

Adaptation	The way in which an organism is suited to its habitat.
Ecosystem	A system formed by the interactions of all the living and non-living things in an environment.
Habitat	The home that contains the resources needed for an organism, such as a plant or animal to survive.
Nest	A structure or place made or selected by a bird to lay its egg and, in some cases, raise its young in.
Organism	A living animal, plant or fungi.
Resources	Any living or non-living thing that animals (including humans) use to meet their needs.
Roost	A place birds regularly return to rest.

## REFERENCES

The Cornell Lab of Ornithology and Pennington. Feathered Friends.  
<http://www.birdsleuth.org/pennington/> (downloaded November 2016)

Cole, H. 2007. *On Meadowview Street*. Greenwillow Books.

## EXTENSION

Research how and where birds found in your region build their nests (i.e., on the ground, in shrubs, on tree branches, in tree cavities, in cliffs etc.).



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Name: \_\_\_\_\_

## Your Bird's Features

Before you make your imaginary bird think about your bird's features. Draw and write about your bird's:

Beak

Feet

Wings

What types of special adaptations does your bird have?



Name: \_\_\_\_\_

## Your Bird's Habitat

Before you make your bird's habitat answer these questions:

What type of food does it eat?

What resources does your bird need to survive?

What is your bird's nest like?

In order to find the resources it needs to survive, what type of ecosystem does your bird live in?

What natural materials do you need to build your bird's habitat diorama?