



Spring 2018 Research Highlights

Researching reindeer

*Reindeer studies and outreach support
development of Alaska red meat industry*

The Reindeer Research Program at the University of Alaska Fairbanks has looked at the best combinations of feed and forage, range management and how the reindeer diet and slaughter methods affect the quality of meat.

Program manager Greg Finstad said that reindeer research over the past 35 years has focused on helping develop a local red meat industry.

"It's producer-driven research," he said.

Finstad believes that reindeer production could help address Alaska's food insecurity and provide an economic boost to tribal entities that sell the meat.

Research has addressed free-range herds in Western Alaska and fenced reindeer in the Interior. The study of free-range reindeer shaped recommendations on what kind of forage is best for meat production at different times of the year. Each forage has its own isotopic signature, so research followed nitrogen isotopes through the grazing system and into reindeer muscles. It showed that willows contribute to building muscles in early summer. Later on, the reindeer add a layer of fat, which is best done with lichens and other high-energy foods.

Several Interior villages are considering raising reindeer in fenced conditions, and Stevens Village already has a small reindeer herd at its bison farm near Delta Junction. The reindeer program is evaluating feed rations made of hay, oats and barley,

Found online at: www.uaf.edu/snre/agroborealis



Top photo: Reindeer in Fairbanks eat wheatgrass haylage as part of the feed palatability research.

Bottom photo: A Seward Peninsula study looked at the effects of reindeer grazing and climate change on tundra vegetation. Grazed areas were compared to ungrazed areas such as this.



SCHOOL OF NATURAL
RESOURCES AND EXTENSION

University of Alaska Fairbanks

which are fed to the research herd in Fairbanks and to reindeer at the Delta Junction farm. Finstad said the goal is to develop a cost-effective feed mix with available foods grown by Interior farmers.

Research information is conveyed through workshops, consultations and the High Latitude Range Management certificate course that Finstad developed and helps teach through the Northwest Campus in Nome.

Challenges to reindeer production in rural Alaska include a lack of slaughter facilities that would allow producers to process reindeer according to state and federal standards. Herders may “field slaughter” reindeer under certain strict conditions. The animals must be slaughtered on snow at temperatures below freezing, and the carcass must be frozen immediately and remain frozen until sold. Reindeer may be sold to consumers and stores as “uninspected meat.”

Finstad has been working with tribal entities that own herds on the Seward Peninsula and St. Paul and St. Lawrence islands to demonstrate hygienic field slaughter methods. Uniform slaughtering and processing methods are important to put out a safe, consistent, quality product, he said.

He has also demonstrated the processing and packaging of reindeer in the university’s mobile processing unit, which is being used as a teaching facility in Savoonga. Practicing with the demonstration unit may help the residents of St. Lawrence Island decide whether they want to get their own. The eventual goal is for the reindeer to be processed under a USDA-approved plan and sold as “inspected meat.”

Interest in reindeer on Saint Lawrence Island grew after a poor harvest of walrus and whales in 2013 had residents eyeing its herd of 3,000 free-ranging reindeer.

This past February, Finstad took three students in his meat production course out in near whiteout conditions to demonstrate new field processing techniques near Savoonga. The reindeer meat finished freezing and was quartered and packaged in



Erin Carr examines reindeer carcasses in the mobile processing unit in Savoonga, where the reindeer program was working on field slaughter protocols.

the processing unit and sold to other markets. The men are now buying reindeer from the tribal organization and selling the meat to markets across Alaska, including Savoonga, Gambell, Nome, Kotzebue and Fairbanks. They call their business “White Out Reindeer.”

The community could successfully harvest several hundred reindeer a year, bringing in needed money to the community, Finstad said.

Finstad believes that successful field harvests are the first step for developing a commercial reindeer meat industry, followed by producing high-value products, such as steaks and other cuts. He has already demonstrated commercial processing techniques in several villages and at the university.

“We can produce a high-quality product that people are willing to pay a lot of money for,” he said.

Agricultural & Forestry
Experiment Station



AGRICULTURAL & FORESTRY
EXPERIMENT STATION

2150 Koyukuk Drive
(O'Neill Bldg., UAF Campus)
P.O. Box 757200, Fairbanks AK
99775-7200



SCHOOL OF NATURAL
RESOURCES AND EXTENSION

University of Alaska Fairbanks