



Agriculture,
Natural Resources
and Extension

2019 Annual Highlights

Extending Knowledge, Changing Lives

The University of Alaska Fairbanks Cooperative Extension Service and the Agricultural and Forestry Experiment Station strive to help Alaskans live better lives through outreach in Alaska communities and vital research on natural resource issues. To learn more, visit www.uaf.edu/ces or www.uaf.edu/afes.

Agriculture and Climate Change

Alaska's climate is warming, and our growing season is lengthening in some areas of the state as much as three weeks in the past 60 years. Researchers with the Agricultural and Forestry Experiment Station are looking at how the changing climate will affect agriculture—which varieties of vegetables do best, whether growing wheat and other grains might be more feasible, and how cover crops might improve soils. Vegetable variety trials continue at the Fairbanks and Matanuska experiment farms. We're also testing several Nordic early-maturing wheat varieties crossed with hardy northern varieties.

Recreation Research

UAF Professor Pete Fix and two other recreation researchers developed an approach that is being used nationally to evaluate visitor experiences on lands managed by the Bureau of Land Management. BLM is directing requests for “outcomes-focused” recreation studies to the UAF-based research partnership. The goal is to provide information to BLM managers on what their visitors value, so they can develop a plan to achieve those recreation outcomes. Current projects are in the Logandale Trails System in southern Nevada; recreation areas near Kingman, Arizona; and Historic Route 66 interpretive sites.

Alaska Food Security

Food security is a major concern to Alaska, which imports at least 90 percent of its food. Agents address this through gardening classes, agricultural conferences that highlight current issues and opportunities, and food preservation and food safety classes. Gardening classes range from a one-time composting or transplanting class to an in-depth series of how-to sessions. More than 170 Alaskans in 2019 received the 40-hour Master Gardener training and agreed to volunteer 40 hours on a community project or helping other gardeners. Trainings are offered in person and online.

Youth Development

Extension teaches youth important life skills through its 4-H and FFA programs. Activities emphasize hands-on projects, citizenship and leadership. Extension's 4-H programs reached 2,544 Alaska youth K-12, who launched rockets, raised rabbits, gave public presentations and learned a host of other skills. 4-H agents worked with 50 teens at the Fairbanks Youth Facility and an independent living center with a goal of reducing homelessness and improving social and job skills. FFA has 18 chapters from Seward to North Pole with students in grades 7 to 12. The program emphasizes growing leaders, building communities and strengthening agriculture.



Extension has provided trusted, research-based information to Alaskans since 1930. It is part of a national education network supported by a partnership between the U.S. Department of Agriculture and land-grant universities.

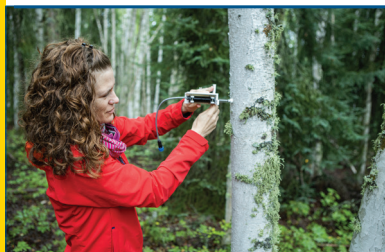
The Agricultural and Forestry Experiment Station has been around even longer. The first experiment station opened in Sitka in 1898. Researchers create knowledge and solve problems in agriculture and forest sciences.

Extension and the Experiment Station combined administratively in 2019 to become the Institute of Agriculture, Natural Resources and Extension.

The impacts here give a glimpse at our accomplishments for 2019.



Agricultural & Forestry
Experiment Station



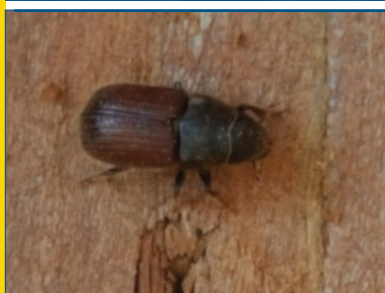
Firewood Research

A researcher with the Agricultural and Forestry Experiment Station is determining when trees contain the least water content and if timing the **firewood harvest** could shorten the drying time.



Health Programs

Alaska has the fastest growing **population of seniors** in the country—and Extension offers several health and disease prevention or management programs. Agents and trained volunteers lead free ongoing StrongWomen or Strong Seniors strength-training classes around the state.



Spruce Beetle Control

Spruce beetles damaged trees on more than a half million acres in Alaska the past two years, and the outbreak continues. Extension met with homeowners in Palmer, Eagle River, Anchorage and Talkeetna to talk about mitigating damage.



Food Preservation

Extension educators tested 590 dial gauges on **pressure canners** to ensure accurate readings and food safety. Nearly 1,100 participants in 25 communities learned how to **preserve foods** and about **food safety**.



Greenhouse Research

A horticulturist grew three **varieties of basil** with different light-emitting diodes (LEDs) and fluorescents to test what lighting resulted in the best growth and nutritive value for the popular herb.



Nutrition Education

Nutrition educators in Fairbanks, Tok, Anchorage, Palmer, Bethel and Juneau helped 2,077 youth and 539 adults learn more about **healthy eating habits**.



Produce Safety

Staff with Extension and the Alaska Department of Environmental Conservation trained 100 farmers on new federal **produce safety regulations** during the past two years.

Extension's Online Presence

Publications
downloaded:

621,866

Twitter
followers:

1,356

Facebook
followers:

5,285

Web views
for the year:

95,223

YouTube
views:

163,274

Responding to Challenges

Alaskans identified these needs that guide our research and outreach.

➔ FOOD SYSTEMS

We help improve agriculture and food security through gardening and agricultural support, research and education, and pest identification and management.

➔ HEALTH

Our programs support the health of Alaska residents, with programs geared to nutrition education, radon mitigation, prevention of diseases including diabetes, and management of chronic diseases.

➔ DEVELOPING TOMORROW'S LEADERS

Youth programs help develop leaders with confidence, responsibility and passion.

➔ RESEARCH

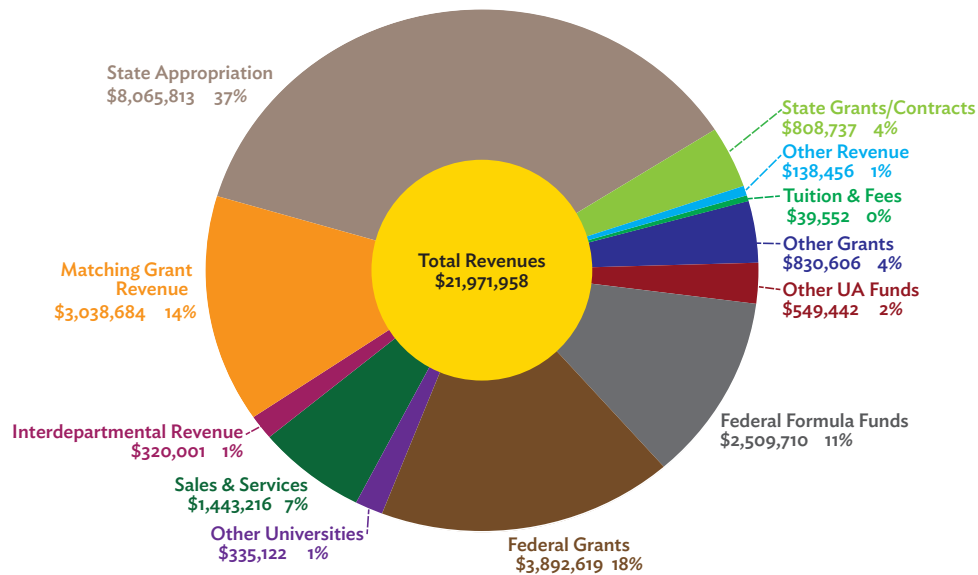
Scientists study how the changing climate affects agriculture, forest productivity, regrowth and management, and soils. Look for research information on our new searchable database at <http://afesresearch.uaf.edu>.

➔ COMMUNITY CONNECTIONS

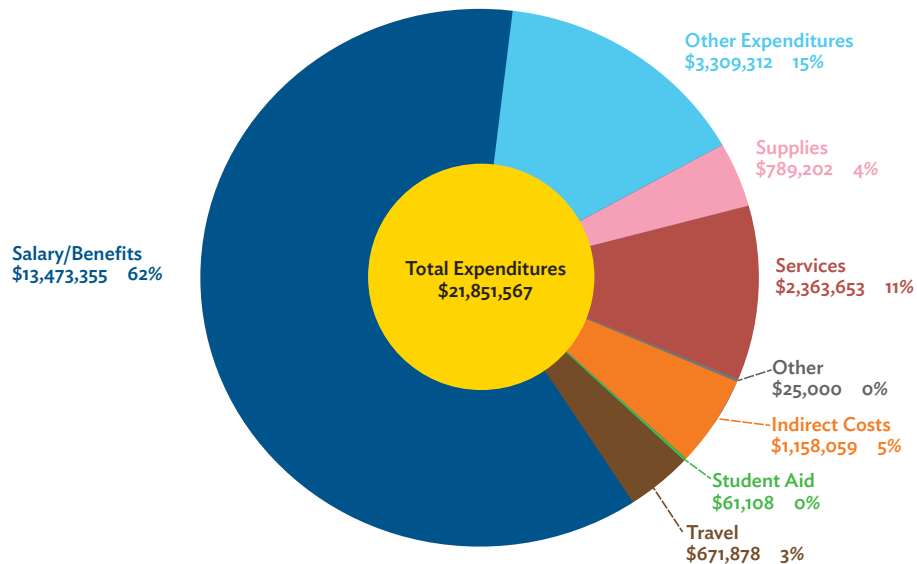
Extension is a grassroots organization that responds to needs as they arise. Information is provided through publications, workshops, presentations, on-site visits, phone calls, emails and social media. Researchers work with stakeholders to identify their needs.

July 1, 2018 to June 30, 2019 (FY19)

Total Revenue By Source



Total Expenditures by Category



These pie charts represent the total revenues and expenditures for the Agricultural and Forestry Experiment Station and Cooperative Extension Service.



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