

## Birds of Magnuson NGSS Correlations K-2

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Field Trip Activity	Disciplinary Core Ideas	Crosscutting Concepts	Science and Engineering Practice	MNP Objectives
<p><b>Nature's Grocery Store:</b> In this activity students explore the idea that birds need to find food from the surrounding habitat by making a "grocery list" of available food sources on a stretch of trail in the park. Students observe the surrounding habitat, hypothesize what food sources it might provide, explore those potential food sources, and record their thinking on their "grocery list." Additionally, students are asked to think about what kinds of birds would be able to utilize the different food sources, and what adaptations those birds have that would enable them to do so.</p>	<p>LS1.A: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)</p>	<p>Structure and Function: The shape and stability of structures of natural and designed objects are related to their function(s).</p>	<p>Asking Questions and Defining Problems: Ask questions based on observations to find more information about the natural and/or designed world(s). Ask and/or identify questions that can be answered by an investigation.</p>	<p>Understand that seeds are contained in spent flowers, fruits, pods, and cones</p>
	<p>LS1.C: All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)</p>	<p>Systems and System Models: Objects and organisms can be described in terms of their parts. Systems in the natural and designed world have parts that work together.</p>	<p>Planning and Carrying out Investigations: Make observations (firsthand or from media) and/or measurements to collect data that can be used to make comparisons. Make predictions based on prior experiences.</p>	<p>Understand the hard work that birds need to do to provide food for themselves and their nestlings, and to provide a safe and sturdy nest for their nestlings;</p>
	<p>LS4.D There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1)</p>	<p>Patterns: Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.</p>	<p>Analyzing and Interpreting Data: Record information (observations, thoughts, and ideas). Use and share pictures, drawings, and/or writings of observations. Use observations (firsthand or from media) to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems. Compare predictions (based on prior experiences) to what occurred (observable events).</p>	<p>Understand how even a small area of plants, especially native plants, can provide a huge amount of food.</p>
	<p>ESS3.A: Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)</p>	<p>Cause and Effect: Events have causes that generate observable patterns.</p>	<p>Constructing Explanations and Designing Solutions: Use information from observations (firsthand and from media) to construct an evidence-based account for natural phenomena.</p>	<p>Understand the hard work that birds need to do to provide food for themselves and their nestlings, and to provide a safe and sturdy nest for their nestlings;</p>
<p><b>Bird Nest Bounty:</b> Students explore the reasons behind nest building and the similarities and differences in nests made by different bird species. They are then given the opportunity to build their own nest from different "ingredients" found around the site, with the additional challenge of only being able to use their "beaks" (clothespins, tweezers, etc) to grab onto the nest materials.</p>	<p>LS1.A: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)</p>	<p>Structure and Function: The shape and stability of structures of natural and designed objects are related to their function(s).</p>	<p>Constructing Explanations and Designing Solutions: Use tools and/or materials to design and/or build a device that solves a specific problem or a solution to a specific problem. Generate and/or compare multiple solutions to a problem.</p>	<p>Understand that each bird nest is a customized and complex structure, containing specific features that nestlings need;</p>
	<p>LS1.B: Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. (1-LS1-2)</p>	<p>Systems and System Models: Objects and organisms can be described in terms of their parts. Systems in the natural and designed world have parts that work together.</p>	<p>Analyzing and Interpreting Data: Use observations (firsthand or from media) to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems.</p>	<p>Understand the hard work that birds need to do to provide food for themselves and their nestlings, and to provide a safe and sturdy nest for their nestlings;</p>

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	LS4.D There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1)	Patterns: Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.	Developing and Using Models: Develop a simple model based on evidence to represent a proposed object or tool. Compare models to identify common features and differences.	Understand that plants provide food and nesting materials in a wide variety of ways, whether they are living or dead, for many species of birds;
	ESS3.A: Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)	Scale, proportion, and quantity: Relative scales allow objects and events to be compared and described (e.g., bigger and smaller; hotter and colder; faster and slower).	Asking Questions and Defining Problems: Ask questions based on observations to find more information about the natural and/or designed world(s).	
	PS1.A: A great variety of objects can be built up from a small set of pieces. (2-PS1-3)			
	ETS1-A: Before beginning to design a solution, it is important to clearly understand the problem. (K-2-ETS1-1)			
<b>Owl Extravaganza</b> - Students engage in discussion and kinesthetic activities designed to help them explore how owl adaptations allow them to be amazing hunters. They then get a hands on look at the results of these amazing abilities by dissecting owl pellets and puzzling out what the owl ate for dinner.	LS1.A: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)	Structure and Function: The shape and stability of structures of natural and designed objects are related to their function(s).	Asking Questions and Defining Problems: Ask questions based on observations to find more information about the natural and/or designed world(s). Ask and/or identify questions that can be answered by an investigation.	Understand that animal's adaptations are designed to help them to survive in some way, and that animals have many adaptations that work together to help the animal achieve survival.
	LS1.C: All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)	Energy and Matter: Flows, Cycles, and Conservation: Objects may break into smaller pieces, be put together into larger pieces, or change shapes.	Analyzing and Interpreting Data: Use observations (firsthand or from media) to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems. Compare predictions (based on prior experiences) to what occurred (observable events).	Understand that some birds eat other animals, and that catching prey carries a different set of challenges for predators.
	LS1.D: Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs. (1-LS1-1)	Systems and System Models: Objects and organisms can be described in terms of their parts. Systems in the natural and designed world have parts that work together.	Constructing Explanations and Designing Solutions: Use information from observations (firsthand and from media) to construct an evidence-based account for natural phenomena.	Understand that animals may eat different food at different times or in different proportions, depending on what is available in their habitat.
			Obtaining, Evaluating, and Communicating Data: Read grade-appropriate texts and/or use media to obtain scientific and/or technical information to determine patterns in and/or evidence about the natural and designed world(s).	Feel empowered to participate in the scientific process, share their ideas, and support those ideas with evidence.

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Overall message, Introduction and Conclusion	ESS3.C - Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (K-ESS3-3) (secondary to K-ESS2-2)			Be curious about birds, and develop empathy and respect for them.
				Develop the art of watching and listening, and recognizing the rewards that result.
				Feel empowered to instigate and carry out stewardship activities in their own community that will benefit birds.
				Understand that the parks and natural areas around their own homes and schools are an important resource for birds
				Empowering children to see their own schoolyard and/or backyard as having the potential to be a great “grocery store” and “bird nest recipe box” by what they grow there and how they take care of it.