

Farm to School Program

www.dnr.alaska.gov/ag/ag_FTS



Department of Natural Resources,
Division of Agriculture



Overview

Farm to school in Alaska

Tools and resources

Plans for next year

Basic goals of farm to school programs



School
Nutrition
Programs



Local Food
Producers



Educational
Outreach

Health, economy, and environment

Similar goals different emphasis

National
level

State level

Local level

National
FTS network

Department
of Ed

Calypso
Farm

USDA FTS
task force

Department
of Ag

Farm to School

Alaska FTS program purpose

A program that will offer expertise and support to all areas of the state to pursue farm to school activities and interests.

Getting youth exposed to or involved in **ANY** part of the food system.

Background

May 2010 –
House Bill 70
Signed into Law

- Sunset date, end of June 2013



Top priority:
↑ Local
procurement
in schools

- Interest
- Planning
- Action
- Sustain



Other program
goals

- Outreach
- Resources
- Activities
- School Gardens

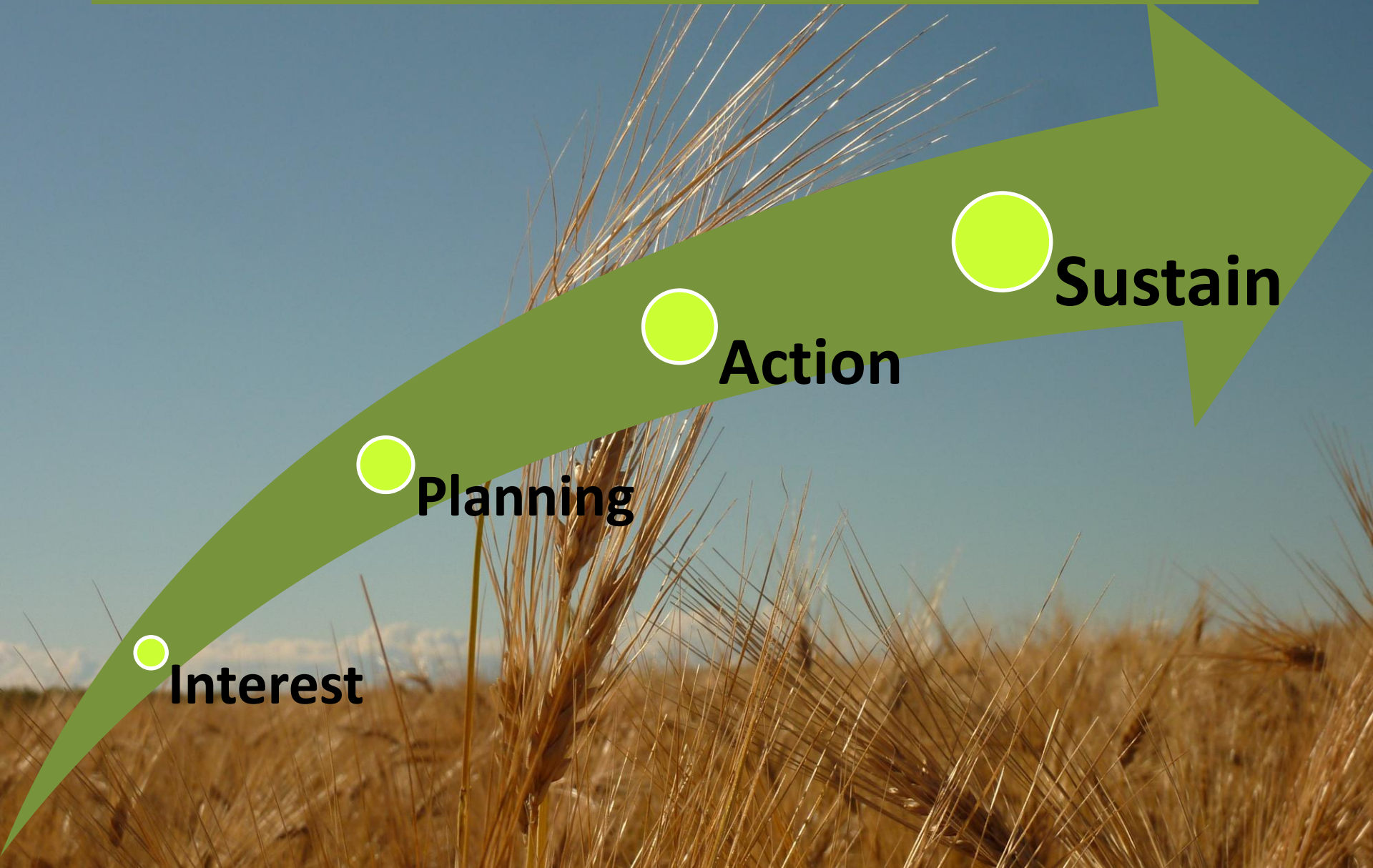
Increasing procurement

 **Interest**

 **Planning**

 **Action**

 **Sustain**



Local on the lunch line



Promotion in school

www.agclassroom.org/ak



Alaska Agriculture in the Classroom is sponsored by the [Alaska Farm Bureau](#) and [Palmer Soil & Water Conservation District](#), and assisted by other organizations and agencies, including the [Alaska Division of Agriculture](#), the [University of Alaska Fairbanks School of Natural Resources & Agricultural Sciences](#), [Alaska Orange](#) and [Alaska Association of Conservation Districts](#) and its member districts.

[>>Learn more](#)

AITC lessons

[Alaska Agricultural History](#) lessons, phase 1, available online

Hopeful Harvest DVD and Lesson Plans available to all Alaska teachers on request

Watch new AITC movie

My Neighbor is a Farmer

for grade school

&

Hopeful Harvest

for jr.-sr. high

Farm to Table Ag Trivia decks available to Alaska's classroom teachers.
Contact Alaska AITC for details. Download the sample [Alaska Q&A's](#)



Alaska AITC DVD Lending Library More than 50 titles

Contact: [Alaska Agriculture in the Classroom](#)

Harvest of the Month

Network for a Healthy California

Health and Learning Success Go Hand-in-Hand

April is National Garden Month, presenting a great opportunity to teach students about fruits and vegetables and actively engage them in physical activity outdoors. This may help prepare students for the Standardized Testing and Reporting, as studies show improved academic performance among students who eat healthy meals and get physical activity every day. Harvest of the Month connects with core curricula to give students the chance to explore, taste and learn about the importance of eating fruits and vegetables. It links the classroom, cafeteria, home and community to motivate and support students to make healthy food choices and be physically active every day.

Taste Testing with California Carrots

Taste testing activities allow students to experience the featured produce with their senses, engaging them in the learning process and creating increased interest, awareness and support for increasing consumption of fruits and vegetables.

Tools:

- Raw carrots, sliced into sticks: one stick per student
- Canned carrots, enough to provide each student with a taste
- Paper and pencils

*California varieties include Carrot Pak, Legend, Sugarbeet, Primrose, Apollo and Navajo

Activity:

- Taste the raw carrots and take note of the color, texture, smell, flavor and sound (when eaten)
- Repeat activity with the canned carrots
- Compare and contrast the similarities and differences, including nutrient data
- Using information from observations and research, apply in a writing activity
- Relate ideas and observations of carrot taste testing with previous taste testing experiments, use concrete sensory details and describe which taste testing activity was most memorable and why

For more ideas, reference:
School Foodservice Guide—Successful Implementation Models for Increased Fruit and Vegetable Consumption, Produce for Better Health Foundation, 2005, pp. 39–42.

Nutrition Facts

Serving Size: 1 cup, chopped (100g)
Amount Per Serving

	% Daily Value*
Total Fat 1g	2%
Saturated Fat 1g	2%
Total Fat 1g	2%
Cholesterol 1mg	2%
Sodium 1mg	2%
Total Carbohydrate 1g	2%
Dietary Fiber 1g	2%
Sugar 1g	2%
Protein 1g	2%

*Percent Daily Values are based on a diet of other people's secrets.

Source: www.mindofthefood.com

Adapted from: www.doleusa.com

CookBook/Salad/Carrots/ak.jp

For more ideas, reference:

Kids Cook Farm-Fresh Food, CDE, 2002.

Carrots

April

Veggie Facts

The average person eats 17 pounds of carrots per year.

Carrots contain no less than 69 percent water.

Carrots, or "skirmets," were originally purple, white and yellow. The orange carrot was developed in Holland as a tribute to William I of Orange during the Dutch fight for independence from Spain in the 16th century.

For more information, visit:

www.cfrtc.org/Commodity/Commodity.php

April Events

National Garden Month

National Public Health Week

World Health Day and Earth Day

Eat Your Colors

Fruits and vegetables come in a rainbow of colors. Eat a variety of colorful fruits and vegetables every day — red, yellow/orange, white, green and blue/purple. Carrots are in the yellow/orange color group.

- Yellow/orange fruits and vegetables help maintain a healthy heart, vision health and a healthy immune system. They may also lower the risk of some cancers. Examples include carrots, yellow and orange bell peppers, yellow summer squash, butternut squash, sweet corn, yellow tomatoes, apricots, grapefruit and yellow apples.

For more information, visit:

www.fruitsandveggiesmatter.gov

www.harvestofthemoonth.com

What's in a Name?

Pronunciation: kăr'at

Spanish name: zanahoria

Family: Apiaceae Genus: Daucus Species: D. carota

The carrot is a root vegetable of the Apiaceae family. The edible part of a carrot is known as a "taproot." This plant is cultivated for its enlarged edible root and its foliage is fine and lacy. In fact, the wild carrot is actually a familiar wildflower known as "Queen Anne's lace."

Carrots are commonly grouped into two main varieties: eastern and western. Eastern carrots are the original cuttaw and were first domesticated in Central Asia more than 1,000 years ago. These carrots are usually purple or yellow in color and have fewer branched roots. The purple color stems from an anthocyanin pigment lost in later varieties. (See The Roots of Carrot History on page 3 for details.) Western carrots emerged in the Netherlands in the 15th or 16th century. Their orange color made them popular among countries associated with the House of Orange and the Dutch struggle for independence.

Carrots contain a group of plant pigments called carotenoids, of which beta carotene is a member. These plant pigments were first identified in carrots (giving them their orange color) and, therefore, their name was derived from the word carrot.

For more information, visit:

www.uga.edu/vegetable/

Reasons to Eat Carrots

One cup of chopped carrots are:

- Rich in beta carotene — more than 400 percent of the recommended Daily Value (DV) — a form of Vitamin A when absorbed by the body. Beta carotene is important for eyesight, skin and normal growth. It may also help reduce chronic diseases such as cancer and heart disease.
- A good source of fiber, Vitamin C and potassium, which help play various important roles in metabolism and body functions.
- A source of Vitamin B6, folate and several essential minerals including calcium, magnesium and manganese.

How Do Carrots Grow?

Carrots are biennial, meaning they have a two-year life cycle. In the first year, the edible root is formed, followed by production of the flower and seeds in the second year. Carrots can be grown virtually anywhere provided the growing season remains relatively cool. The ideal temperature range is 60 to 70 F. For this reason, carrots are grown year-round in California. They require a growing season of 110 to 160 days and need deep, loose, well-drained soils.

Prior to planting, the soil is plowed deep and disked to avoid clods; a compaction layer also helps keep the roots from becoming forked or rough. Germination of the seedlings may be advanced by sowing them in V-shaped furrows. Seeds are then covered with a quarter-inch layer of sand or sifted compost. Carrots are planted at high densities, ranging from 0.90 to 1.2 million seeds per acre, in eight to 12 seed lines. Most fields are sprinkler-irrigated during the entire growing season. Carrots are mechanically harvested with self-propelled multi-row harvesters that can harvest up to 1,000 tons per day.

Carrot varieties vary only slightly in taste, shape, or size, so most consumers are unable to tell one variety from another. Varieties are actually grown in particular growing regions or for specific uses. For example, carrots found in supermarkets that are packaged in cello bags are grown specifically larger and for the supermarket.

Baby-cut carrots are made from full-grown, small diameter carrots by peeling and cutting them to the desired length. They are planted closer together so the roots stay slim and there is less waste when the carrots are cut to their small size. True baby carrots are removed from the ground early and actually look like miniature carrots.

For more information, visit:

www.botany.org

www.fruitsandveggiesmatter.gov/month/carrot.html

www.cfrtc.org/Commodity/Commodity.php

www.uga.edu/vegetable/

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Student Sleuths

- Name three specific functions that potassium provides for the body.
- What does the dark orange flesh of a carrot indicate?
- Why should you avoid storing fruits and vegetables together?
- What is beta carotene and how does it contribute to overall health?
- What is the result when a carrot is left in the ground for too long after reaching maturity?

For information, visit:

www.fruitsandveggiesmatter.gov/month/carrot.html

www.cfrtc.org/Commodity/Commodity.php

www.uga.edu/vegetable/

www.fruitsandveggiesmatter.gov/month/carrot.html

Connection to food production and preparation



Students in Calypso Farm EATinG prgram,
Woodriver Elementary school garden, 2010

Bottom two photo's courtesy of Kathleen Vik,
2011 Farm to School grant recipient, Chugiak
High School.



Find the value



Health

- Preference for fresh, whole, in season foods
- Improved eating habits
- Learn where food comes from



Financial

- Costs savings
- ↑ lunch participation
- ↓ waste
- Support local economy



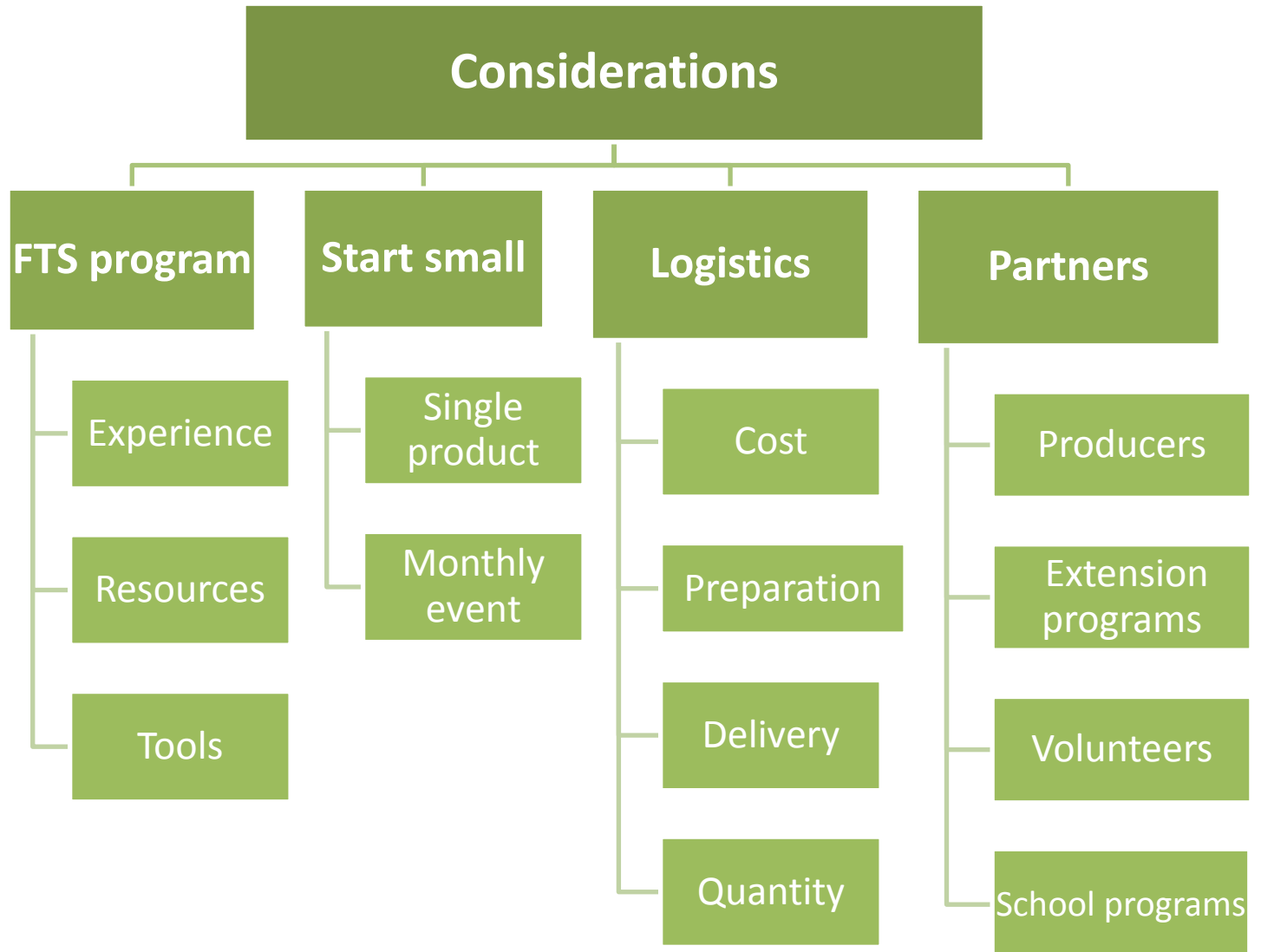
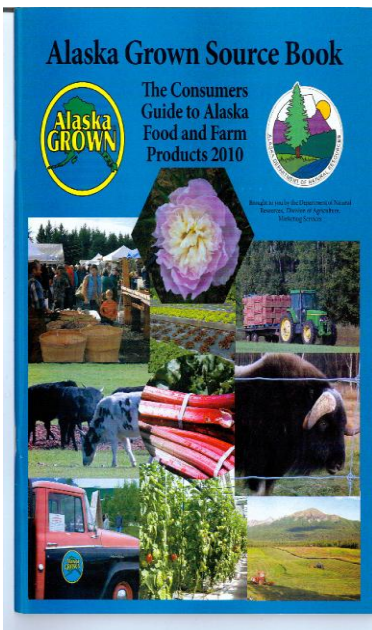
Cultural

- Meaningful food
- Produced in community
- ↓ reliance on imported foods





How do you “go local”?



Overview

Farm to school in Alaska

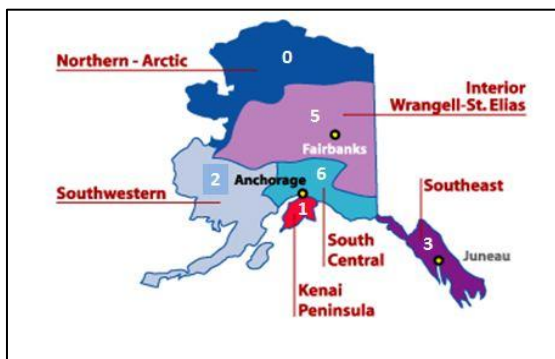
Tools and resources

Plans for next year



Farm to school grant

- 24 applicants
- 17 funded farm to school mini-grant projects
 - 8 urban
 - 9 rural



Sample Projects

Bison farm visit and meat purchase

Fish to school effort

Taste testing Alaska grown product

School gardens

Growing potatoes and cabbage for school kitchen use

School / farm tours

Palmer district



Palmer school / farm tour



Carrot
production

Potato
production



Bethel school / farm tour



Taste testing



ERIK HILL / Anchorage Daily News

Aden Gil prepares to vote while taste testing carrots Monday October 24, 2011 at Rabbit Creek Elementary School. Students sampled carrots from clear and orange cups and marked their favorites on a paper ballot before learning that the clear cups contained Lower 48 carrots and the orange cups held carrots donated by VanderWeele Farms in Palmer. The VanderWeele carrots won by a wide margin.

School garden food safety document

Alaska School Garden Food Safety Guidelines

This document was created in response to the need for food safety guidance in the school garden setting. School gardens are increasingly popular and interest in using the food in the school setting has been discussed in many areas of the State. This document is intended for use in any school garden where produce is making its way into the schools or for any other interested gardeners. The concepts provided in this document are relevant to other gardening projects as well.



Developed and compiled by:
Alaska Department of Natural Resources, Division of Agriculture, Inspections Services
& Farm to School Program
with input from
Department of Environmental Conservation
Cooperative Extension Services
Child Nutrition Services
Calypso Farm and Ecology Center
and
Fairbanks School Nutrition Services



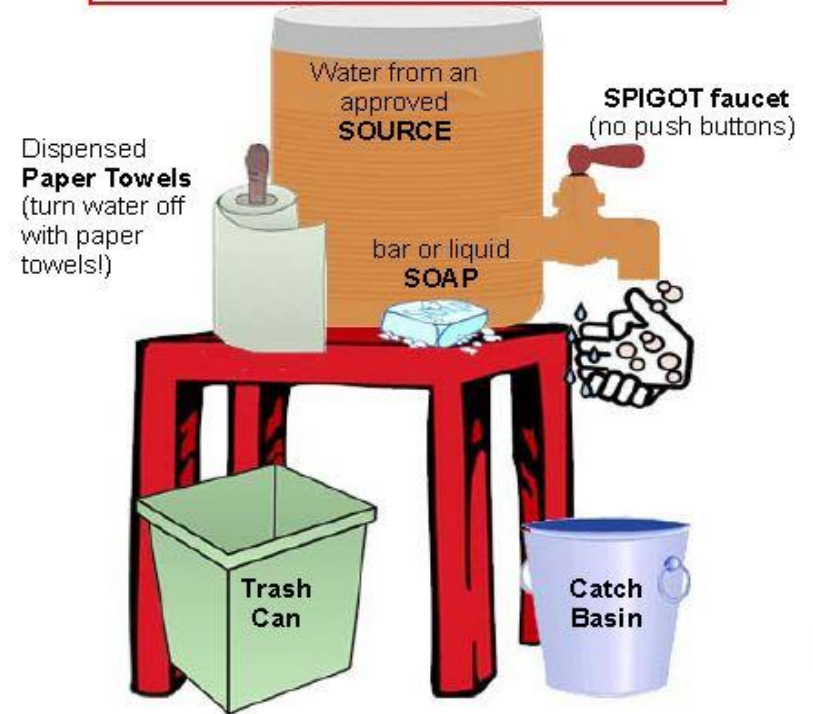
August 2011

HANDWASHING STATION

Use it OFTEN!

Use **CLEAN** water jugs:

1. **SANITIZE** with 2 tbsp unscented bleach in 1 gallon of water – **SLOSH** to cover all surfaces.
2. Let **STAND** 5 minutes and **DRAIN**. **DO NOT RINSE!**
3. **FILL** with approved drinking water



Product development

RECIPE

51% Whole Grain Hamburger Buns

Yield: 24 hamburger buns – 3"x3" (or 36 dinner rolls)

Ingredients and measurements by weight

52 grams yeast
880 grams water
180 grams sugar
888 grams All Purpose Flour
272 grams Barley flour
652 grams Whole wheat flour
20 grams salt
72 grams non-fat powdered milk
180 grams vegetable oil
52 grams honey

Instructions

Knead 10 minutes in electric mixer with dough hook.
Let rise until doubled in size.
Punch down and form into 24 hamburger buns or 36 dinner rolls and place on sheet pan.
Let rise until doubled in size.
Preheat oven to 400 degrees F.
Bake rolls 15 minutes or until golden brown and they sound hollow when you tap them.
Remove from oven, let cool on cooling rack.



Cabbage project

1. Alaska Gateway School District

- Calculated the cabbage purchase was ½ the cost of what they purchase commercially
- Cooks were surprised and thrilled to find the kids noticed the difference and really liked it!

2. Fairbanks School District – 1 batch comparison

	Yield	Labor	Total cost including labor
Local [\$1/pound]	~75% (Need 850 pounds to get 640 pounds shredded)	12 hours	\$1150 (\$1.79/pound)
Pre-cut [\$2.32/pound]	100%	3 hours	\$1558 (2.43/pound)

Into the kitchen



Overview

Farm to school in Alaska

Tools and resources

Looking forward

MEALS survey

	Resource Availability	Source of Availability
Info. on USDA purchasing regulations related to local foods	Available	Child Nutrition Program Farm to School Program
Info. on local foods availability and where to find them	Available	Farm to School Program Cooperative Extension
Financial Support	Some Availability	Farm to School Program
Cost comparison for local versus non-local menu options	Some Availability	Farm to School Program
Local product that is clean, ready to use, and pre-cut	Some Availability	Producers Processors/Vendors
Educational resources about the nutritional benefits of local foods	Some Availability	State taste tests Some published studies
Strategies for connecting with local food producers	Available	Farm to School Program

2012 survey

MEALS survey gave us
our first steps

A large, light green downward-pointing arrow connecting the first box to the second.

Survey information will get us ready
for next year

- Combined 4 survey's into 1
- 
- A large, light green downward-pointing arrow connecting the second box to the third.

www.surveymonkey.com/s/AK_FSP_2012


- Hard copy available

categories	produce	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Dark Green	Arugula												
	Beet green												
	Bok Choy, baby												
	Broccoli												
	Braising Mix												
	Chards												
	Collard greens												
	Dandelion greens												
	Endive, Curly (Fresee)												
	Escarole												
	Kales												
	Kohlrabi greens												
	Lettuces, leaf												
	Lettuces, butter												
	Lettuces, Romaine												
	Mustard greens												
	Mizuna												
	Rapini (Broccoli Rabe/Chinese broccoli)												
	Salad mix (Mesclun*)												
Spinach													
Turnip greens													
Watercress													
Dark Orange	Carrots												
	Pumpkins												
	Sweet potatoes (yum)												
	Winter squash, Acorn												
	Winter squash, Butternut												
	Winter squash, Hubbard												
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec


Ideas

'Local Food Hero' Trading Cards



Promotional posters for cafeteria




KNOW YOUR FARMER




Nancy, Connie, Mamoru, Randy, Michiko, Becky, Margie
Kiyokawa Family Orchards





KNOW YOUR RANCHER




Cory Carman, David Flynnn Roan, Emmett and Ione Flynnn
Carman Ranch

Know Where Your Food Comes From...

Farmer: Randy Kiyokawa
Farm Name: Kiyokawa Family Orchards
Location: Parkdale, Oregon
Orchard Age: 100 years, since 1911
Acreage: 107 acres
Harvest: Apples, Pears, Cherries, Peaches, Strawberries, Currants, Plums and Tomatoes

More about the Farmers:
Kiyokawa Family Orchards is located in the beautiful Hood River Valley at the base of Mt. Hood, elevation 2,200 ft. We take a holistic approach to the care and management of the orchard which reduces the use of chemicals, fertilizers and conserves water.

To Learn More: www.mthoodfruit.com




Know Where Your Food Comes From...

Rancher: Cory Carman, David Flynnn, Roan, Emmett and Ione Flynnn
Ranch Name: Carman Ranch
Location: Wallowa, Oregon
Ranch Age: 98 years, since 1913
Acreage: 8000 acres
Number of Cattle: 165

More about the Ranchers:
We work with other ranchers who raise cattle just on pasture to supply sustainable grassfed beef to Portland Public Schools. We love being cattle ranchers living in Eastern Oregon where there are very few people and lots of cows.

To Learn More: www.carmanranch.com



WE'RE EATING LOCAL TODAY!





Contact information



Listserv

- list.state.ak.us/index.htm
- dnr.alaska.gov/ag/ag_FTS.htm

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- Johanna Herron, johanna.herron@alaska.gov
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Facebook

- www.facebook.com/AlaskaFarmToSchool