

UAF Cooperative Extension Service

Empowering Communities Through Education



2008

Program Highlights



State Advisory Council Supports Extension Mission

The Cooperative Extension Service Advisory Council addressed the changing needs of urban and rural families and the concerns of Extension nationwide to respond to these needs. We supported the interim director in his goal of making Alaska Extension more responsive, with householder energy education being our top priority for program expansion. One piece was the improved CES website. Looking forward, we encouraged special attention to sustainable rural communities with the energy and youth development focus. As part of this, the council committed itself to being more active in the state political process to gain program support.

We felt the year was most productive under Pete Pinney's leadership in the areas of increased community outreach, expanded staffing in off-road communities and administrative fine-tuning. We look forward to the new year with Extension's expanded role in the university structure.

Nancy Mendenhall

Nancy Mendenhall, Chair
CES State Advisory Council

From the Director's Office

The UAF Cooperative Extension Service connects individuals and communities with usable, research-based information. I thank the dedicated personnel, an active state advisory council and thousands of volunteers who make this possible.

People across the state attend Extension workshops, conferences and programming ranging from 4-H ATV safety to peony production. In response to this year's energy crisis, we have renewable energy and conservation projects from Prince of Wales Island to Nome.

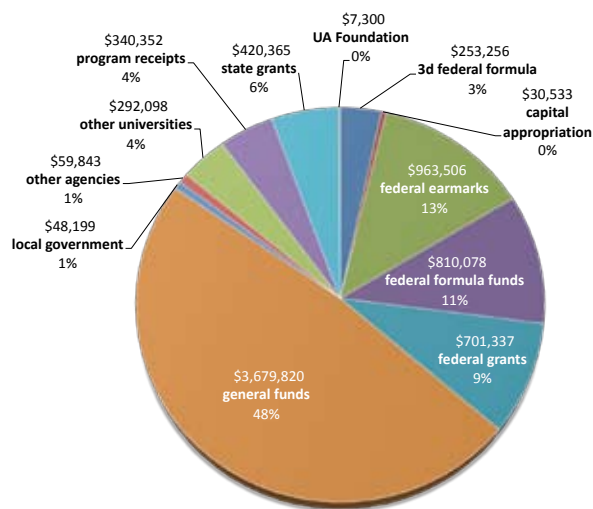
Be part of the largest information network in the world. Visit us at www.uaf.edu/ces. Participate in our new interactive social networking site, <http://engage.uaf.edu>, which connects the university and Alaskans to conversations about energy, leadership and emerging communities of interest.

Pete Pinney

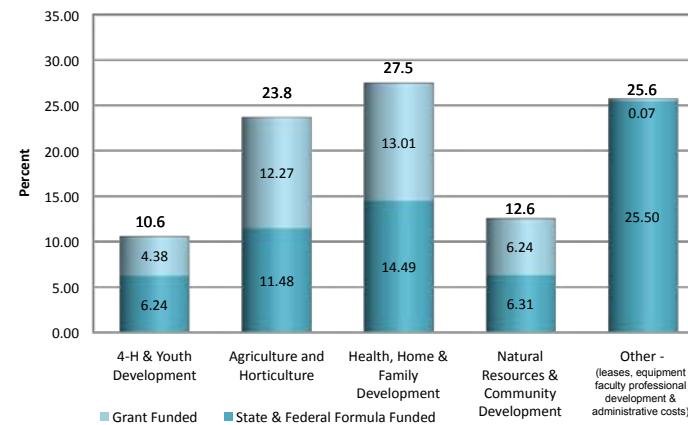
Pete Pinney, Interim Director
UAF Cooperative Extension Service



CES July 1, 2008 - June 30, 2009 (State FY08)
Expenditures by Revenue Source (total \$7,606,687)



Extension Employees 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.

Extension Spotlight

Energetic Agent Delivers Community Programming

Stephen Brown goes to unusual lengths to find programming that meets community needs.

He regularly scans Craigslist for ideas. Earlier this year, the agriculture and horticulture agent noted that residents of Southcentral used the online forum to ask basic questions about chickens, and he also noticed a brisk trade in poultry. Laying chickens sold for \$100 each.

Brown hosted an evening workshop in October called Chicken University, offering information about the care and feeding of chickens, including a little “chicken psychology.” Sixty people showed up, overflowing the Copper River/Mat-Su office in Palmer.

Brown, who has been a Cooperative Extension agent in New York and Kansas, moved to Alaska in 2007 but he is already getting known here for his high-energy level and devotion to new technology. A co-worker calls him a techno geek.

An expert on the use of the GPS, Brown was one of four Extension agents around the country in 2008 named as a NASA Fellow for their geospatial outreach. He attended a NASA training in Utah this summer on using the latest mapping technology.

During the past year, he has taught basic and intermediate GPS to eager audiences of State Troopers, the Civil Air Patrol and a variety of emergency responders, hikers and mushers around the state — 17 workshops to 456 people.

Brown familiarized himself with the GPS while he served as an agent at Cornell University, which pioneered the use of the

device in what is called “precision agriculture.” Precision agriculture, which uses the GPS on tractors and geographic information system (GIS) data, allows farmers to reduce the amount of fertilizer used and cut gas costs because the fertilizer is delivered precisely based on a computer model.

From Cornell, Brown went to Brown County, Kansas, which is the center of precision agriculture. “There, a farmer wouldn’t dream of not having a GPS on a tractor,” he says.

The opportunity to introduce precision agriculture to Alaskan farmers was one reason Brown applied for a job with the Copper River/Mat-Su District. So far, only a handful of farmers are practicing precision agriculture but Brown expects that number to grow.

Brown seems to have energy to burn. Off the job, he runs marathons with a goal of competing in every state. One weekend in September, he ran back-to-back marathons in Bismark, N.D., and Billings, Mont. He also has plans to climb Denali in May.

Brown loves the variety of his work in Palmer, which can range from working with sports turf managers to teaching gardening. Recently, he showed a developer in Talkeetna how to put a reliable airstrip in more cheaply, saving an estimated \$50,000. The developer was pleased to find that the recommendations, based on research at the Palmer experiment station, really worked.

Brown likes the job satisfaction that comes with Extension. “It’s the opportunity to make a difference,” he says.



Photo by Phyllis Craig

Brown likes the job satisfaction that comes with Extension. “It’s the opportunity to make a difference,” he says.



Photo by Jeff Fay

How's Them Subarctic Apples?

Extension's forestry specialist has been testing 39 varieties of apple trees to determine which varieties are best suited for interior Alaska. The trial compares differences in varieties grown inside unheated high tunnel structures and in outside plots. First-year results indicate substantial difference in the survival, growth and apple production of trees grown inside the plastic-covered structures in Fairbanks. This winter's cold temperatures will provide a good test.

Encouraging Green Thumbs

Agriculture and Horticulture agents taught more than 140 Master Gardeners around the state, and, for the first time, offered Extension's popular Master Gardener correspondence course as an online option. Participants included 30 gardeners from Ketchikan to Dutch Harbor and north to Eagle. Hundreds of other gardeners, many from rural areas, participated in gardening and composting classes. Nearly one-third of Dot Lake's population (39) turned out for a seed-starting workshop last March.

Livestock Specialist Works To Improve Reindeer Stock

Reindeer reproduction has not been managed among herds in western Alaska. Stressing the importance of reproductive management, Extension's livestock specialist has been educating herders about possibilities for herd improvement using tools such as artificial insemination. These efforts have gained support from the Kawerak Reindeer Herders for further research and outreach.

AGRICULTURE & HORTICULTURE

Helping Alaskans Grow Alaska

Invasive Species Prevention Encouraged

Extension has played a key role in raising the awareness of the threat posed by invasive plants and animals.

Lori and Troy Zaumseil first became aware of invasive plants after picking up an Extension pocket weed guide from the Alaska State Fair several years ago. A few months later, a Canada thistle showed up with another plant they purchased from an Anchorage store.

The Zaumseils became deeply concerned after reading more about the thistle, which sends out a network of long, creeping roots that choke nearby plants. It is nearly impossible to eradicate. Lori talked to the local home supply store, the national headquarters and finally, the Alaska Division of Agriculture.

Zaumseil, a fire department dispatcher, and her husband have spoken about invasive weeds at a variety of conferences inside and outside of Alaska, and they have lobbied legislators, the Anchorage mayor and the Congressional delegation. They love to talk about how citizens can make a difference.

Annual conferences hosted by Extension have brought together concerned citizens and a variety of state and federal agencies.

"This is what Extension is really good at — pulling people together to solve problems," says Michele Hebert, a Fairbanks agriculture and horticulture agent.



Two "weed warriors" celebrate their collection of invasive bird vetch gathered last fall at the Creamer's Field Migratory Waterfowl Refuge in Fairbanks. Photo by Jeff Fay

The threat posed by invasive species is huge, she says. Other states are spending millions of dollars every year to eradicate invasive species that have damaged cropland, crowded out native species and clogged salmon streams.

Invasive plants and animals have the potential to threaten Alaska's fisheries, tourism and agriculture, she said. While a number of invasive species have been introduced to Alaska, the impacts have not been great so far — and Extension would like to keep it that way.

Prevention efforts found supporters among the Alaska Legislature this year. The Legislature unanimously passed House Bill 330, which creates a state weed coordinator to help manage prevention efforts, and it also makes Alaska eligible for federal funding to battle the problem.

Hebert said an Invasive Species Council is also needed to develop a strategy for handling all other invasive species.

Meanwhile, the message of the potential threat is getting out — a Cooperative Weed Management Area was organized to manage invasive plants in the Anchorage area, and citizens around the state have participated in various weed pulls and have gotten involved in other ways. The Zaumseils have established a group in Anchorage — Citizens Against Noxious Weeds Invading the North (CANWIN).

"Prevention is absolutely the best way," says Lori Zaumseil.

Promoting Positive Change

Putting Local Foods on the Table

How long does it take to can walrus? Cooperative Extension Service agents regularly field questions about how best to preserve Alaska's locally grown and harvested foods. When several Alaskans wanted to know the ideal processing time for walrus, however, we didn't have a research-based recommendation.

Extension's Food Product Development Program is working on an answer. After receiving donated walrus meat, Food Science Specialist Kristy Long teamed up with the university's Fishery Industrial Technology Center in Kodiak this past summer. She, an assistant and two Extension agents met in August to can walrus with different marinades. Sensors in the jars indicated the meat's temperature at various processing times.

Recommendations will be available soon. Long said providing safe canning times will provide Alaska Natives one more alternative for safely preserving walrus. Freezing foods is expensive in rural areas and food stored outside is subject to freezing and thawing cycles.

"Once you've canned it, that food is safe to eat for a long time," she said.

Research also has been conducted on pasteurization of caviar, smoking fish and preserving other subsistence foods, including kelp.

Research is just one element of Extension's food preservation work. During the past two years, Extension has

created a series of food preservation DVDs. The series, called "Preserving Alaska's Bounty," features agents demonstrating canning basics, canning game meat and fish in cans and jars, making sauerkraut, pickling vegetables and infusing vinegars. DVDs released this year will include information about preserving wild berries, making jams and jellies, drying foods, the use of root cellars and game processing.

Tanana District Agent Roxie Dinstel said Extension traditionally has done a great job of providing hands-on food preservation workshops, but the DVDs allow Extension to reach Alaskans who live in communities without agents — or others who would benefit from this style of instruction.

This past fall, Extension also launched online food preservation resources. Seven interactive Flash modules combine written, audio and video instructions on canning basics and canning fish and game in jars and cans. Using the Flash modules, people who want to learn about using a pressure canner, for instance, will be able to read about pressure canners, watch a district agent explain the gauge and listen to what a properly operating pressure canner sounds like.

DVDs may be ordered online at www.uaf/ces/publications/ or through local Extension offices. The Flash modules may be viewed at www.uaf.edu/ces/preservingalaskasbounty/.



Kate Idzorek cuts up walrus meat for canning trials.
Photo by Linda Tannehill



Photo by Jess Dilts

Reducing Energy Costs

While energy prices seesawed this year, Extension's energy and housing specialist helped Alaskans trim their home heating bills. He traveled the state, teaching classes on cold-climate homebuilding techniques, solar design and retrofitting existing homes. More than 950 people attended workshops in Fairbanks, Delta, Glennallen, Anchorage, Kenai, Bethel, Nome, Unalakleet and Kodiak. The specialist and the Southeast agent also helped Juneau residents reduce their energy consumption after avalanches interrupted the community power supply and electricity rates more than tripled.

Agents Offer Tips on Saving Money

As energy costs rose and the national economic news worsened, Extension agents offered tips and information on frugality — how to save money around the house, maximize vehicle mileage and manage personal finances. See some of their ideas at www.uaf.edu/ces/hhfd/energyconservation/.

Promoting Healthy Lifestyles

Extension uses the "train the trainer" approach to promote programs whenever possible. An agent trained 67 instructors across Alaska to teach StrongWomen classes in their communities, promoting better balance, strength and bone density among mid-life and older women (and men). Another agent taught 62 leaders of Living Well Alaska, a program that helps people manage chronic health conditions.



Trash, including fluorescent light bulbs, is expensive to backhaul out of rural communities. Photo by Dan Lung

Taking Out the Trash

Many rural communities that rely on air cargo and barges to remove their garbage tend to ignore the larger and hazardous junk such as cars, refrigerators, light bulbs, batteries and scrap metal. Extension worked with the Kuskokwim River Watershed Council to survey 15 villages about their interest in recycling and backhauling waste. The study laid the groundwork to begin a river-wide planning process.

Wood Website Updated

Extension's popular wood energy website at www.alaskawoodheating.com now includes many more Alaskan communities. A cost calculator enables Alaskans to compare the annual cost of home heating using different fuel sources. The site also features information on wood availability, the heating value of different types of firewood and wood heat safety.

Using Wood Waste

An Extension program specialist worked with the Copper River School District on the possibility of using area wood waste to heat the Kenny Lake School. The wood-fired boiler project is being considered as one of the top three alternative projects in the state.

NATURAL RESOURCES & COMMUNITY DEVELOPMENT

Maximizing Alaska's Potential

Mining for Information

Rural Residents Tour Gold Mines

Bob Gorman of the UAF Mining Extension invited a group of elders and community leaders from southwest Alaska to tour two large gold mines in the Interior this past spring.

These tours and an intensive workshop showed how the Fort Knox and Pogo mines operate, the working conditions and the environmental controls taken. As part of the bargain for this training, the Lower Kuskokwim residents shared this knowledge with their communities so they could effectively participate in the Donlin Mine permitting process, Gorman said. Developers of the mine are moving toward the lengthy permit process.

"We're not trying to convince anyone about the right thing to do," said Gorman. "Communities need facts to determine what they want to do. They need the right information without a lot of passion, a lot of emotion."

Greg Roczicka of Bethel agreed to participate in the tour because he knew the UAF Cooperative Extension Service would be fair.

"I knew I'd get a more unbiased tour and plenty of information ... as opposed to a one-sided brainwashing attempt from the mine companies or overeager environmentalists."

A workshop and the tours were led by Bob Loeffler, the former director of Alaska's Division of Mining, Land and Water. The eight participants were from Quinhagak, Kipnuk, Kongiganak, Bethel, Lower Kalskag and Georgetown.



A huge tire on a Fort Knox Mine haul truck dwarfs participants. Photo by Bob Gorman

In addition to touring the Fort Knox open pit mine north of Fairbanks and the Pogo underground mine near Delta, participants learned how safety precautions have evolved since mining's early days, when the industry operated under few environmental regulations. Now companies must pass state and federal regulations and the process can involve up to 60 permits. Developers must identify the risk of environmental problems, the consequences if something happens and the backup plan.

After seeing both operations, Roczicka said, "The trip actually broadened my perspective and raised my level of comfort that it (mining) can be done in a much safer manner ... but mining companies are in it for the profit, and it's part of our responsibility to make sure they conform to the regulations. And that's a pretty tall order."

Hands-on Learning

Supporting Families of Deployed Military



This past summer, Kim Coffman volunteered at a camp near Fairbanks for 140 military kids whose parents had been deployed or would be within six months.

The 15-year-old and another teen talked with the kids about the healthy ways they could handle the stress created by having a parent so far from home. They used video cameras to document the week's activities and produced a DVD. Along with footage of campers swimming and touring a Black Hawk helicopter, kids talked about how their parents' deployment affected them.

On the DVD, a girl named Ashley, says, "The worst thing about my dad being deployed is that he is not going to be around for my seventh-grade year and my 13th birthday. I'm not going to be able to hang out with him."

Coffman volunteered as part of Speak Out Military Kids, a 4-H-led program designed to improve awareness of issues faced by the families of deployed military. She and others teens have talked with legislators, youth at a statewide leadership conference and with elementary students at two schools on Eielson Air Force Base. They encouraged the younger students to support each other — and to talk to their parents and other adults if they needed help.

Coffman, a sophomore at Ben Eielson Junior/Senior High School, was in elementary school when her father, a pilot, served in Korea. Her father is retired now from the Air Force, but many of her classmates are affected by deployments.

"They worry about their parents who are deployed," she said.

Speak Out Military Kids is just one component of Operation:



Children of deployed military learn how to fold the flag at camp. Photo courtesy of Operation: Military Kids

Military Kids, a collaborative effort between 4-H, the Army and thousands of community partners around the country.

Candi Dierenfield, the Alaska 4-H military liaison and director of the Operation: Military Kids, said the program works with a network of agencies and schools to support military families before, during and after their family member's deployment. The program raises awareness and understanding of the deployment's impact on the military member, family and community.

It's not just the families of the deployed who are affected, said Dierenfield. Those who stay behind often have to work longer hours. Since an estimated 7,000 members of the military will be deployed from Alaska in 2009, the effects will be widespread, said Dierenfield.

The message to the children of deployed military is, "Just because they're a kid doesn't mean that they can't help out. Everyone's important in a community."



Photo by Jeff Fay

The 4-H philosophy of practical hands-on learning grew out of a desire more than 100 years ago to make public school education more connected to country life.

4-H youth still learn how to raise livestock, sew and garden, but are going new directions with programs in science, robotics and health care. Leadership and community service also are emphasized. More than 10,000 Alaska children participated in 4-H sponsored programs in 2008.

4-H-sponsored activities:

- 4-H teens and adults taught ATV safety to youth in Glennallen, Fairbanks and Kenny Lake, and the program is expanding to Bethel.
- A community service event in Anchorage, the Pillow Patrol, led to more than 700 pillowcases being made to donate to a variety of institutions, including foster children and needy families. The event brought together volunteers from diverse groups, including residents of a youth detention center and a shelter for homeless youth.
- Youth in the Kenai District learned hunting ethics and safety, and they field dressed and butchered a moose.
- Fifty 4-H'ers from across Alaska attended the second-annual State Horse Contest in Fairbanks in April. This included a horse bowl, public speaking, demonstrations and horse judging.

Extension Hotlines

Energy & Building

1-800-478-8324

Food Safety & Preservation

1-888-823-3663

Publications & Information

1-877-520-5211

Visit us at www.uaf.edu/ces



UAF Cooperative Extension Service
PO Box 756180
Fairbanks, AK 99775-6180



America's Arctic University

UAF is an Affirmative Action/Equal Opportunity employer and educational institution.

The University of Alaska Fairbanks Cooperative Extension Service programs are available to all, without regard to race, color, age, sex, creed, national origin, or disability and in accordance with all applicable federal laws. Provided in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Pete Pinney, Interim Director, Cooperative Extension Service, University of Alaska Fairbanks.

Front cover photo by Sherry Bottoms

