



School of  
Natural Resources  
and Extension

# 2018

# Annual Highlights





# update

## A note FROM LEADERSHIP

The School of Natural Resources and Extension seeks to make a difference in Alaskans' lives through our academics, research and outreach.

On the academic side, we teach students how to manage Alaska's resources and promote stewardship through relevant instruction, research opportunities and internships that help students get jobs. In 2018, the school changed the name of its undergraduate and master's degrees to natural resources and environment. This better describes what the degrees are about and will help us recruit students.

Our researchers study the impact of how a changing climate affects Alaska's forests, soils and agricultural possibilities and the feasibility of enterprises, such the peony or reindeer industries. This research is vital to Alaskans. We welcomed an energetic new director of the Matanuska Experiment Farm and Extension Center in Palmer. Jodie Anderson's goal is to expand research, instruction and outreach at the facility.

Extension provides trusted, practical information to Alaskans through multiple channels. This research-based information is shared through events offered across the state, publications, videos, news releases, web and social media. Extension provides leadership and skills training to youth, and programs on food and production agriculture, food preservation, food safety, energy, health, mine training and more.

Changes are coming in 2019 as the result of a university reorganization. The School of Natural Resources and Extension will not exist as of July 1, but our programs will continue. The academic degree programs will move to the College of Natural Science and Mathematics but faculty and staff will continue to conduct research through the Agricultural and Forestry Experiment Station. Extension will continue to work with the experiment station to extend research information.

The leadership of our unit is also in transition. In February of 2019, I was named acting director of the School of Natural Resources and Extension. After July 1, I will become the acting director for a new unit that will include Extension and the Agricultural and Forestry Experiment Station. I have been an animal science professor and researcher with the university since 1999 and am honored to lead our programs as we strive to provide relevant research and education.

I thank faculty and staff for their hard work and dedication to our mission. I also thank our many stakeholders who advocate for our programs.

Sincerely,

Milan Shipka

*Acting Director, UAF School of Natural Resources and Extension*



School of  
Natural Resources  
and Extension





# ACADEMICS

UAF School of Natural Resources and Extension 2018

*Ecologist Elizabeth Bella discusses how recent wildfires had changed the landscape with UAF students on a natural resources field tour. They were hiking in the Skilak Wildlife Recreation Area.*

## Name change reflects focus of degrees

**UNDERGRADUATE AND MASTER'S DEGREES** with the School of Natural Resources and Extension have a new name: natural resources and environment. Previously, the school's degrees were called natural resources management.

Academic Director David Valentine said faculty felt that the new name better reflects what the degrees are about. Many of the school's classes also relate to the environment, such as air and water quality, forests, wilderness and park management, and environmental decision-making and ethics.

Valentine also believes the name change, which became effective with the fall 2018 semester, will help recruit students. UAF Admissions says a number of students who want to study the environment and use that term in online searches. "More students who are looking for us will find us," he said.

The name change will not bring any immediate changes to the curriculum. The school's doctoral degree will continue to be known as natural resources and sustainability.

Another upcoming change is that the degree programs will have a new academic home, beginning July 2019. As part of a UAF reorganization, the degrees and academic department will move to the College of Natural Science and Mathematics. Degree requirements will not change but Valentine said the change will likely lead to more collaborations with faculty from other disciplines and more cross-listed classes.

"Students will have greater options down the road," he said.



*Students tour Kenai Fjords as part of a field tour focus on tourism.*



# Earthquake Response

## Preparing for emergencies and helping communities after a natural disaster

**EXTENSION HELPS ALASKANS PREPARE** for floods, wind events, wildfires and other natural disasters through community workshops and publications on these topics.

Extension also helped Alaskans respond to the 7.0 earthquake that rocked Anchorage and Southcentral on Nov. 30. Staff in Anchorage and Mat-Su worked with local emergency officials, spoke with community members and monitored social media to determine what was needed and how Extension could best respond.

Immediate concerns included the need for a clean water supply and advice for homeowners on assessing hazards. Other identified needs were dealing with emotional trauma after the quake, choosing a reputable contractor for home repairs and testing for radon.

Extension developed a publication on safe emergency water supply and adapted materials from the U.S. Department of Housing and Urban Development on assessing hazards, dealing with trauma and choosing contractors. These publications and others were made available to many sites in Anchorage and in the Mat-Su area, including grocery stores, libraries, and building supply stores. The need for radon testing was also publicized and additional resources were posted online.

Palmer agent Steve Brown said determining what information was needed was Extension's biggest role. "People wanted unbiased, reliable information."

Since Anchorage schools closed for a week, 4-H, volunteers and the Loussac Library teamed up to provide daily youth programs on a "Rock the Quake" theme. Youth built and launched rockets, and enjoyed programs on constructor robotics, art and literacy.

---

Extension posted a variety of resources on Facebook to help Southcentral residents following the earthquake. These posts were seen by more than 60,000 residents in the first two weeks and shared with many others. They included information from Extension, the Department of Environmental Conservation, FEMA and other entities.

---

*A stretch of the Glenn Highway north of Anchorage sustained severe damage during the Nov. 30 earthquake. iStock photo*





# research

## Resource economics

### ANALYZING FEASIBILITY, RESOURCE POLICY

**THE VILLAGE OF SAVOONGA** owns a herd of more than 3,000 reindeer, and a decreasing supply of walrus and other marine mammals has the St. Lawrence Island community thinking more about its reindeer as a source of food and employment.

Josh Greenberg, a natural resource economist with the School of Natural Resources and Extension, teamed up with the Reindeer Research Program to develop a series of business plans that will allow Savoonga and possibly other villages to evaluate different production strategies for a reindeer meat industry.

The feasibility of reindeer operations is just one of many economic studies conducted by Greenberg over the past 30 years. Recent projects have evaluated the feasibility of raising musk ox for qiviut under different scenarios, the effect an industrial road to the Ambler Mining District might have on subsistence communities and the impact of individual fishing quotas on the Alaska sablefish industry.



Richmond Toolie prepares to butcher a reindeer carcass in Savoonga. Photo by Erin Carr

Greenberg has specialized in fisheries but he has also studied many other Alaska resource issues, including the economic value of reindeer range, the peony industry, sustainable livestock production and carbon sequestration. He studies various management and allocation issues and the effect of policy changes on user groups.

“We’re a resource-based state and how we manage our resources is critical,” Greenberg said. “You’re basically providing information to policy makers that they can look at in addition to public testimony.”

- Since its release in 2017, the Grow & Tell app has been installed on 3,465 iOS devices and 536 android systems. The citizen scientist app allows gardeners to rate the vegetable varieties they have grown for taste, yield and reliability.
- Variety trials at the UAF Georgeson Botanical Garden tested 23 varieties of beets, carrots and celery in replicated trials. Thirty-six varieties of Brussels sprouts, beans and corn were evaluated for more rigorous testing.
- The Fairbanks Experiment Farm operates the longest continuously running weather observation station in Alaska. The station, which has been collecting data since 1911, is one of four in the U.S. the World Meteorological Organization honored in 2018.



# Outreach

## Innovative agent helps residents thrive

**SARAH LEWIS** became the Southeast Alaska family and community development agent after working as a professional architect for 19 years and earning a master's degree in social work. She sees connections between all three worlds. "It's about helping people thrive in their environment," she said.

Lewis, who is based in Juneau, already had a strong interest in food security before coming to Extension six years ago. She had trained as a Master Gardener and served on local foods groups in Juneau.

As a new agent, Lewis worked with other agents to sharpen her food preservation skills — and started offering classes. She teaches a variety of pickling and fermenting, canning, and preparing wild foods classes in Juneau and other Southeast communities when the travel budget allows.

She is known for innovative programs, such as the life skills class she teaches students called Surviving the Zombie Apocalypse. She also coordinates Wild Kitchen Walks around Juneau. After the participants harvest wild foods on a hike, they prepare delicacies with Lewis, such as nettles pesto and pickled fireweed shoots.

Her programs respond to community needs. Lewis also educates potential entrepreneurs about the state's cottage food business rules. After learning that the hospital needed someone to lead group diabetes prevention programs, she trained and started a year-long session last fall — and plans to start another this spring.

"I see myself as filling gaps in the community," she said.




---

"I see myself as filling gaps in the community."  
—Sarah Lewis

---




---

*Sarah Lewis teaches a Sitka canning class how to put on a pressure canner lid and make sure the vent is clear and the gasket undamaged. She was canning soups and sauces. Photo by Charles Bingham for the Sitka Kitch*



## EXTENSION ONLINE PRESENCE

**11,165**

page views per month  
on average

**133,982**

page views for the year

**414**  
Publications

**Facebook**  
followers  
**4,660**

**YouTube**  
total views  
**75,350**

**Twitter**  
followers  
**1,328**

Hard copy  
distributions  
**162,690**

Publications  
downloaded  
online  
**245,493**

UAF School of Natural Resources and Extension 2018

did you know?

### FOOD

- Nutrition educators in Fairbanks, Tok, Anchorage, Palmer, Soldotna, Bethel and Juneau provided nutrition education to 1,651 low-income youth and 501 adults.
- Extension agents taught 62 food preservation and food safety workshops to 914 Alaskans in 21 communities from Nome to Sitka.

### TRAINING

- The Mining and Petroleum Training Service graduated 26 new underground miners and 15 new surface miners at its facility near Delta Junction. Eighty percent of graduates are employed one year after completing a mine training.
- Seventy-seven individuals in seven communities trained as certified food protection managers through Extension's videoconference training. The state requires at least one manager on staff at all Alaska food establishments to ensure food safety.

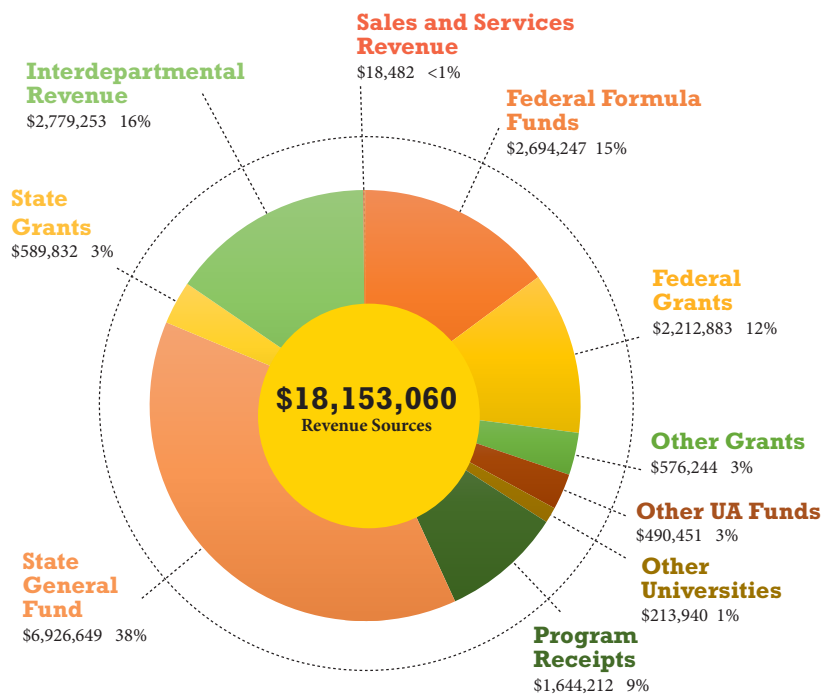
### YOUTH

- 4-H reaches more than 2,500 Alaska youth who participate in clubs, after-school programs, school enrichment and camping programs. Five hundred volunteers support these activities.
- Alaska FFA gained chapters in Tok and Seward and has 18 chapters with 330 youth interested in agricultural education and leadership development.

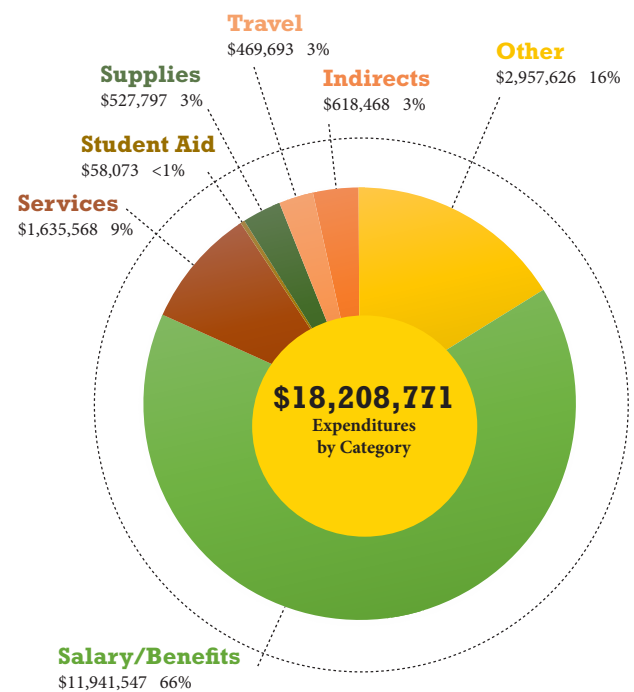
### OUTREACH

- Extension has received a four-year \$679,000 grant to help Alaska farmers and other agricultural workers with disabilities. The grant is one of 14 awarded to Extension projects around the country as part of the National Institute of Food and Agriculture's AgrAbility program.
- More than 80 presentations at the Sustainable Agriculture Conference in Anchorage covered diverse topics, including seaweed farming, reindeer husbandry and gardening in rural Alaska.





July 1, 2017 - June 30, 2018 (State FY18)



July 1, 2017 - June 30, 2018 (State FY18)