



Agriculture,
Natural Resources
and Extension

2020 Annual Highlights

Extending Knowledge, Changing Lives

The UAF Cooperative Extension Service and the Agricultural and Forestry Experiment Station strive to help Alaskans live better lives through outreach and vital research on natural resource issues.

Responding to the Pandemic

“ I attempted to respond quickly to community requests for education on topics that were suddenly very important to my Southeast clientele: family resources, programs for youth unexpectedly at home, healthy home information and strategies for household resilience in the face of unexpected change and financial difficulty. — Southeast Alaska Extension agent Sarah Lewis ”

Agriculture and Horticulture

The pandemic increased concerns about food security. Alaskans wanted more guidance about raising their own food and maybe had more time to garden. Agents and staff reported high interest in classes and increased phone calls and emails. Sitka and Juneau combined efforts for a Master Gardener class by Zoom — and participants continued to meet informally for months afterward. A Southeast gardening conference co-sponsored by Extension drew 600 participants — four times the usual number.



Youth

4-H and FFA got creative. FFA's state convention met by Zoom and Google Classroom, complete with skills and written competitions and speech contests. 4-H youth participated in watercolor and art lessons, livestock educational activities and even a yak farm tour by Zoom. Kenai 4-H even hosted a drive-in livestock auction. Many 4-H offices distributed activity kits on gardening, computer coding and cultural activities, such as making a story knife.



Health, Home and Family

Some StrongWomen and Strong Senior strength-training groups continued to meet outside during the summer, by Zoom and even phone. Programming in chronic disease and diabetes management and prevention shifted to Zoom. Food preservation classes, which are usually hands-on, presented a special challenge but many online sessions were offered despite this and hundreds of pressure canner gauges were tested by appointment. More than 200 people signed up for a Zoom session on birch tapping and syrup making.





Mining and Petroleum Training Service

The mining and workforce development program, which trains underground and surface miners at its facility near Delta Junction, operated at a reduced capacity because of COVID restrictions, and its federally mandated Mine Safety and Health Administration training transitioned successfully to distance delivery.



Research

Despite restrictions, agricultural, forestry and outdoor recreation research continued. The changing climate and lengthening growing season may mean that it is possible to grow different vegetable and grain varieties than have grown here previously. Trials for both continued in Fairbanks and Palmer. Cover crops were tested to determine how best to enrich soils, and greenhouse research looked at crop production and the use of LEDs. Research continued on harvesting and drying firewood and on recreation surveys.

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

The **Mining and Petroleum Training Service** delivers training, development and consulting services to resource industries.

Researchers with the **Agricultural and Forestry Experiment Station** create knowledge and solve problems in agriculture, forest sciences and outdoor recreation.

The impacts here provide a glimpse at our accomplishments for 2020.



Agricultural & Forestry
Experiment Station



Quick Facts



Malting and feed barley varieties are being evaluated for their adaptability to Alaska. Most of the malting barley that is used to make beer in Alaska, is imported from the Lower 48. Farmers get higher prices for malting barley.



For seven years, 4-H has provided an enrichment program for incarcerated youth at the Fairbanks Youth Facility. Activities include learning how to train service dogs, yoga, drawing and drumming. 4-H agents also help youth plan and cook meals for their families and visitors during holidays and contribute to the facility garden.



The Alaska Weeds ID mobile app has seen 6,000 downloads over five years and use of it is accelerating. Individuals may identify problematic weeds and report the locations of them on public lands. USDA has provided funding to add insects to the app.



Experts from the Mining and Petroleum Training Service have been invited to help Greenland's KTI Råstofskolen establish an underground training center and share their Arctic expertise.

Extension's 2020 Online Presence



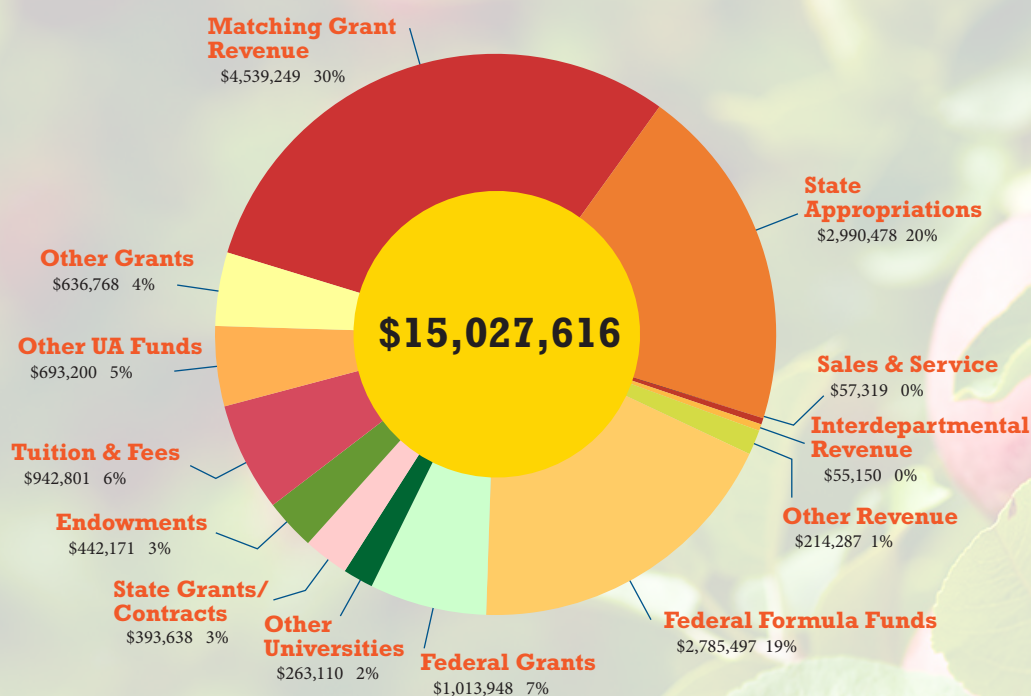
Other Agricultural and Forestry Experiment Station Research is ...

- Developing protocols for inventorying forest biomass using a UAV (unmanned aerial vehicle)
- Determining which Alaska apples make the best juice or cider. Forty-seven varieties of apples grown in Alaska were pressed for further testing.
- Measuring water levels in trees to determine the optimal time for harvesting firewood and pinpointing the drying times for trees cut when they are the wettest and driest
- Developing an early maturing spring wheat variety that grows well in Alaska. Testing continues.
- Gathering more information about common insect pests that affect Alaska's agriculture
- Surveying individuals who use recreation areas to determine use and management preferences. More than 900 users of the Matanuska Greenbelt Trail System were surveyed.
- Studying the fate of herbicide in treated soils under different environmental conditions
- Working with rural communities to use a safe and hygienic method to field slaughter reindeer
- Studying the viability of reindeer semen collected from bulls who received a hormonal treatment to counteract aggressive behavior during the rutting season

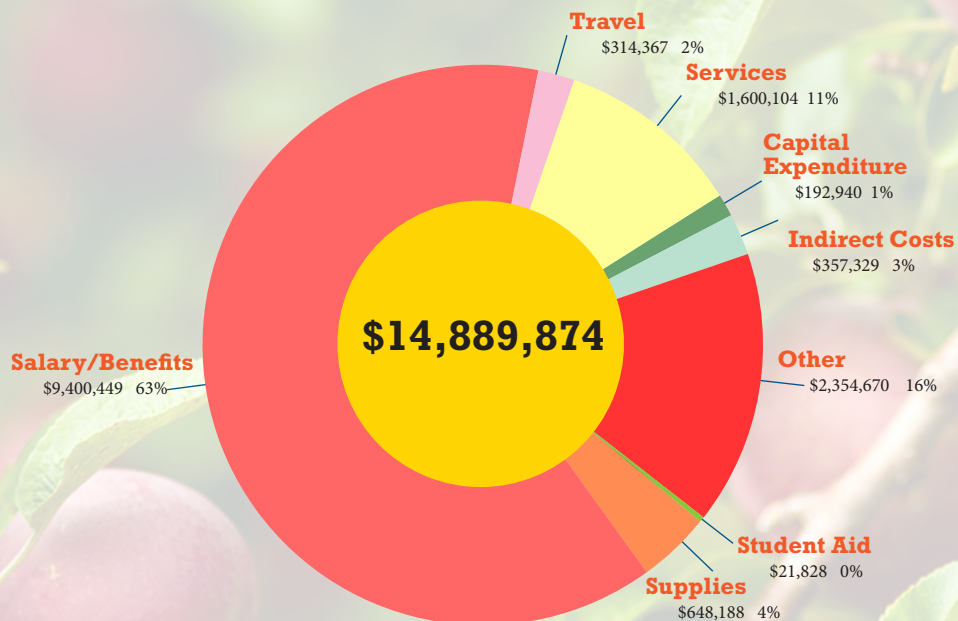


July 1, 2019 to June 30, 2020 (FY20)

Revenues



Expenditures



These pie charts represent the total revenues and expenditures for the Institute of Agriculture, Natural Resources and Extension.



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