





BIG IDEA: Bluebirds are an important part of our ecosystem.

OBJECTIVE: Students will learn how bluebirds support our gardens and farms.

This lesson is adapted from the FoodPrints curriculum. <u>FoodPrints Anywhere</u> has videos, guides, and activities that you can do at home, including this <u>DIY Recycled Bird Feeder</u>. To learn more about the FoodPrints program and access the full curriculum, including instructional videos, visit freshfarm.org/foodprints.

VOCABULARY

- INSECTIVORE an animal or plant that eats insects
- **ECOSYSTEM** a community of interacting organisms and their environment
- MATERIALS (available at the first box)
- Copies of attached BlueBird Box monitoring sheet (pencils and clipboards)
- NESTLING a young bird that has not yet learned to fly and still lives in the next by its parents
- FLEDGLING a young bird that has grown feathers and is learning to fly
- Screwdriver
- Step stool

ENGAGE: The engage section is designed to activate students' prior knowledge and experiences, pique their interest, and build curiosity.

Gather students around the first Bluebird nestbox. Share that Bluebirds, along with other bird species, are an important part of our garden and farm ecosystems.

Ask students how they think birds help at JK Farms.

Possible answers include:

- birds are insectivores, meaning that they eat insects that can damage growing produce;
- birds eat weed seeds, which help prevent weeds from taking over;
- birds help with seed dispersal;
- birds are pollinators.

Before opening the boxes, remind students that it is important to be quiet and gentle during this activity to not disturb the birds.

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6 BLUEBIRD TRAIL



EXPLORE: These hands-on and minds-on investigations offer an opportunity for students to further explore the Big Idea of the lesson.

INVESTIGATION:

NESTBOX MONITORING. In this investigation, students will get the chance to observe nesting bluebird boxes. Share that regularly checking on these native birds increases the chances of success, as monitoring nest boxes will alert JK Community Farm to problems birds may be having with predators and competitors.

You may also see other native birds, including tree swallow, house wren, chickadee, house sparrow and tufted titmouse. Each bird uses a different material to make its nest; you can use the attached chart to identify the type of nest in the box.

To monitor, approach each box quickly and quietly. Tap on the side of the box but do not have students stand in front of the box in case an adult flies out. Next, open the box with the provided screwdriver. The female may stay sitting on the nest when you open the box. If she does not leave, do not disturb her.

Have students take turns looking into the nest. Ask them to pay close attention to the material used for the nest. Check to see the number of eggs present, and if there are any nestlings or fledglings. Once all students have had a turn, close the nest box, tighten the screw, and make sure the box is securely closed.

Students can use the attached chart to record their observations, including the number of bird eggs they see.

EVALUATE AND CLOSE: Before moving on to the next station, please take a few moments to have students reflect on what they have learned.

- Have students share why birds are an important part of our ecosystem
- Ask students how we can take care of and protect bluebirds.

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BLUE BIRD TRAIL MONITORING

Box number	# Eggs found	# Birds seen	Nest material	Bird identification

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HOW TO IDENTIFY NESTS AND EGGS BY SPECIES

Species	Nest Materials	Eggs
Bluebird	Nest is 1-4" tall made with fine grasses or pine needles; there is a deep nest cup.	4-6 powder blue or sometimes white
Tree and Violet-green swallow	Nest is made of grasses, but with a coarser material than the bluebird next. It has a flatter cup and is usually lined with feathers.	5-7 white, pointy on one end and smaller than bluebird eggs
House Wren	House wrens fill a nestbox with sticks and then line the deep nest cup with fine plant fibers or feathers.	6-8 tiny eggs are glossy white/tan, heavily speckled with pinkish-brown spots.
Chickadee	Nest is made of moss and a small, deep nest cup is lined with hair or fur.	5-8 white or cream, non- glossy tiny eggs that are covered with reddish brown speckles.
House Sparrow	House sparrows build a tall sloppy nest of coarse grasses, often with feathers and pieces of scrap paper, cloth, cellophane or other garbage. The nest forms a canopy with a tunnel like entrance.	5-7 cream or greenish colored, non-glossy eggs have heavy brown markings.

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