



Invasive vs Native Debate



<u>Performance Expectations</u>	<u>Connections Between EP&Cs, CCCs, and SEPS</u>	<u>Clarifications for DCIs</u>	Relevant EEI Units <u>Middle School</u> <u>Elementary School</u>
<p>K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p> <p>2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.</p> <p>3-ESS3-1 Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.</p> <p>4-ESS2-1 Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.</p> <p>5-LS2-1 Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.</p> <p>5-ESS3-1 Obtain and combine information about ways individual communities use science ideas to protect the Earth’s resources and environment.</p>	<p style="text-align: center;">Targeted Environmental Principles & Concept(s)</p> <p>Principle II: People Influence Natural Systems</p> <p>The long-term functioning and health of terrestrial, freshwater, coastal, and marine ecosystems are influenced by their relationships with human societies.</p> <p>Concept A. Direct and indirect changes to natural systems due to the growth of human populations and their consumption rates influence the geographic extent, composition, biological diversity, and viability of natural systems.</p> <p>Concept B. Methods used to extract, harvest, transport, and consume natural resources influence the geographic extent, composition, biological diversity, and viability of natural systems.</p> <p>Concept C. The expansion and operation of human communities</p>	<p style="text-align: center;">Targeted Disciplinary Core Idea(s)</p> <p>K-ESS2-2 Biogeology Plants and animals can change their environment</p> <p>2-LS4-1 Biodiversity & Humans There are many different kinds of living things in any area, and they exist in different places on land and in water.</p> <p>3-ESS3-1 Natural Hazards A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts.</p> <p>4-ESS2-1 Biogeology Living things affect the physical characteristics of their regions.</p> <p>5-LS2-1 Interdependent Relationships In Ecosystems The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as “decomposers.” Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem.</p>	<p>K: Some Things Change & Some Things Stay the Same</p> <p>3: Living Things In Changing Environments</p> <p>4: The Flow of Energy Through Ecosystems; Reflections of Where We Live; California Indian Peoples & Management of Natural Resources</p> <p>5: Nature & Newcomers</p> <p>6: Energy! Pass It On</p> <p>7: Shaping Natural Systems Through Evolution</p>

One Cool Earth (OCE) supports the integration of Next Generation Science Standards (NGSS) three dimensional learning and the Environmental Principles & Concepts (EP&Cs) in their lesson planning. In recognition of A Blueprint for Environmental Literacy and the California State Board of Education, OCE uses the *CA Science Framework*.

<p>MS-ESS3-3 Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.</p>	<p>influences the geographic extent, composition, biological diversity, and viability of natural systems.</p> <p>Concept D. The legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.</p>	<p>5-ESS3-1 Human Impacts on Earth Systems Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth’s resources and environments.</p> <p>MS-ESS3-3 Human Impacts on Earth Systems Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth’s environments can have different impacts (negative and positive) for different living things.</p>	
	<p>Targeted Crosscutting Concept(s)</p> <p>Systems Energy & Matter Patterns</p>		
	<p>Targeted Science and Engineering Practice(s)</p> <p>Asking Questions Developing and Using Models Obtaining, Evaluating and Communicating Information</p>		

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