FROM THE DEAN & DIRECTOR’S DESK:

The Alaska Agricultural & Forestry Experiment Station has a long and proud history in Alaska. There have been changes in the way we live, but one thing has remained constant: Alaskans live on an edge—geographically, politically, and climatically. The population has always been small in relation to the vast territory it occupies, and great distances separate communities. By necessity, new ideas and innovative thinking have long been characteristic of the people of Alaska. This is no more evidenced than in the evolving mission of the Experiment Station, of service to Alaska and Alaskans, now expressed through the land-grant mission of the University of Alaska Fairbanks.

In keeping with new ideas, innovative thinking, and service, the School of Natural Resources and Agricultural Sciences, the Agricultural and Forestry Experiment Station, and the University of Alaska Fairbanks are proud to bring you the Palmer Center for Sustainable Living.

It is the expression of the endurance of agriculture in Alaska, its evolving definition in our state, and its importance to the people of Alaska. Today, Alaskans face a world that is increasingly vulnerable to the cost and supply of food and energy. Alaska is the harbinger of the effects of changes in climate and its population must learn to sustain itself in the face of these shifts. We are also concerned about educating our children, who will grow up in this transformed environment. It is time that we bring strongly to the foreground the frontier spirit that has always inspired us.

The Palmer Center for Sustainable Living was created to help generate new ideas and new directions by embodying research, instruction, and outreach in a stimulating environment that showcases the history of and new innovations in agriculture in the Matanuska Valley and at the Matanuska Experiment Farm. The Center invites Alaskans and visitors to take advantage of lifelong learning activities and recreational opportunities in a setting that shows how multiple land and resource uses can be compatible and sustainable. It provides people with stimulating opportunities for engagement with cutting edge research and experiences in Alaska.

The changes we face—and the opportunities we create—will affect all of our lives. The Palmer Center for Sustainable Living is here for you. We hope you visit often, participate in our research, educational, and outreach programs, and bring us your new ideas of how we can continue to serve you in our ever-changing world of the far north.

—Carol E. Lewis

Dean, School of Natural Resources & Agricultural Sciences
Director, Alaska Agricultural & Forestry Experiment Station

ALASKA’S AGRICULTURAL EXPERIMENT STATION:
The U.S. government purchased Alaska from Russia in 1867, and after funding was appropriated in 1868, it became the District of Alaska. Just 30 years later, the Alaska Agricultural Experiment Station was established in Sitka, almost 60 years before statehood in 1959. Thus the Experiment Station was providing agricultural production information to Alaskans before it was established as the Territory of Alaska by the 2nd Organic Act passed into law by the U.S. Congress in 1912.

Agricultural Experiment Stations in each of the United States and its territories were established by the Hatch Act of 1874 to provide agricultural research information to the states in which they operate. Usually, they are a part of the land-grant institution in their state. The experiment stations themselves are administrative entities that oversee experiment farms and research sites that provide not only research information, but also education and outreach. Alaska’s Agricultural Experiment Station is no different. It has statewide responsibilities and operates experiment farms in Palmer and Fairbanks with research sites in Delta Junction and Nome. It is a part of the School of Natural Resources and Agricultural Sciences, one of seven schools and colleges in the land-grant institution of the University of Alaska system, the University of Alaska Fairbanks. It is also one of seven research institutes at the university that make it Alaska’s arctic research university.

Over its history, the Alaska Agricultural Experiment Station, today named the Agricultural and Forestry Experiment Station, has operated nine experiment farms. The first major farm established was in Sitka and was the first headquarters of the Experiment Station. The last major farm opened was in Palmer. The Agricultural and Forestry Experiment Station today is headquartered on the University of Alaska Fairbanks campus which also houses its Fairbanks Experiment Farm.

<table>
<thead>
<tr>
<th>THE EXPERIMENT STATION’S FARMS</th>
<th>location</th>
<th>period of operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sitka</td>
<td>1898 to 1930</td>
<td></td>
</tr>
<tr>
<td>Kodiak</td>
<td>1898 to 1930</td>
<td></td>
</tr>
<tr>
<td>Kenai</td>
<td>1899 to 1908</td>
<td></td>
</tr>
<tr>
<td>Rampart</td>
<td>1900 to 1923</td>
<td></td>
</tr>
<tr>
<td>Copper Center</td>
<td>1903 to 1908</td>
<td></td>
</tr>
<tr>
<td>Fairbanks</td>
<td>1906 to present</td>
<td></td>
</tr>
<tr>
<td>Matanuska</td>
<td>1917 to present</td>
<td></td>
</tr>
<tr>
<td>Petersburg</td>
<td>1940 to 1974</td>
<td></td>
</tr>
<tr>
<td>Homer</td>
<td>1974 to 1984</td>
<td></td>
</tr>
</tbody>
</table>
THE UNIVERSITY OF ALASKA FAIRBANKS AND SNRAS/AFES have created the Palmer Center for Sustainable Living (PCSL) in the Matanuska Valley. It is the crown jewel of UAF, connecting the north and the south of our great state. The PCSL embraces an expanding urban community while retaining the adventurous and independent spirit of the frontier for self-sufficiency and forging new trails and byways. The history of the experiment farm in the Matanuska Valley has been steeped in agriculture. Today, the definition of agriculture worldwide has changed to include more than traditional agriculture, but also forest products, urban landscaping, sportsturf, agrotourism and recreation, lake and stream management for fish habitat, and nutrition and habitat for wildlife. The 1,000-acre Palmer Center for Sustainable Living honors and continues the history of agricultural research, education, and outreach with its controlled environments, field horticulture, hay production, organic production fields, animal pastures, turfgrass demonstration plots, and wildlife nutrition research. It encompasses the Matanuska Experiment Farm, Kerttula Hall, and the future Matanuska Colony History Center and Alaska Environmental Studies & Learning Park. Neighbors of the PCSL are important to its work, and lend themselves to the linkages between urban and suburban Alaska. The PCSL connects Matanuska-Susitna Borough lands, UAA Matanuska-Susitna College lands, and State of Alaska lands in the Kepler-Bradley State Recreation Area. We are the key to connectivity of the existing trail system that is heavily used by our partners and residents in our neighboring communities. We are honored to be a part of the Matanuska Valley family.

Matanuska Experiment Farm Use Map
The Matanuska Greenbelt Trails are of various types and wind across four land managers’ properties: Matanuska Susitna Borough’s Crevasse Moraine Trails, University of Alaska Anchorage’s Matanuska-Susitna College’s nature trails, the University of Alaska Fairbanks’ Matanuska Experiment Farm’s fields, and Division of Parks and Recreation’s Kepler-Bradley Lakes State Recreation Area.

While trail users run, hike, bike, ski, and ride among these properties, it was not until December 2008 that any attempts were made to manage the lands as a continuous, complex trail system, yet still respect the missions of each individual land manager. Because of the complexity of the system, it was not uncommon for users to lose their way. During this first year, the goal is to try to reduce the probability of users getting lost. Digital maps of trails and property boundaries were developed in GIS, then put on line for free distribution.

A signage program is being adapted from Alaska State Parks standards. Metal directional signs are being designed with individual land managers’ logos combined with a greenbelt logo. These will be placed along main corridors, with directions to trailheads at the corridors’ far ends. Eventually gateway kiosks will be placed where main connectors enter another property.

Version 1.2u 2009/06/08  www.tinyurl.com/matanuskagreenbelt
Palmer Center for Sustainable Living

University of Alaska Fairbanks
School of Natural Resources and Agricultural Sciences
Agricultural and Forestry Experiment Station

**Matanuska Experiment Farm**
- RESEARCH, EDUCATION, & PUBLIC SERVICE
  - Region-adapted variety testing
  - Hay & forage
  - Urban & rural horticulture
  - Domestic livestock & range management
  - Turfgrasses
  - Wildlife biology

**Kerttula Hall**
- EDUCATION & ORGANIZATIONAL SUPPORT
  - Baccalaureate through PhD academic programs
  - Research & teaching laboratories
  - Faculty, staff, & administrative offices
  - Outreach & research partnerships

**Matanuska Colony History Center**
- HISTORICAL RESOURCES
  - Guest offices
  - Historic buildings
  - History & natural resources library
  - Conference center
  - Distance delivery facilities

**Alaska Environmental Studies and Learning Park**
- SUSTAINABLE LIVING RESEARCH & EDUCATION
  - K-12 natural resource & geography programs
  - Renewable energy & conservation
  - Agriculture & forestry
  - Biomass energy
  - Geography
  - Parks & recreation management
  - UAF Mountain Science Center
Providing opportunities to Alaskans to learn about Alaska’s natural resources and their responsible management through education, research, and community service.

The Alaska Agricultural Experiment Station has entered its second century of service to the residents of Alaska. The Palmer Center for Sustainable Living is grounded in this history that began in 1898 when the Alaska Agricultural Experiment Station was established in Sitka. The Matanuska Experiment Farm, the center for agricultural research in the Matanuska Valley, was founded in 1915 when Milton Snodgrass chose its current site. This was two years prior to the opening of the College of Agriculture and School of Mines, now the University of Alaska Fairbanks. The Matanuska Farm became the primary source of information for farmers in the Matanuska Colony Project in the 1930s. The Matanuska Farm is one of nine experiment farms that were operated throughout the territory of Alaska from Kodiak to Rampart. Besides the Matanuska Experiment Farm, only one other remains, the Fairbanks Experiment Farm. The Alaska Agricultural Experiment Station (renamed the Agricultural and Forestry Experiment Station in 1982) and its two experiment farms in Fairbanks and the Matanuska Valley became a part of the School of Agriculture and Land Resources Management (renamed the School of Natural Resources and Agricultural Sciences in 2002) when it was established in 1975. To further enhance the research, education, and outreach mission of the School and the Experiment Station in the Matanuska Valley and southcentral Alaska, the Palmer Research and Extension Center was created to consolidate these activities under one umbrella. The new Palmer Center for Sustainable Living will be headquartered at the Matanuska Experiment Farm, revitalizing these functions. Those interested in reading more about the history of the Alaska Agricultural Experiment Station will find the centennial edition of Agroborealis (v. 30 n. 1) interesting and informative (this issue, like other publications produced by the school and station, are available on line at www.uaf.edu/snras/afes/pubs/).

Palmer Center for Sustainable Living
The Palmer Center for Sustainable Living (PCSL) will highlight the history of the Alaska Agricultural Experiment Station in the Matanuska Valley through the Matanuska Colony Historical Center and bring new and exciting research, education, and outreach opportunities to southcentral Alaska. The Center will also be home to the Matanuska Experiment Farm; Kerttula Hall, the focus of formal educational programs; and an extended educational center, the Alaska Environmental Science and Learning Park.

Matanuska Experiment Farm
The Matanuska Experiment Farm provides research information on a variety of agricultural crops and livestock, including traditional methods of production and controlled crop environments, alternative and traditional livestock, sports turf, and wildlife biology. The new endeavor in sports turf features best management practices appropriate to Alaska.

Kerttula Hall
Kerttula Hall is the centerpiece of our education programs in southcentral Alaska. Importantly, it is located in the Matanuska Valley, poised to serve Valley residents yet connected to urban Anchorage and the expanding urban corridor to the north and south by an efficient transportation system.

Matanuska Colony History Center
Historically, the Matanuska Colony emphasized the importance of reliable food supplies in southcentral Alaska. It is appropriate that the PCSL recognizes this heritage. The historical buildings are the core that will link our current and future research, instruction, and outreach to our past with a library, conference center, guest offices, and a distance delivery facility.

Environmental Studies and Learning Park
Lifelong learning is an important part of sustainable living. The Park will have learning experiences for all ages that tie to the three other components of the PCSL and include agriculture, forestry, geography, and renewable energy and conservation. It will include the UAF Mountain Science Center, providing interactive experiences with mountaineering as a part of Alaska’s history and future from its location at the base of the Chugach Mountains and proximity to the Alaska Range.
REGION-ADAPTED VARIETY TESTING
• Forage crops
• Grains & oilseeds
• Vegetables & florals
• Potatoes
• Hay and haylage
• Energy crops

TURFGRASSES
• Aircraft runways
• Golf greens & fairways
• Sports turf
• Lawns
• Parks & recreation

URBAN & RURAL HORTICULTURE
• Greenhouses
• Controlled environments
• Landscaping
• Composting

HAY
• Dog and horse owner preferences
• Livestock producers
• Disturbed land revegetation

Matanuska Valley Demonstration Garden
Demonstration for home and industry
Volunteer opportunities
Workshops and short courses
The Matanuska Experiment Farm was established in 1915 and was a primary reason the Matanuska Colony was placed in the Matanuska Valley. From its start, its purpose was to provide diversified research and demonstration projects that showed the residents of the Matanuska Valley how to farm in the climate of southcentral Alaska. The Matanuska Experiment Farm continues to serve as a site for field research, but with an updated venue to serve today’s Alaskans.

The Matanuska Valley is becoming more urban, and agriculture has taken on a much broader definition. So has the work at the Experiment Farm, which now includes not only research and demonstration but a growing education and outreach component. New focuses are forestry, recreation, tourism, turfgrasses, and horticulture and animal practices focused on urban and farmette applications. Also, small rural and remote communities are seeking information on local food and feed production. Another exciting opportunity is in wildlife biology, with ongoing research in cooperation with the Alaska Department of Fish and Game and the University of Alaska Anchorage on moose and caribou nutrition. Expanding our Community Garden will give the community, from producers to retailers to homeowners, opportunities to view region-specific selections for ornamentals and landscaping materials and to participate in volunteer work at the Matanuska Experiment Farm.

The 21st Century Experiment Farm
As the Alaska Agricultural and Forestry Experiment Station begins its second century of service, the farm’s enterprises reflect the ongoing needs of the state as they change.

Urban & Rural Horticulture
Controlled environments are essential to extending the growing season throughout Alaska. They also enable individuals to produce a substantial amount of produce and ornamentals in a small space, important as the urbanization of the Matanuska Valley continues and rural populations strive for food sustainability. Greenhouse management and crop growth in controlled environments have become important at the Matanuska Experiment Farm; we conduct this research for local residents and to extend controlled environment technology to rural Alaska.

Region-Adapted Variety Testing
Varieties of crops available and people’s preferences change over time. To determine the best crops for Alaska, we conduct variety trials on grains and oilseeds, field and greenhouse horticultural crops, potatoes, and turfgrasses, with future trials planned for energy crops and crops adapted to controlled environments.

Hay
Hay is a major crop in the Matanuska Valley, used as feed for traditional livestock, a large horse population, and for alternative livestock including a growing herd of wood bison at the Alaska Wildlife Conservation Center. Work at the farm includes production and management of hay and haylage crops in the cool climate of the Matanuska Valley.

Livestock
The Matanuska Experiment Farm has been home to a variety of livestock since it began in 1915. Today the concentration is on beef cattle, with research focusing on management of cattle on small acreages. Our herd indicates range-use habits and tests the hay and haylage we grow at the farm.

Turfgrass Research
Southcentral Alaska’s rapidly growing population, coupled with high maintenance costs and environmental concerns, has increased demands for low-cost, low-maintenance, environmentally friendly turf, for home lawns, sports fields, golf courses, and aircraft runways. Alaska’s harsh conditions make establishing and maintaining such facilities especially difficult. We are meeting that demand, researching impact-resistant turf; winter survival; disease control and resistance; local materials for substrate bed construction, fertilization regimes to minimize nutrient contamination of watersheds, and more.

Matanuska Valley Demonstration Garden
Historically we have always provided opportunities for volunteers from the community, whether home or professional gardeners, businesses, or just those wanting a gardening experience, to join with us in our demonstration gardens. The Matanuska Valley Demonstration Garden will grow with the community as we conduct workshops, guided tours, demonstrations, and sponsored activities; all to make Alaska’s gardens grow.
DEGREE PROGRAMS
School of Natural Resources & Agricultural Sciences
- BA, Geography
- BS, Geography
- BS, Natural Resources Management
- MS, Natural Resources Management
- Master of Natural Resources Management and Geography
School of Management
- Master of Business Administration
Joint SNRAS/SOM
- BS, Parks and Recreation Management (proposed)
- PhD, Resources Management and Sustainability

PARTNERSHIPS
- Cooperative Extension Service
- Alaska Dept. of Fish & Game
- Alaska Dept. of Natural Resources
- Alaska Division of Agriculture
- Alaska Division of Forestry
- Alaska State Grange
- City of Palmer
- Gateway Community Council
- Matanuska-Susitna Borough
- Matanuska-Susitna College
- University of Alaska Anchorage
- USDA Agricultural Research Service
- USDA Natural Resources Conservation Service
- US Forest Service
- Valley Mountain Bikers and Hikers
History
For nearly three decades, Kerttula Hall (formerly known as the Palmer Research Laboratory) has helped advance agricultural research for the State of Alaska. Sen. Jay Kerttula helped secure $2,560,000 in state funding for construction of the laboratory and offices in the early 1980s. The modern, red-roofed building, which was built where a dilapidated dairy barn had been, opened in 1985. The new space was a tremendous improvement over a tiny lab that had served the experiment farm in downtown Palmer. The expanded facilities helped make possible a much deeper level of research. The research was done not only for the university, but for various state and federal agencies. Soil testing and nutrition research for livestock were the main emphases in the early years. The improved space allowed the addition of new equipment, which extended the research possibilities, and ultimately led to increased grant funding. Much of the laboratory analysis for revegetation work for the trans-Alaska pipeline was done here, as well as extensive plant breeding research.

In honor of Jay Kerttula’s support, the university re-named the building Kerttula Hall in August 2008, with an outdoor ceremony, dedication, and dinner. Kerttula came to the Matanuska Valley as a child in 1935 with his family, who were part of the Matanuska Colony farmers who helped settle the Valley in the 1930s. The family farm gave Sen. Kerttula the inspiration and skills to establish his own successful farm. He is the only legislator who has served as both Speaker of the House (1968-1970) and President of the Senate (1980-1984). A Kerttula anticipated modern trends, such as organic gardening, community supported farming, food safety, and agricultural sustainability: all among the issues on which the Palmer Center for Sustainable Living will focus.

Kerttula Hall in the 21st Century
Kerttula Hall is the focus of the School of Natural Resources and Agricultural Sciences education, research, and outreach functions at the Palmer Center for Sustainable Living. It will be the headquarters for faculty who are involved in research, teaching, and outreach in natural resources management, geography, business administration, and related fields. It is our research and laboratory facility that houses scientists whose fields range from soil science to plant science to wood chemistry. It serves as an important center for PhD and master’s degree students who are studying to become the leaders in the natural resource management and environmental issues facing Alaska. Kerttula Hall will provide a home for undergraduates as they pursue their studies and engage in active research related to sustainable living that incorporates agriculture, forestry, geography, and environmental studies. Importantly, it is located in the Matanuska Valley, poised to serve Valley residents and urban Anchorage, located about 40 miles away, and connected by an efficient transportation corridor. It is the center for many outreach, educational, and research partnerships with educational institutions and state and federal agencies, offering a connection to the largest transportation and communications hub in Alaska.
Learning from our past…
Looking forward to our future…

Palmer Center for Sustainable Living:
Matanuska Colony History Center

History
We are learning from our past. Historically, the Matanuska Colony emphasized the importance of agricultural lands and reliable food supplies to the people of southcentral Alaska. The research conducted partly at the Matanuska Experiment Farm beginning in 1916 was critical to the farmers of the Matanuska Colony. It is appropriate that the Palmer Center for Sustainable Living recognizes this heritage.

The Palmer Center for Sustainable Living encompasses approximately 1,000 acres in the central Matanuska-Susitna Valley, and was established as the Matanuska Experiment Farm by the US Department of Agriculture in 1915. It was operated as a federal Agricultural Experiment Farm until 1932 when it and the Alaska Agricultural Experiment Station were transferred to the University of Alaska in Fairbanks. The federal presence at the Matanuska Experiment Farm was reemphasized in 1948 with the establishment of the USDA Agricultural Research Service (ARS) in Palmer. Over the years, the ARS established a broad base of agricultural research information for producers, industry, public agencies, and the general public. For example, from 1960 through 1985, federal and university researchers developed and released 34 varieties of forage and revegetation grasses, potatoes, cereal grains, cabbages, and berries. Many are still being used by farmers, homeowners, and for revegetation of disturbed lands. In the 1970s land disturbance from oil development and the construction of the trans-Alaska pipeline brought a need for reclamation and revegetation research that has spanned 25 years.

Historic Buildings
The historic buildings located at the Palmer Center for Sustainable Living are the core of a history center that will link our research, instruction, and outreach to our past.

Center Cottage was planned and built by Fred E. Rader as his personal residence while he served as assistant in charge of the Matanuska Experiment Farm. It was completed in 1917. Part of the residence served as an office for the Matanuska Experiment Farm. It is one of the oldest framed structures still in existence in the Matanuska Valley.

Kodiak Cottage, rumored to be a Swedish kit home, was originally assembled in 1917 at Kalsin Bay, a branch of the agricultural experiment farm on Kodiak Island. When the Kodiak branch closed in 1922, the cottage was barged to Goose Bay and hauled overland by horses to the Matanuska Experiment Farm.

Construction on the Herdsman’s House, originally known as South Cottage, was begun in 1929 and finished in 1930. It served as a residence for several farm superintendents over the years.

The Mess Hall and Dormitory was built in 1929 to house seasonal and year-round laborers. Most were single men who worked clearing land, raising crops, and tending livestock for a season or two before moving on. The Distance Delivery Center will be housed in this building.

The Future
The historic buildings of the Matanuska Colony History Center will be central to preserving our history and looking to our future. The buildings will house a historical research and education library accessible to anyone interested in the agricultural history of the Matanuska Valley and the role it played in pioneering Alaska. The Center Cottage will be home for the Alaska Challenge Conference Center, housing modern conference rooms and guest offices. Residences such as the Kodiak Cottage and the Herdsman’s House will remain a part of the community presence on the farm as they have in the past. These historic buildings are the core of the Palmer Center for Sustainable Living.
ALASKA ENVIRONMENTAL STUDIES & LEARNING PARK

PALMER CENTER FOR SUSTAINABLE LIVING
UAF School of Natural Resources and Agricultural Sciences
Agricultural and Forestry Experiment Station

Lifelong Learning
- Conference center
- Video conferencing
- Guest offices
- K-12 education & outreach
- Lifelong learning opportunities

Housing Research
- Local materials
- Local construction
- Renewable energy systems
- Garden and turfgrass roofs
- Energy efficiency renovation

Biomass and Renewable Energy
- Fuel crops
- Biomass energy
- MEF power plant
- Gasification & liquification

UAF Mountain Science Center
- Interactive learning
- Historical displays
- Mountain and alpine studies
- Tourism destination

Nature trails & bike paths
- Recreation management
- Trail maintenance
- Multi-use systems
- Competitive events
Environmental Studies in the 21st Century
The park will tie together the other three components of the Palmer Center for Sustainable Living in a learning and research atmosphere; energy research and fuel production, advanced computing capabilities, agricultural research, and appropriate land use and management come together to meet the challenges of the near-Arctic and Arctic. Energy, forestry, agricultural systems, and mountain science are all elements of the learning park’s focus on bringing ongoing research to the public, from kindergarten-age pupils to retirees interested in augmenting their life experiences with the latest knowledge.

Biomass Energy Research and Development Laboratory
The question of how to use biomass to produce energy in Alaska both efficiently and sustainably is being answered at the Matanuska Experiment Farm through our gasification and liquefaction research using bio-energy crops from the forest and field. Our Biomass Energy Research and Development Laboratory provides learning opportunities for youth and adults.

Forestry
Forestry is in the future of the Matanuska Experiment Farm. Urban use of the forests for recreation and for urban enhancement, development of wood strength standards for Alaska tree species, exploration of markets and marketing strategies for Alaska timber and wood products, research into nontimber forest products including energy are all research, education, and outreach directions being taken on our nearly 1,000-acre farm.

Wildlife Biology
Wildlife in Alaska is important for viewing and for food; studying wildlife can answer many questions, such as those concerning nutrition and range management. We have partnered with the UAA Department of Biology and the Alaska Department of Fish & Game to investigate the diets and range habits of moose and caribou, using animals living at the farm.

UAF Mountain Science Center
UAF possesses academic and research expertise in many areas pertaining to mountain and alpine studies. The physical geography, geology, and biology of Alaska’s mountain and alpine environments are compelling and integral parts of the state’s history. Experts from UAF’s science-based academic departments and research institutes will create a unique, interactive science and learning center that explains and explores Alaska’s mountain world (glaciers, volcanoes, wildlife, climate, geology, flora). UAF’s Mountain Science Center will include displays of rare archival photographs, diaries, equipment, and recorded interviews with pioneering explorers, mountaineers, settlers, and indigenous peoples. The Center’s proximity to the road system will make it a viable tourism destination and education facility.

K-12 Education & Outreach
SNRAS is home to several education and outreach programs in geography and geographic literacy, environmental studies, natural resources, high latitude range management, and geographic information sciences. Expansion of these programs, through on-site and distance-delivered means, will become the core of UAF and SNRAS’ education and K-12 outreach efforts for the Matanuska Valley. SNRAS education and outreach partnerships and collaborative agreements with the National Geographic Society, Google, 4-H, and FFA will be incorporated into the overall programmatic capacity at the PCSL.

Parks and Recreation
Nature-based outdoor recreation in an urban setting is becoming increasingly important in the Matanuska Valley and the Anchorage bowl. Our extensive trail system and our interaction with hikers, bikers, skiers, and horseback riders provides an excellent opportunity to do interactive research, education, and outreach with our community partners.

Lifelong Learning Center
Lifelong learning at UAF offers a rich array of experiences through coursework, workshops, and lectures for older and younger students. Working with the Osher Lifelong Learning Institute, Summer Sessions at UAF, and other groups, the PCSL Lifelong Learning Center will work with agencies, educational institutions, and individuals to create a robust learning environment. There will be opportunities to explore academic and general interest classes in an atmosphere that is intellectually challenging, with participants from all backgrounds who share intellectual curiosity and their life experiences.
**CAPITAL INVESTMENT AND OPERATIONAL COSTS**

**PALMER CENTER FOR SUSTAINABLE LIVING**

UAF School of Natural Resources and Agricultural Sciences
Agricultural and Forestry Experiment Station

**Operational Needs and Capital Improvement Costs**

The Palmer Center for Sustainable Living has had operating costs between $500,000 and $650,000 over the past five years. Fluctuations have occurred primarily because of changes in personnel as operational needs have changed. More recent increases have been due to the rising cost of fuel. The Center is supported totally by the School of Natural Resources and Agricultural Sciences and the Agricultural and Forestry Experiment Station. As we move toward energy sustainability with the opening of our Biomass Energy Research and Development Laboratory, we hope to see decreases in our fuel costs for heating and for powering our vehicle fleet. The renovation of our buildings to make them more energy efficient should also lead to a decrease in our operating cost. Expansion of activities at the PCSL will most likely mean a need for some increases in personnel but we hope to attract an energetic group of volunteers to help, particularly in the Alaska Environmental Studies and Learning Park and the Matanuska Colony History Center.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Administration (1)</td>
<td>$145,796</td>
<td>$191,382</td>
<td>$153,769</td>
<td>$141,992</td>
<td>$157,083</td>
<td>$181,180</td>
</tr>
<tr>
<td>Farm Operations (2)</td>
<td>$502,093</td>
<td>$422,205</td>
<td>$431,818</td>
<td>$367,951</td>
<td>$402,833</td>
<td>$479,187</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$647,889</td>
<td>$613,586</td>
<td>$585,587</td>
<td>$509,943</td>
<td>$559,916</td>
<td>$660,367</td>
</tr>
</tbody>
</table>

(1) General and Administrative expenses incurred to support the farm and experiment station.  
(2) Direct costs of operating the farm and experiment station including, fuel, utilities, farm personnel, etc.
Capital Needs

Two of our Colony houses will be renovated to establish a convention center, offices, library, and distance education center as a part of our Matanuska Colony History Center. The facades of the buildings will remain unchanged from their original appearance but the interiors will house modern facilities with world-wide teleconferencing capability. They will also serve as examples of how energy-saving technology can be incorporated in older home and office remodels. Kerttula Hall will be the central location for our administration, faculty, and staff. Currently it serves as a laboratory with some offices for faculty and staff. If we are to house all of our resources at the PCSL as we have planned, we will need to expand Kerttula Hall and renovate our Colony buildings. This expansion into a modern, state-of-the-art learning and research center will help us achieve the vision for the Palmer Center for Sustainable Living.

Capital and Strategic Financial Needs (Estimated):

<table>
<thead>
<tr>
<th>Renovation of the Colony houses</th>
<th>$2,000,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renovation of Kerttula Hall</td>
<td>$5,000,000</td>
</tr>
<tr>
<td>Expansion of Kerttula Hall and addition of new facilities</td>
<td>$25,000,000</td>
</tr>
<tr>
<td>Total Long-term Capital and Strategic Development Costs</td>
<td>$32,000,000</td>
</tr>
</tbody>
</table>

Contact Information

Dean & Director Carol E. Lewis
School of Natural Resources & Agricultural Sciences
Agricultural & Forestry Experiment Station
University of Alaska Fairbanks
P.O. Box 757140, Fairbanks AK 99775-7140
907.474.7083 (ph) • 907.474.6567 (fax)
ffcel@uaf.edu • fysnras@uaf.edu
www.uaf.edu/snras/ • http://snras.blogspot.com

The School and Station focus on:
- Energy
- Agricultural stability
- Climate change
- Workforce development

WE ARE AN ALASKA-WIDE NETWORK!

The University of Alaska Fairbanks is accredited by the Commission on Colleges of the Northwest Association of Schools and Colleges. UAF is an AA/EO employer and educational institution.