AGRICULTURAL LITERACY: Why Farm Field Trips?

Agricultural Literacy introduces students to where their food comes from, who grows their food, and the relationship between their own health, healthy food, healthy regional agriculture, and an overall healthy environment. If future generations are going to care about farms and farming they must be directly exposed to the people and places that produce their food.

This resource guide targets 3rd and 4th grade teachers (academic benchmarks are listed on page 4), but can be adapted for use by any grade level. We’ve suggested some general activities to consider in planning your farm field trip. Each farm provides a unique educational experience. Some farms may have existing educational resources that will help you plan for your trip.

Selecting a Destination:
• Review our Agricultural Literacy Partners Resource Guide for ideas or seek out your own local farm. ‘ĀINA In Schools staff is available for consultation regarding field trip destinations: aina@kokuahawaiifoundation.org.
• Evaluate costs, farm field trip capacity (max students), and any other logistical requirements of the farms you are looking at.
• Set a date for a teacher preview of the farm prior to your class visit.

Funding Your Field Trip:
The Kōkua Hawai‘i Foundation offers field trip assistance grants that can help with transportation and admission to local farms. See kokuahawaiifoundation.org/fieldtrips for more information. ‘ĀINA Schools should contact aina@kokuahawaiifoundation.org regarding additional funding opportunities.

Before You Visit the Farm:
Prepare questions to ask when the class visits the farm. Students might read a book about a farm before visiting and discuss what they think they’ll see and do. You may also want to suggest that the group observe things on their way from the school to the farm. What changes did they notice in the smells, sounds, and landscape?

Let the farmer know what information students are gathering for follow-up assignments; perhaps they can help provide access to what the students need. The more students are asked to think about the visit before and after they go, the more they will learn and remember.
**Suggested Pre-Field Trip Activities for the Class:**

1. Develop a KWL chart with the class to get an understanding of the students’ perceptions and knowledge of farms. Record their ideas on what they know about farms under the K column. In the days prior to the trip, have the class generate questions they want answered at the farm. Record under the W column. Prior to the trip, provide each chaperone with a list of these questions so they can be discussed at lunch on field trip day. Upon returning from the trip, have students fill in the L column with what they learned at the farm.

2. Introduce specific farm vocabulary to the students using photographs, realistic models, or the actual objects.

3. Create a “Farm Scavenger Hunt” list. Make copies for the students and set them up on clipboards before the farm field trip. Examples of things to find on a farm: vegetable that grows underground; fruit that grows on a tree; tool a farmer uses daily; an insect seen on the farm; different plant parts (stem, root, leaf); farm animals; etc.

4. Compare the growing cycle and food chains for various crops and produce they will see at the farm.

5. Discuss with students the amount of work involved in raising livestock and growing crops. If available, look at pictures of machines used to make the work easier.

6. As a class, learn about bees and other pollinators.
   a) Have students find out the answers to such questions as: Why are bees important to farming? How do the farmers use the bees? How do bees gather honey?
   b) Use pattern blocks to create a honeycomb model.

7. Read a variety of fiction and nonfiction books on farms and on specific foods. For example, read *My Hawaiian Farm* by Pearle Maxner, *The Ugly Vegetables* by Grace Lin, *Pumpkin, Pumpkin* by Jeanne Titherton, *Farm* by Elisha Cooper.

**During the Field Trip:**

1. Pass out clipboards with the Farm Scavenger Hunt worksheet. Ask chaperones to assist students as they collect the information around the farm.

2. Take photographs, slides, or videotape of the trip, including the children participating in various activities. These images can be used in follow-up and reflection activities in the classroom.

3. Find out what kinds of trash the farm generates and how the trash is disposed of or recycled.

4. Encourage children and their chaperones to use their new vocabulary throughout the trip.

5. At different times during the trip, have the chaperones ask their groups to use one or more of their senses to experience the farm. These can be shared during their lunch.

6. If each student receives a pumpkin (or other large fruit or vegetable), explain that their homework assignment task is to take a piece of string and measure the circumference.
Post-Field Trip Activities:

1. Have students look at their KWL chart, and add information to their L column. Then divide the class into cooperative groups to create a mural about farms using the information from their KWL chart.

2. Using the pictures taken at the farm, students can create a story, poem, or report about farm life. Use digital tools to create slideshows, videos, and presentations on lessons learned at the farm.

3. Compose and send a class thank you letter to the staff at the farm. Include student essays and artwork illustrating the trip and things they learned about farming.

4. Using various fruits and vegetables that students saw on the trip:
   a) Have students estimate the number of seeds inside before opening them up and compare to the actual number of seeds. Keep a few seeds to plant in the classroom or school garden.
   b) Compare varieties of food crops. Develop an attribute chart for each. List characteristics. Compare by weighing and measuring.
   c) Create a graph or other visual representation of their data.

5. Have a food tasting party. Provide a variety of farm fresh fruits and veggies for students to taste. Have them rank their preferences. As a class, determine which variety is the most and least popular. Graph results.

6. Evaluate the trip with the children. Have them discuss: “What did you particularly like?” “What did you dislike?” “Why or Why not?” “Why are our local farms important?” “How can we support local farms?”

7. If they received pumpkins (or other large fruits or vegetables) at the farm, then have students bring in the string they used for their measurement homework assignment. Have the children compare the lengths of the strings, ordering them from longest to shortest and discuss their findings. This is also an opportunity to measure length and weight and calculate volume using non-standard units.
### 3rd Grade HCPS III Benchmarks a Farm Field Trip May be Able to Address:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Benchmark</th>
<th>Description</th>
<th>Possible Farm Field Trip Connection</th>
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</thead>
<tbody>
<tr>
<td>Healthy Eating and Physical Activity</td>
<td>HE.3-5.1.3</td>
<td>Explain the importance of a healthy diet as part of a healthy lifestyle.</td>
<td>Comparing and contrasting fresh farm food to processed food; discussing which is &quot;closest to the source&quot;</td>
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<tr>
<td>Personal Skills and Interest</td>
<td>CTE.3.2.1</td>
<td>Describe how different careers may require different skills, knowledge, and attitudes</td>
<td>Why farmers chose this career; challenges farmers face; how to become a farmer; sustainable practices</td>
</tr>
<tr>
<td>Science, Technology, and Society</td>
<td>SC.3.2.1</td>
<td>Describe ways technologies in fields such as agriculture, information, manufacturing, or communication have influenced society</td>
<td>History &amp; evolution of farm tools and equipment for planting, harvesting and processing</td>
</tr>
<tr>
<td>Measurement Attributes and Units</td>
<td>MA.3.4.1</td>
<td>Describe the concept of area and volume and the appropriate units for each</td>
<td>Farm size calculations; relation to yields and inputs</td>
</tr>
<tr>
<td>Interdependence</td>
<td>SC.3.3.1</td>
<td>Describe how plants depend on animals</td>
<td>Pollinators, beneficial insects, manure</td>
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<tr>
<td>Earth Materials</td>
<td>SC.3.8.1</td>
<td>Describe different Earth materials (e.g., rocks, minerals, sand, soil) and explain their formation and composition</td>
<td>Waste, composting, worms, soil</td>
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### 4th Grade HCPS III Benchmarks a Farm Field Trip May be Able to Address:

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<tbody>
<tr>
<td>Cultural Dynamics/ Change and Continuity</td>
<td>SS.4.6.1</td>
<td>Describe how individuals or groups deal with conflict, cooperation, and interdependence within the ahupua’a</td>
<td>Food and food production are central to relationships between people and the land</td>
</tr>
<tr>
<td>Environment and Society</td>
<td>SS.4.7.3</td>
<td>Analyze the consequences of human modification of the physical environment in Hawaii using geographic representations (including lo‘i kalo and loko i’a)</td>
<td>Lo‘i/loko i’a serve as real life examples of the consequences of human impact as we modify the environment</td>
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<tr>
<td>Measurement Formulas</td>
<td>MA.4.4.5</td>
<td>Use known measurements to calculate desired measurements of squares and rectangles (e.g., use the length of the square to calculate its area and perimeter)</td>
<td>Lo‘i or loko i’a size calculations; relation to yields and inputs</td>
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<tr>
<td>Science, Technology, and Society</td>
<td>SC.4.2.1</td>
<td>Describe how the use of technology has influenced the economy, demography, and environment of Hawai‘i</td>
<td>Contrasting modern fish farming vs. loko i’a technologies; investigating historical and contemporary kalo production technologies</td>
</tr>
<tr>
<td>Cycles of Matter and Energy</td>
<td>SC.4.3.1</td>
<td>Explain how simple food chains and food webs can be traced back to plants</td>
<td>Ecology of life (algae, microorganisms, crustaceans, fish) in the lo‘i or loko i’a</td>
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