



Merry Lea

*Environmental Learning Center
of Goshen College*

Standards Correlations

Exploring Merry Lea Sustainable Farm K - 5th

Program Synopsis

Merry Lea Sustainable Farm is a unique edible ecosystem where students taste their way to an understanding of humans, farm and habitat connections. Students delve into soil ecosystems, search for pollinators at work and meet our animals living at the farm. Making apple cider provides students a memorable example of how food can be processed before we consume it.

Indiana Academic Standards for Science

Kindergarten

- K.PS.1** | Plan and conduct an investigation using all senses to describe and classify different kinds of objects by their composition and physical properties. Explain these choices to others and generate questions about the objects.
- K.ESS.4** | Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
- K.LS.1** | Describe and compare the growth and development of common living plants and animals.
- K.LS.2** | Describe and compare the physical features of common living plants and animals.
- K.LS.3** | Use observations to describe patterns of what plants and animals (including humans) need to survive.

1st Grade

- 1.ESS.2** | Observe and compare properties of sand, clay, silt, and organic matter. Look for evidence of sand, clay, silt, and organic matter as components of soil samples.
- 1.ESS.3** | Observe a variety of soil samples and describe in words and pictures the soil properties in terms of color, particle size and shape, texture, and recognizable living and nonliving items.
- 1.LS.3** | Make observations of plants and animals to compare the diversity of life in different habitats.

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2nd Grade

- 2.LS.1** | Determine patterns and behavior (adaptations) of parents and offspring which help offspring to survive.
- 2.LS.3** | Classify living organisms according to variations in specific physical features (i.e. body coverings, appendages) and describe how those features may provide an advantage for survival in different environments.

3rd Grade

- 3.LS.1** | Analyze evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.
- 3.LS.2** | Plan and conduct an investigation to determine the basic needs of plants to grow, develop and reproduce.
- 3.LS.3** | Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction.

4th Grade

- 4.ESS.4** | Develop solutions that could be implemented to reduce the impact of humans on the natural environment and the natural environment on humans.
- 4.LS.1** | Observe, analyze and interpret how offspring are very much, but not exactly, like their parents or one another. Describe how these differences in physical characteristics among individuals in a population may be advantageous for survival and reproduction.
- 4.LS.2** | Use evidence to support the explanation that a change in the environment may result in a plant or animal will survive and reproduce, move to a new location, or die.
- 4.LS.3** | Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior and reproduction in different ecosystems.

5th Grade

- 5.LS.2** | Observe and classify common Indiana organisms as producers, consumers, decomposers, or predator and prey based on their relationships and interactions with other organisms in their ecosystem.

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Indiana Environmental Literacy Guidelines

for up to 4th Grade

Questioning, Analysis and Interpretation

Develop questions that help them learn about organisms, objects, places and relationships in the local environment, especially in nearby outdoor areas with which students have a personal connection.

Locate and collect information about the environment and environmental topics by using tools, maps, technology and basic field skills (observing, interviewing, measuring).

Develop and communicate simple explanations that address their questions.

Knowledge of Environmental Process and Systems

Be able to tell the difference between and give examples of natural, human influenced and human-built ecosystems in Indiana.

Define a healthy ecosystem and list the components of one.

Skills for Understanding and Addressing Environmental Issues

Identify environmental problems and issues in local environments and communities.

Identify some of the decisions and actions related to an issue and explain why those decisions and actions occurred.

Determine what types of citizen action are appropriate.

Personal and Community Action

Connect with their local environment through a variety of positive outdoor experiences.

Understand how their civic responsibilities promote personal actions that support their environment.

Understand what is meant by the term 'environmental stewardship.'

Document prepared by Merry Lea according to current [Indiana Academic Standards](#) from the Indiana Department of Education website and according to [Indiana Environmental Literacy Guidelines](#) from the Environmental Education Association of Indiana.