

Wetland Walk Standards

The Museum's Education Department actively works on developing our curriculum and helping teachers to identify ways in which our programs support and relate to Common Core, CA History-Social Science Frameworks, and Next Generation Science Standards.

How to read this document: Below are charts that show the various standards that this program supports. This is by no means an exhaustive representation of the connections that can be drawn from our programs, but shows some of the strongest connections that teachers who use our programs make. After each standard is a brief description of what occurs within the program that supports the standard. At the bottom you'll find links to resources for understanding the standards.

Program: Wetland Walk

Grade: 3rd

Topic: Students explore the wetlands of Neary Lagoon and use binoculars to spot and record wildlife along a one-mile hike. By collecting data on their observations and comparing them to past data, students find patterns of seasonal change, migration, and human impacts.

Potential Pathways / Themes: *Adaptation and/or Seasonality*

Next Generation Science Standards

Theme: Adaptation

Performance Expectations

3-LS4-3: Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

- Students learn about adaptations that help birds survive in a wetland environment, and observe features of the habitat that support life.
- Students use graphs to show that some birds migrate as a behavioral adaptation if they do not have the physical adaptations to survive seasonal changes to their environment.

Science and Engineering Practices

Engaging in Argument from Evidence

Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).

- Students identify different species of birds and use observational evidence to support their claims.

Disciplinary Core Ideas

LS4.C: Adaptation

For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all.

- Students learn that different species of birds have different adaptations that help them acquire food and shelter.

Crosscutting Concepts

Cause and Effect

Cause and effect relationships are routinely identified and used to explain change.

- Students learn that migration patterns are caused by seasonal changes that animals must either be well adapted for or must leave to find more suitable habitat.

History-Social Science Standards

HSS3.1.2: Students trace the ways in which people have used the resources of the local region and modified the physical environment.

- Students learn the history of Neary Lagoon and how different groups of people have utilized and changed the wetland throughout time, including impacts to the wildlife found there.

HSS3.2.2: Discuss the ways in which physical geography, including climate, influenced how the local Indian nations adapted to their natural environment (e.g., how they obtained food, clothing, tools).

- Students learn that Native Americans used wetlands as a source of food, water, and resources for making tools and shelter allowing them to survive there for thousands of years.

Next Generation Science Standards

Theme: Seasonality

Performance Expectations

3-LS4-4: Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.

- Students study seasonal changes at Neary Lagoon, and how they affect wildlife.
- Students compare birds that migrate in response to seasonal change to those that do not.
- Students learn how historical changes to the environment have changed the species found there.

Science and Engineering Practices

Engaging in Argument from Evidence

Engaging in argument from evidence in 3–5 builds on K–2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).

- Students make claims about migration as a solution to seasonal changes in their habitats.

Disciplinary Core Ideas

LS4.D: Biodiversity and Humans

Populations live in a variety of habitats, and change in those habitats affects the organisms living there.

- Students learn how seasonal changes to the wetland environment affect the species that can be found there at different times of year.

Crosscutting Concepts

Systems and System Models

Objects and organisms can be described in terms of their parts; and systems in the natural and designed world have parts that work together.

- Students study the relationship between birds and their habitats. They notice that changes in the ecosystem affect the organisms within it.

History-Social Science Standards

HSS3.1.2: Students trace the ways in which people have used the resources of the local region and modified the physical environment.

- Students learn the history of Neary Lagoon and how different groups of people have utilized and changed the wetland throughout time, including impacts to the wildlife found there.

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Next Generation Science Standards

Theme: Seasonality

Performance Expectations

3-ESS2-1: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

- Students relate graphs of bird populations at Neary Lagoon to seasonal temperature patterns.

Science and Engineering Practices

Analyzing and Interpreting Data

Analyzing data in 3–5 builds on K–2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.

- **Students study graphs of bird populations at Neary Lagoon to make predictions about the environmental conditions.**
- **Bird count data is collected for later use in the classroom to produce bar graphs comparing the populations of different species observed.**

Disciplinary Core Ideas

ESS2.D: Weather and Climate

Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next.

- **Students record weather conditions, predict changes in seasonal weather conditions, and discuss how these conditions affect the species found in the wetland.**

Crosscutting Concepts

Patterns

Patterns of change can be used to make predictions.

- **Students learn that predictable changes in temperature and weather cause predictable observational patterns in the kinds of species found and their abundance throughout the year.**

History-Social Science Standards

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- **Students learn the history of Neary Lagoon and how different groups of people have utilized and changed the wetland throughout time, including impacts to the wildlife found there.**

HSS3.2.2: Discuss the ways in which physical geography, including climate, influenced how the local Indian nations adapted to their natural environment (e.g., how they obtained food, clothing, tools).

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Resources

Next Generation Science Standards

[Understanding the Standards](#)

[How to Read the Standards](#)

[Topic Arrangements of the NGSS](#)

[Common Acronyms used in NGSS](#)

History-Social Science

[HSS Framework](#)

- [Kindergarten](#)
- [1st Grade](#)
- [2nd Grade](#)
- [3rd Grade](#)
- [4th Grade](#)
- [5th Grade](#)

English Language Arts

[ELA Standards](#)

[CCSS English Language Arts Resources](#)

[ELA/ELD Framework](#)

Mathematics

[Kindergarten Standards](#)

[1st Grade Standards](#)

[2nd Grade Standards](#)

[3rd Grade Standards](#)

[4th Grade Standards](#)

[5th Grade Standards](#)