

2007

Program Highlights

UAF Cooperative Extension Service

Empowering Communities Through Education



COOPERATIVE
EXTENSION
SERVICE

UNIVERSITY OF ALASKA FAIRBANKS

From the Director's Office

Few people outside of the University of Alaska Fairbanks Cooperative Extension Service know the extent to which faculty and staff impact 60,000 Alaskans annually with informal education, applied research outreach and public service.

A recent external review encouraged Extension to increase its visibility as a gateway to the university and strengthen academic ties to research and teaching. Pending approval by the University of Alaska Board of Regents, Extension will move to the Office of the Provost as a way to improve engagement with components of the entire university system.

This review provides a few highlights of a year of accomplishments performed by a highly dedicated, passionate group of individuals working to improve people's lives around the state, and increase economic self-sufficiency, community resiliency and access to knowledge useful in everyday lives.


Pete Pinney, Interim Director
UAF Cooperative Extension Service



State Advisory Council Anticipates Strong Future

The Cooperative Extension Service State Advisory Council had a challenging year working with changing Extension national priorities and internal changes at the University of Alaska Fairbanks, and considering ways that the council can be more effective. The council recognizes service as the third and equal part of the university mission. Three concerns needing special attention are: challenges to communities due to global warming, energy issues and positive youth development.

The council looks forward to Extension's new place within the UAF structure with the goal of increased outreach and service. Anticipating a strong future for Extension, we thank Interim Director Pete Pinney for his dedication and resourcefulness during this transition, and former Director Tony Nakazawa for his years of positive, broad-visioned leadership.


Nancy Mendenhall, Chair
CES State Advisory Council

Extension Spotlight

Fairbanks Agent Helps Consumers of All Ages

On any given week, Roxie Dinstel might teach sausage making, money management and home energy conservation or advise diabetics about their diets.

Known for an almost limitless level of energy, the Fairbanks-based Extension home economist offers her services to a wide variety of audiences, including seniors, military families, students, low-income clients and others who want to manage their homes or finances better. She has traveled as far north as Barrow, west to Selawik and east to Northway — and many places in between.

A recent afternoon found her teaching the basics of credit to an economics class at West Valley High School. She led the class through the value and pitfalls of credit cards and what she calls “good debt” and “bad debt.” Bad debt is spending money just to spend money, she said. Good debt is an investment that leads to something better — like getting a college education. She also recommended caution, demonstrating with a calculator how large college loans translate into big payments.

Dinstel has helped consumers of all ages for more than 30 years as an Extension agent. She started at age 21, shortly after graduating

from Eastern New Mexico University with degrees in home economics and business.

The path seemed logical because of her childhood on a ranch in central Texas, she said. “We raised a lot of what we ate, so this is nothing new.”

Her Extension career began in Abilene, Texas, in 1976, and she has served as an agent in Oklahoma, Montana and, for the last 12 years, in Fairbanks. Along the way, she earned a master’s degree at Texas Woman’s University and is working on a doctorate at the University of Alaska Fairbanks.

Her work depends on the needs she perceives, grants for projects and on requests. One of her more popular classes — “Pond to Pan” — developed because military spouses needed to know how to gut, clean and prepare fish.

“Their husbands started fishing and hunting and they didn’t know what to do with the game,” she said.

Although she spends the most time on food preservation, requests for adult money management classes have become more frequent, she believes, because of challenges families face with rising energy, gas and grocery bills.



Roxie Dinstel teaches the basics of credit to Fairbanks high school students.

Photo by Jeff Fay

Dinstel also edits a home economics newsletter for the Tanana District and writes a regular newspaper column on topics ranging from parenting to making fireweed jelly and the importance of getting enough sleep. She enjoys answering calls or e-mail questions about everything from pickling beans to removing carpet stains.

A free-lance home economist from Montreal once asked about the substitution rate for guillemot eggs to chicken eggs for a recipe. Dinstel discovered that two chicken eggs would substitute for each of the seabird’s large eggs.

She got several phone calls, she said, after researchers Outside found that blueberries were rich in antioxidants. “What about

our berries?” the callers wanted to know. Dinstel and others participated in research that showed Alaska blueberries and lowbush cranberries have even more antioxidants than the berries tested Outside. Alaska blueberries were prepared in various ways and tested by the same lab in Massachusetts that had evaluated the original berries.

Besides a grasp of multiple topics, Dinstel is known for peppering her talk with “y’alls” and earthy sayings such as “colder than a dead frog” or it’s “darker than the inside of cow.” People respond well to her down-to-earth attitude and her desire to help out in any way possible — and that suits Dinstel.

“I just love what I do,” she says. “People rely on us.”

Turning Yard Waste into Composted Soil

Recycling yard waste can save up to 60 percent of the nation's landfill space. With recycling as a goal, two 12-hour, hands-on classes taught Kenai Peninsula gardeners the art and science of "hot composting." Using free, downloadable composting software, a small chipper/shredder and a weigh scale, 20 students assembled a number of hot compost piles. All easily reached 150 degrees Fahrenheit on their way to producing rich humus.

Introduced Potato Becomes a Standard

The "German Butterball" potato, which was first introduced in 1997 at the Warren Larsen Memorial Test Site in Kenai, has become an annual standard for most Kenai Peninsula gardeners and commercial seed potato sellers. Master Gardening courses and various home horticulture classes have promoted the new high-yielding potato variety with the distinctive buttery taste.

Reducing Calf Deaths

Cattle ranchers in southcentral Alaska experienced unusually high mortality rates among newborn calves and sought help from Extension. Many regions of Alaska are selenium deficient, so Extension's livestock specialist suggested that cattle producers place selenium trace mineral salt blocks on their grazing land for consumption by cows before and after they calve. After following that recommendation in spring 2005, producers have not lost a single calf to unknown causes.



Cultivating Homegrown Skills

Tara Dupper of the Refugee Assistance and Immigration Service, and gardeners Yanzhen Lin, Bee Vang and Pa Vang sell vegetables at an Anchorage market. Photo by Julie Riley

Agents Teach Gardening to Refugees and Communities

Anchorage Horticulture Agent Julie Riley taught 10 Hmong refugee families how to garden two years ago, and she was asked to work with refugees again last year.

She collaborated with Catholic Social Services' Refugee Assistance and Immigration Services on a program aimed at teaching refugees — many of them Hmong from Thailand — small business skills by helping them grow and sell Alaska vegetables.

Riley met weekly with the refugees for 15 indoor sessions, beginning in February. An interpreter translated as the Cooperative Extension Service agent covered gardening basics. She used fresh vegetables from grocery stores and packets of donated seeds to help the class learn the names of vegetables and which crops grew best in Anchorage.

An interpreter was needed only occasionally once the class moved outside to the 8,000 square-foot space next to community gardens in Mountain View.

"Gardening is a learn-by-doing thing," says Riley.

Assisted by family members, the gardeners raised radishes, cilantro, broccoli, cabbage, mustard and turnip greens, beets, carrots, zucchini, kohlrabi, potatoes and dried flowers. Altogether, they made \$6,000 selling twice weekly at area farmers' markets.

Participants want to double the size of their garden this year. And Riley hopes to teach a new set of gardeners as well as advanced techniques to the second-year gardeners.

A USDA grant supported the Refugee Farmers Market Program, which also received a variety of donations, including transplants, seed potatoes and topsoil.

Riley's class is one of many. Extension agents teach gardening across Alaska, from short courses on organic or greenhouse gardening to the full Master Gardener program. Master Gardeners receive 40 hours of instruction on different areas of horticulture and pest management. They agree to volunteer an equal number of hours.

Extension agents graduated more than 100 Master Gardeners in Alaska during 2007. These gardeners helped at fairs, volunteered at botanical gardens and organized community gardens. Master Gardeners taught gardening to teenage boys at the McLaughlin Youth Detention Center in Anchorage and to seniors in Anchorage and Fairbanks.

Extension agents also taught gardening to low-income and rural residents, who pay a premium for imported produce. Gardening can supplement subsistence foods with locally grown, healthy produce.

As part of a USDA grant, Sustainable Communities Agent Mara Bacsujlaky responded to gardening requests in the Tanana Chiefs Conference Region, filling orders for seeds, fertilizer and potatoes from Nenana, Venetie, Chalkyitsik, Loudon (Galena) and Tetlin.

Six other villages and communities have agreed to participate in another grant-funded program to determine local preferences and crop success for common cold-hardy crops and to conduct trials for berry varieties.

Three communities developed community gardens, which each had wanted to develop but lacked the resources.

Bacsujlaky said, "Whenever I arrived in one of the participating villages, whether by car or plane, I was always greeted with the welcome — 'The garden lady is here!'"

Eating well for less

Nutrition Educators Cover Food Basics

Kenai nutrition educator Colleen Sonnevil is used to appreciative former clients walking up and giving her a big hug. While shopping at a local grocery store, one woman proudly insisted on showing her the healthy items in her shopping cart.

As one of Extension's six part-time nutrition educators, Sonnevil teaches regular classes at the local food bank and helps low-income clients through the federally funded Food Stamp Nutrition Education Program.

A series of four to eight classes covers the basics of food budgeting, nutrition, comparison shopping, menu planning and meal preparation. Sonnevil's suggestions help families eat nutritious meals while on food stamps.

"It's food and money management," says Sonnevil.

Her clients are mostly the unemployed and the working poor. She has taught classes at a women's crisis center and another center, where clients are transitioning from drug treatment or jail to independent living.

Feeding a family on food stamps is a real struggle, she says. Some people who don't know how to cook rely on more expensive prepared foods, and sometimes they run out of money at the end of the month.

Sonnevil advises them to combine commodities that are available from the food bank with items purchased with food stamps. Usually, she teaches them how to make something called "master mix," a homemade blend that can be used for biscuits, pancakes and other foods, and "magic mix," which serves as a basis for soups and gravies.

She remembers a young woman who had a baby and did not know how to cook except for prepared foods. After taking classes, she now cooks meals from scratch.



Kathleen L. Zollman, left, and Jodine Warfle use "master mix" to make cookie mix in a jar for inexpensive Christmas gifts at the Kenai Peninsula Food Bank. Photo by Colleen Sonnevil

The nutrition educators work one-on-one with clients and also in group settings. Sonnevil recruits from classes she teaches at the food bank. Other referrals come from public health nurses, a food pantry run by a local church and other agencies.

Some people take one or two classes and others attend all of the classes and "graduate." As of October, 227 clients had enrolled in the program around the state during the previous year and 168 had graduated. Nutrition aides also work in Anchorage, Bethel, Nome, Juneau, Palmer and Fairbanks.

Helen Idzorek works in Fairbanks. During the past year, the nutrition educator taught classes to seven residents living at a facility for people recovering from substance abuse. Many of the residents had been incarcerated or had been homeless. They had no basic nutrition education or training on managing their food dollars. The facility had a greenhouse and garden where the residents grew vegetables, including squash and tomatoes. Idzorek helped them turn the tomatoes into spaghetti sauce and tomato sauce — and made jams and jellies from the berries they picked. They each developed a recipe book.

"The moments that give me the greatest pleasure as a nutrition educator are when one of the residents says, 'When I live by myself someday, can I still call you and ask you for advice and recipes?'" Idzorek said.

Strong Women Leaders Trained

Since offering the first Strong Women class in Kenai in 2004, Extension has trained 32 leaders to teach classes in their home communities. The strength training classes are geared to midlife and older women. One participant in Palmer, said, "I feel much better and my strength has improved. I'm standing straighter and have better balance. I don't tire as quickly and am able to get more done."

Building Better Homes for Alaskans

For the past 17 years, Extension's energy and housing specialist has been teaching cold or marine climate home-building techniques across Alaska. With rising energy prices this year, audiences were particularly receptive. More than 500 people attended his home-building and solar design workshops in Nome, Delta, Glennallen, Kenai, Palmer, Juneau, Sitka, Fairbanks, Haines, Anchorage and Dillingham.

Cooking Meals for One or Two People

The Juneau District partnered with the local AARP Widowed Persons Service to offer "Cooking for One or Two," a hands-on cooking class for older adults living alone, singles and pairs of all ages. Fifteen participants explored menu planning, food budgeting, nutritional guidance and meal preparation. The class was duplicated successfully in Haines.

Program Promotes Septic Maintenance

Maintaining septic systems is a public health and environmental issue, especially with increasing population densities. With that thought in mind, the Cooperative Extension Service water quality coordinator focused his sabbatical on expanding programs in wells and septic system education. He applied for and received a Department of Environmental Conservation grant to educate homeowners about the importance of maintaining septic systems. The pilot program begins this summer on the Kenai Peninsula.

Sizing Up Bethel's Firewood Market

Wood heat is becoming particularly important to rural areas, where fuel oil costs are the highest. Extension's natural resource economist conducted a home-heating analysis in Bethel to determine a firewood market and its size. Residents there rely on fuel oil and also on driftwood. The economist outlined a plan by which an area business could harvest firewood on nearby lands during the winter and transport wood to the Bethel market by summer.

Raising Native Plants

Many Alaskans want to garden with plants native to Alaska, and federal agencies are required to use native plants to refurbish disturbed federal lands. Finding a source of those plants is difficult, so an Extension field technician in Sitka identified the best methods to grow native species and then published 10 fact sheets. As a result, requests for information on gardening with native plants have increased, as have hands-on community workshops.



Heating with Wood



Southeast sawmills generate mountains of wood waste that can fuel biomass heating systems. Inset: Paul Coffey with the Natural Resources Conservation Service and Brian Templin with the city of Craig pose with the wood-fired boiler that is being installed in Craig. Photos by Karen Petersen

Biomass Project to Lower Energy Costs

If all continues on schedule, a large wood-fired boiler next to the Craig Municipal pool will soon heat several school buildings and the pool in the Southeast community.

The biomass heating system will rely on wood waste generated by two nearby sawmills and is expected to lower heating costs substantially.

The \$1.3 million biomass system, which will likely be fired up in late February, will output about 4 million BTUs—enough to heat the pool water, the pool building and elementary and middle school buildings. Estimated annual savings of \$40,000 to \$60,000 are based on two pickup truckloads of wood chips a day.

The project idea came from Karen Petersen, a Cooperative Extension Service program assistant in Thorne Bay, who heard about the Fuels For Schools Program at a conference in Colorado. The federal program helps public schools retrofit their current fuel or gas heating system to a biomass heating system that relies on wood waste. Petersen thought about Prince of Wales Island, where sawmills generate sizable piles of wood scraps.

"We have this huge opportunity here," she thought.

Petersen brought the idea to Craig City Administrator Jon Bolling and other city officials.

"I thought she was crazy," Bolling said, but he quickly saw merit in the idea. City officials and Petersen visited a similar project in Darby, Mont., that heated a school.

A feasibility study, which was completed in 2004—when diesel fuel was \$1.46 a gallon—confirmed that the project was doable. Since then,

diesel fuel has risen to more than \$3.50 a gallon in the community with an estimated 1,400 year-round residents.

"It just makes the project that much more viable," said Bolling.

The CHIPTEC two-chamber gasifier burns sawmill scraps such as wood chips and sawdust in the primary chamber, converting the fuel to gas, which is fired up in a second combustion chamber to heat the water jacket to near boiling. The water is then pumped into the buildings, with propane and fuel oil systems for backup and supplemental heat.

Petersen has supported the project for the past three years. The best part, she said, is that this type of system doesn't spew smoke and won't harm the environment. It also benefits sawmill operators who burn wood scraps in big open pits.

The heating system is funded by USDA Rural Development, Denali Commission, Natural Resources Conservation Service, Alaska Energy Authority and the city of Craig.

With petroleum costs rising, Price of Wales Islanders are already studying other biomass projects. Thorne Bay, for instance, is considering an outdoor wood-fired boiler to heat city and fire halls and the library. The U.S. Forest Service Thorne Bay Ranger District is also discussing a large boiler system to supply heat to the district office, warehouse, bunkhouse and employee housing.

High heating costs affect communities and individuals around the state. Extension's wood energy website and online cost calculator at www.alaskawoodheating.com help consumers evaluate different heating options, available wood types by region and harvesting information.



Rural Kids ‘Taste’ 4-H Camp in Bethel

For the past three summers, Alaska 4-H has hosted a summer camp in Wasilla for the children of deployed Alaska National Guard members.

This past May, 4-H offered a similar camp on the Yukon-Kuskokwim Delta. Eighteen kids from villages such as Tooksook, Tuntutuliak, Alaknuk and Scammon Bay joined kids from Bethel for “Be Aware, Get Prepared . . . A Taste of 4-H Camp.”

The three-day camp in Bethel also included five youth counselors from the area and a variety of adults, including 4-H Agents Lee Hecimovich and Marianne Kerr.

Kerr said the deployment of more than 200 members of the Guard in southwest Alaska — the first since World War II — affected the entire region. Most of the deployed parents were dads, but a few moms also left for the 15-month tour to Kuwait. Their absence placed additional stress on remaining family members.

The idea of the camp was, “Let’s do something for the kids,” Kerr said.

4-H offered the camp during May, in a short window between the end of school and when many kids leave for fish camp.

Several of the kids, ages 10-14, had never been to a camp. Since Bethel does not have an established camp, 4-H improvised and used the small dormitory at the University of Alaska Kuskokwim Campus. Meals were donated by supporters

in the area — or cooked outside in a nearby park, and most of the activities also were offered outside.

The kids learned self-defense from two area state troopers and emergency preparedness from Lan Hecimovich, an Anchorage firefighter. Hecimovich, a certified shooting sports instructor, also taught a 4-H camp staple — shooting sports. The kids were trained in gun safety before taking aim with guns loaded with pellets.

Bethel Youth Center Director and 4-H Educator Janet Athanas showed the kids how to make walking sticks. They stripped the bark off willows and dried the sticks overnight in the boiler room of the Youth Center. The kids sanded the sticks smooth and an adult sprayed them with a clear coat of varnish. They then customized the sticks with fur, leather, beads and feathers.

The kids and their counselors had fun at the camp. One said, “I wish we could stay longer. This was fun.”

The Bethel camp and a camp in Wasilla for children of deployed Air Guard members were funded by a grant for the USDA in partnership with 4-H, the Army and the Air Force. Eielson Air Force Base 4-H staff also developed a camp for the children of deployed parents that is now used at Air Force bases around the world — and the Army in Alaska has offered similar camps in collaboration with 4-H.



*The 4-H creed is
“learn by doing”*

and about 3,000 registered 4-H members in Alaska participate in this hands-on program that emphasizes leadership, citizenship and practical life skills.

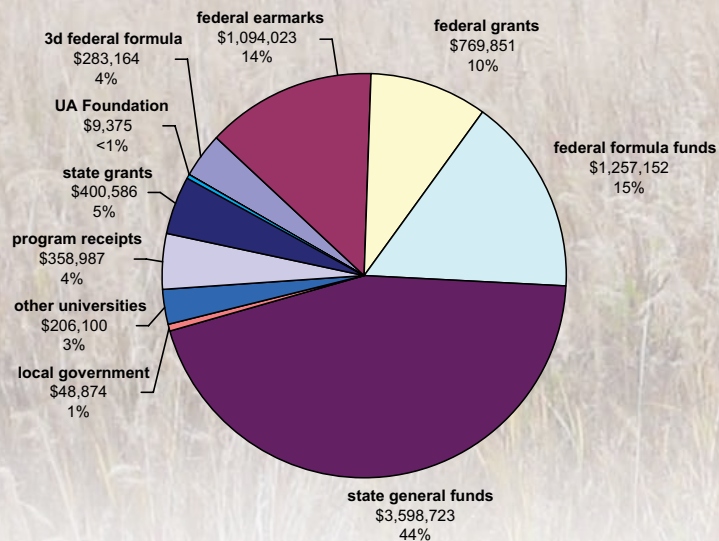
An additional 7,000 children benefited from 4-H sponsored activities that included short-term classes, after-school programs and camps.

During the past year, 4-H kids raised horses and other livestock, sewed, cooked and gardened. They also participated on a cultural moose hunt, earned emergency medical certification and produced a DVD about dating violence.

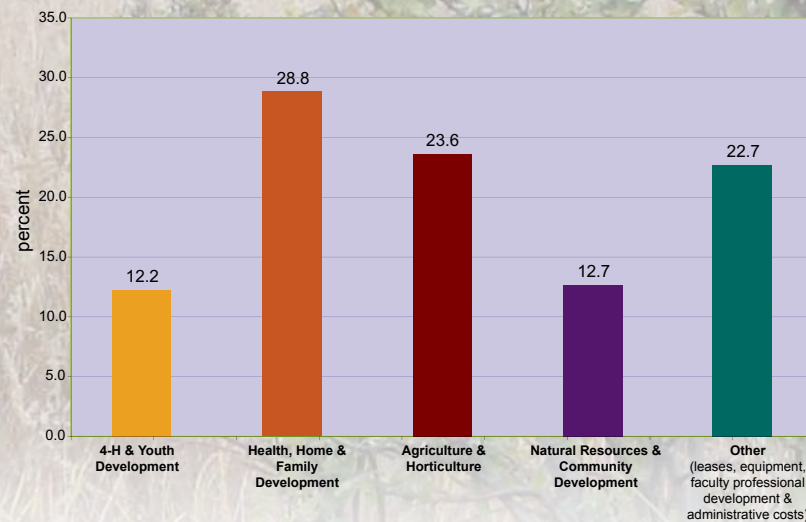
4-H sponsored activities:

- Volunteers with the “Pillow Patrol” events in Palmer and Anchorage sewed more than 600 pillowcases so foster children could have a pillowcase to call their own.
- 4-H’ers on the Kenai Peninsula participated in the second-annual cultural moose hunt, which included hunter safety. They wrapped and labeled the meat the next day.
- A Sterling 4-H group raised more than \$12,000 for the American Cancer Society’s Relay for Life.
- Fairbanks area kids collaborated with ice carvers for “Camp Kidsicle” at the Fairbanks Ice Park.
- High school students in Sitka learned about health careers by earning their emergency trauma and emergency medical technician certificates.
- Eielson Air Force Base teens starred in and helped produce a date rape awareness DVD and distributed it to schools statewide.

Expenditures by Revenue Source July 1, 2006 - June 30, 2007 (total \$8,026,835)



CES Resources by Program Area Percent of Total



The Cooperative Extension Service relies on a variety of federal, state and local sources of funding. These charts show funding sources as a percentage of the total budget and the resources spent by program area.

Visit the Cooperative Extension Service website at www.uaf.edu/ces



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