

USDA United States Department of Agriculture

# Tanana Chiefs Conference Federally Recognized Tribes Extension Program

# Heidi Rader – (Federally Recognized Tribal Extension Program Grant)

National Institute of Food and Agriculture

Project Number: Alaska FRTEEP Grant Heidi Rader

University of Alaska Cooperative Extension Tanana Chiefs Conference Agriculture 122 First Ave., Suite 600 Fairbanks, AK 99701 907.452.8251, ext. 3477 Heidi.Rader@alaska.edu

Amount funded: \$3,000



Heidi Rader plants flower baskets with Leonard John and Mabeleen Christian in the spring in Arctic Village.

## Situation:

The long travel distances to reach Alaska's remote locations not only increase the cost of transporting food to rural residents but also reduce the quality and freshness of that food.

Teaching rural residents about growing local food through gardens or sustainable farming and ranching, especially training in the use of locally available fertilizers, could help community members gain access to cheaper, higher quality produce. That would not only help reduce food costs compared with using only transported produce of poorer quality, it will increase access to more nutritious food.



Jesslyn West and her friend, Kameron Reitan, gather potatoes in the garden of Jesslyn's grandmother, Freda Beasley, of Galena.



Jessyln West and Freda Beasley picking cranberries in Galena.

# Objectives:

- Provide professional development workshops, demonstrations, handouts and publications on sustainable agriculture to include gardening and raising locally produced food
- Work with rural residents to look at waste management streams and using locally available fertilizers such as bone meal, moose manure and fish waste.
- Increase the understanding of tribal ag professionals and community leaders on tribal lands about sustainable farming and ranching practices, for example, intensive grazing systems, soil-building cropping systems, niche market development and local food self-sufficiency.

#### Actions.

The principal investigator, Heidi Rader, attended, and gave presentations at, two

- Alaska Forum on the Environment, Feb. 2-6; presentation Feb. 5 titled: "Local Food Production and Food Security in Remote Interior Alaska: Opportunities and Challenges." During the conference, Rader also gave a short presentation at the Tribal Conservation District Workshop to inform attendees about opportunities available from Alaska Cooperative Extension.
- Potato, Vegetable and Fruit Growers Conference, Feb. 10-11, Palmer. The presentation was similar but geared toward farmers and ranchers.

The presentation, "Local Food Production and Food Security in Remote Interior Alaska: Opportunities and Challenges," addressed these key points:

- · The current food situation in rural communities
- Challenges to improving local food production in rural Alaska, including poor soil, shortage of supplies, lack of time and cold weather
- Innovative models for rural Alaska, including a school greenhouse in Nome, the Chena Hotsprings Resort geothermally heated greenhouses and the Chickaloon tribal sustainable greenhouse
- Paths to improve food security in remote Alaska





Lettuce, squash, and cauliflower.



In addition to these conferences, Rader used her grant to attend the August 2009 National Association of County Agricultural Agents annual conference in Portland, Oregon, where she received the NACAA Communications Award for a PowerPoint Presentation, on which she presented a poster.

The award-winning PowerPoint discussed:

- · Soil characteristics
- Essential nutrients, including the values of primary nutrients N, P and K
- · Ways to improve soil fertility
- · Nitrogen and the nitrogen cycle
- Compost procedures, management and uses
- Vermiculture (worm composting) and Lasagna Gardening (making soil with layers of organic matter)
- Reminder that soil is a system: "By supporting soil life, you encourage healthier plans, save money and make less work for yourself."

In addition, the FRTEP grant allowed Rader to attend the Alaska SARE Conference. March 18-19, 2009, in Fairbanks.

### **Results:**

Workshop and conference attendees gained a better understanding of remote, Interior Alaska. Rural Alaskans gained a better understanding of the University of Alaska Cooperative Extension Service and the Tanana Chiefs Conference Federally Recognized Tribe Extension Program and how they can take advantage of each.

As a result of the presentations at the two Alaska conferences, Rader has received many invitations to travel outside her district, highlighting the need for additional FRTEP agents in Alaska.

Romanesco Veronica, a unique cauliflower variety, grown in Fairbanks.



#### Impacts or Benefits on Agriculture

Attendance at the Alaska conferences provided an opportunity to network with people concerned with the issues of local food production and agricultural sustainability from across Alaska.

In addition to providing valuable information to conference attendees, the PI increased her own knowledge in a variety of areas critical to the success of Alaska agriculture:

- · Season extension and high tunnels
- · Year round community support agriculture in Alaska
- · Fruit and berry crop research in Alaska
- · Soil fertility and organic systems
- Composting
- · Direct marketing to consumers
- · Raising chickens in Alaska
- · Alternative heating systems for greenhouses
- · Using fish waste for compost
- Funding opportunities available from USDA and other sources

This information will prove valuable in her own outreach programs in rural areas.



Grace Thomas shows off her award winning turnip at the Gwichyaa Zhee Gwich'in Tribal Agriculture Fair in