

## Unit 3: Relationships in Ecosystems

<b>Unit #:</b>	APSDO-00034874	<b>Duration:</b>	10.0 Lesson(s)	<b>Date(s):</b>	
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**Team:**  
Jennifer Gregg (Author), Andrea Galuska, Erin Dolch, Jennifer Gregg, Kristen Jakupco, Lori Maniatis, Jeana Occhialini, Mary Labowsky, Kristin Cutler, Michele Lemis, Anne Marie Riley, Sally Tino-Pirla, Lisa Banever, Rebecca Haughey, Traci Protz

**Grades:**  
2

**Subjects:**  
Science

### Unit Focus

In this unit, students will develop an understanding of what plants and animals need to grow and how plants depend on animals for seed dispersal and pollination. Students will create a model of a seed that can be dispersed by wind. Students will also compare the diversity of life in different habitats and explain the conclusions scientists have drawn from the examination of fossils. Summative assessments include a performance task and a written component that assesses mastery of content and skills. Supporting instructional materials may include related mentor text(s), online and print resources, and teacher generated inquiry tasks.

### Stage 1: Desired Results - Key Understandings

Established Goals	Transfer	
<p><b>Next Generation Science Standards (DCI)</b> <i>Science: 2</i></p> <ul style="list-style-type: none"> <li>• Plants depend on animals for pollination or to move their seeds around. <i>LS2.2.A2</i></li> <li>• There are many different kinds of living things in any area, and they exist in different places on land and in water. <i>LS4.2.D1</i></li> </ul> <p><i>Science: 3</i></p> <ul style="list-style-type: none"> <li>• Being part of a group helps animals obtain food, defend themselves, and</li> </ul>	<p><b>T1</b> (T1) Integrate knowledge from a variety of disciplines and apply it to new situations to make sense of information, formulate insightful questions, and/or solve problems.</p> <p><b>T2</b> (T2) Design an investigation or model using appropriate scientific tools, resources, and methods.</p>	
	Meaning	
	Understandings	Essential Questions
	<p><b>U1</b> (U387) Fossils provide evidence about the types of extinct organisms that lived long ago and also about the nature of their environments.</p> <p><b>U2</b> (U334) Living in groups helps many</p>	<p><b>Q1</b> (Q385) How does a habitat support the plants and animals that live there?</p> <p><b>Q2</b> (Q342) How does an animal/organism/species' response to its ecosystem affect the changes that it will</p>

<p>cope with changes. Groups may serve different functions and vary dramatically in size. <i>LS2.3.D1</i></p> <ul style="list-style-type: none"> <li>• Fossils provide evidence about the types of organisms that lived long ago and also about the nature of their environments. <i>LS4.3.A2</i></li> <li>• Populations live in a variety of habitats, and change in those habitats affects the organisms living there. <i>LS4.3.D1</i></li> <li>• Some kinds of plants and animals that once lived on Earth are no longer found anywhere. <i>LS4.3.A1</i></li> </ul>	<p>animals survive.</p> <p><b>U3</b> (U921) Scientists use good experimental design and laboratory techniques that lead to precise and accurate data.</p> <p><b>U4</b></p> <p>Different habitats have different organisms and changes to those habitats affect which organisms may live there.</p>	<p>survive?</p> <p><b>Q3</b> (Q341) How can forming a group help an animal survive?</p> <p><b>Q4</b> (Q924) What questions do I wonder about? How can I use science to figure out the answer?</p> <p><b>Q5</b></p> <p>Why do some living things no longer exist on Earth? How are living things present on Earth today similar and different from living things that no longer exist?</p>
<b>Acquisition of Knowledge and Skill</b>		
<b>Knowledge</b>		<b>Skills</b>
<p><b>K1</b></p> <p>Different living things need different habitats to grow and survive</p> <p><b>K2</b></p> <p>Plants depend on animals for nutrients, pollination, and seed dispersal</p> <p><b>K3</b></p> <p>Scientists can study fossils to learn how long life has existed on Earth, and how different plants and animals are related to each other</p>	<p><b>S1</b></p> <p>Identify what living things live in a particular habitat (e.g., Farmington River, Talcott Mountain, Nature Trails behind our school)</p> <p><b>S2</b></p> <p>Explain how plants depend on animals for pollination and to move seeds around (e.g., bees, squirrels carrying nuts around)</p> <p><b>S3</b></p> <p>Explain how humans impact living things (e.g., cutting down trees in the rainforest, poaching, hunting, habitat destruction that results in endangered species)</p> <p><b>S4</b></p> <p>Explain the conclusions scientists have drawn from the examination of fossils</p> <p><b>S5</b></p> <p>Explain why some species survive well in a</p>	

		certain habitat and why other species do not <b>S6</b> Argue, with evidence, how some species survive well because they live in a group
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