The weather this summer continues to surprise even the most “experienced Alaskan” as day after day brings sunshine and temperatures well above average. In 2012, Underground Weather reported 14 days of 70 or above, with five of those 14 hitting only 70 degrees. This year, we have experienced similar extremes but in the area of lack of rainfall as opposed to cold temperatures. Fairbanks has received only 1.59” compared to the four month to date average of 4.44”. The Mat-Su has had 3.01” to date compared to the average of 4.08”. The above normal temperatures combined with the below average precipitation has made it challenging for many producers around the state. First cutting of hay has some producers reporting a 30% yield, while farms under irrigation have reported yields in excess. Currently, the ten day forecast is calling for rain in south central and Fairbanks so I will keep my fingers crossed and hope this time they are right.

Several conferences took place this last month, one of which was the annual meeting of the Pacific Northwest Economic Region (PNWER). There were many presentations related to food production and marketing. If you were unable to attend or would like to review presentations that were given you can find them at Pacific Northwest Economic Region.

The Division of Agriculture continues to participate in discussions regarding the Food Safety Modernization Act (FSMA). FDA has extended their comment period on the Produce Safety and Preventative Control Rule until November 16th. This extension will allow time for parties to compare those regulations to the two newly released rules; the import rule and the 3rd party verification rule. All the various rules and other documents are available on the FDA FSMA website at Food Safety Modernization Act.

It is that time again to apply for transportation reimbursement payments. These payments are made through the Reimbursement Transportation Cost Program and provide partial reimbursements for costs associated with the production or transportation of an agricultural product. More information can be found at Reimbursement Transportation Cost Program.

The UAF Matanuska Experiment Farm is looking for input on how it can better meet industry needs. Please take the time to complete the survey and provide input at Matanuska Experiment Farm Survey.

As always if you have any questions or concerns please give me a call at 761-3867.

~ Franci Havemeister

“There is no such delight can bring, as summer, autumn, winter and spring.”

Wilham Browne
Alaska Grown Restaurant Rewards Program Has a New Look

The Alaska Grown Restaurant Rewards Program works to build relationships between farmers and restaurants across the state. The program reimburses food service operations for their Alaska Grown purchases to foster and encourage the use of local produce. When the program launched in 2012, the 40 participating restaurants incorporated produce from Alaska Grown registered producers into their menus. Restaurant owners reported the reimbursed funds allowed them to buy more from local sources; restaurants who were already buying Alaska Grown produce increased their purchases, and new restaurants were introduced to Alaska Grown products as a result of this incentive program. The result of their purchases benefitted forty-three producers statewide, and further boosted the state economy by keeping dollars in our local communities.

The 2013 program has been updated, including a brand new logo and streamlined application process, and is now receiving applications from businesses. Our goal is to reach more communities, increase restaurant participation, and increase the market for local food producers. Due to the federal funding source this program is limited to local fruits and vegetables; we hope it can expand to other locally produced foods in the future.

Meet intern Taylor Berberich

I am a May 2013 graduate from Washington State University, with a degree in landscape architecture. I grew up in Palmer, helping my dad in the fields and getting as muddy as possible. I was a member of the Palmer FFA Chapter and Alaska FFA Association, as well as the Ag-in-the-Classroom Program. From that I gained a huge appreciation for bringing agricultural awareness to the community, especially to kids. I love that my position with the Division of Agriculture takes me out to the community, promoting local foods! I hope to get back into helping with agriculture education now that I have finished college. Email Taylor for more information.
Alaska Farm to School Program Update

Haines School Garden Project
Haines has a very successful school garden program with produce being sold and served in the school cafeteria. The name of their garden is Starvin’ Marvin and has grown over the winter thanks to the school shop class building 11 new raised beds for use this summer. The new beds and new hoop house have expanded the gardening area and variety of crops they are able to grow.

Haines also has a new innovative program, ‘Garden Gate to School Plate’, designed to encourage local gardeners to dedicate space in their garden to supply the school with locally grown produce. The reason is simple; quality, freshness, and reduced transportation cost. The school is able to buy unprocessed foods and, thanks to the Watershed Council, Starvin’ Marvin Garden is able to coordinate school produce needs and serve as an aggregation point for the local growers. One could consider it a miniature version of a food hub!

On Farm Food Safety Workshops
On Farm Food Safety Workshops are touring the state. Over the past year we have hosted 9 workshops reaching over 100 people in 8 communities. According to participants of these workshops they are learning a lot, find the workshops full of relevant and useful information, and are very likely to recommend them to other farmers or producers. Workshops provide information, resources, and (when possible) on site examples for producers to learn about good agricultural practices for ensuring food safety practices on a farm. Workshops will help open new opportunity for farmers as well as help prepare them for the new FDA Food Safety Modernization Act. These workshops target both large and small growers, farmers’ markets, home gardeners, and anyone interested in learning more about ways to grow, handle, and distribute fresh produce in a safe way.

If your community is interested in hosting a workshop please contact Johanna Herron or Barb Hanson at the Division of Agriculture; Johanna.herron@alaska.gov, barbara.hanson@alaska.gov.

For updates, news, grant opportunities, and announcements join our listserv at: http://list.state.ak.us/sublists/akfarmtoschool/jl.htm.

Don’t forget to check us out on facebook at: www.facebook.com/AlaskaFarmToSchool.

For more information about the Alaska Farm-to-School program, or if you have any questions, contact Johanna Herron at Johanna.herron@alaska.gov or (907) 374-3714.
Pest Detection / Inspection Section

Seed Potato Field Trials

In June 2013, the inspectors participated in the Washington State University (Othello, WA) and at Oregon State University (Hermiston, OR) annual seed potato trials. The seed trials involved visually inspecting over 100 rows of seed potato plants (multiple varieties) originating from 8 states and Canada (various provinces). The visual inspection involved flagging for Blackleg, Leaf roll, Mosaic (plants that expressed symptoms that are commonly associated with Potato Virus Y (PVY) infection); seed borne-herbicide injury, calico, witches broom, mixed variety, etc. We verified suspect PVY infection with a lab test in the field. At the time of inspection, we were not aware of the origin and or grower of the seed. This information, as well as the results, was provided later that week. For more information on the seed trials go to [http://potatoes.wsu.edu/](http://potatoes.wsu.edu/).

Meet Elodea
Alaska’s First Freshwater Aquatic Invasive Plant

The Department of Natural Resources is leading a statewide strategy discussion to manage Elodea across Alaska. Soil and Water Conservation Districts (SWCDs) and other partnering agencies are coordinating local efforts.

Potential Impacts on Alaska:
- Degrades fish habitat and displaces native flora and fauna.
- Makes boat travel difficult and reduces recreation opportunities.
- Fouls float plane rudders.
- Alters freshwater habitats by decreasing flow and increasing sedimentation.
- Reduces value of waterfront property and may financially impact businesses associated with water related activities.

To identify Elodea look for these characteristics:
- Submerged leaves are densely packed among stem.
- Leaves in whorls of 3 or occasionally 4 unlike native species.
- Lighter green stem than the leaves & grow in a tangled mass.
- Leaves are 1/4-1/2” long and 1/8” wide.

Report sightings by calling 1-877-INVASIV or email Brianne Blackburn.
In mid July the Plant Materials Center (PMC) partnered with the Kodiak Soil and Water Conservation District (KSWCD) to remove Bohemian Knotweed (an invasive species) from a .25 acre area on Natalia Way in Kodiak, Alaska.

Bohemian Knotweed is a hybrid between Japanese Knotweed and Giant Knotweed. Used mainly as an ornamental plant, the plant spreads mostly by stem and root fragments and typically occupies in disturbed areas such as flood zones and along roadsides. Plants can grow 6.5 to 10 feet tall. Stems are hollow, somewhat reddish-brown, and usually branched. Leaves are mostly spade shaped but can be heart shaped towards the base of the stem. Bohemian Knotweed can be a problem because it can:

- Invade riparian areas
- Displace native vegetation
- Destabilize stream banks and increase sediment
- Alter nutrient quality of leaf litter

The Knotweed invaded Natalia Way after removal of a house. Originally planted as an ornamental, it quickly took over the disturbed site. Removal was difficult because it was located on a steep hillside. In 2012 crews used an herbicide to kill the plants. This July, a 6 man crew worked 2, labor intensive, 12 hour days to remove the plants by hand. Roots can grow 12 to 20 feet long and if left unattended the species can grow out of control quickly. The crew removed a dump truck of dead material and root base along with over a ton of rock in efforts to eradicate the Knotweed. Once the material was removed heavy equipment contoured and prepped the ground for hydro seeding. Hydro seeding consists of a mixture of grass seed, fertilizer, mulch and adhesive. After spraying this slurry a biodegradable (coconut fiber) erosion control blanket was placed on top to retain moisture and further prevent erosion. The KSWCD and the PMC will continue to monitor the progress of this revegetation project. It is expected to take several years to completely eradicate the Bohemian Knotweed from Natalia Way and establish the native grass species to the site.

Additional sightings of Bohemian Knotweed have been made in Kodiak but most are in residential areas. For more information visit the KSWCD website or contact Casey Dinkel at the Plant Materials Center.


Workers fill a city dump truck with bags of Bohemian Knotweed.

A biodegradable blanket is laid across the site after hydroseeding to prevent further erosion.

Crews work to remove Bohemian Knotweed by hand.
This article addresses dairy cow health and the Alaska dairy industry. The Office of the State Veterinarian has responsibility for oversight of the dairy industry in Alaska. The dairy program within the Office of the State Veterinarian is responsible for ensuring the safety of milk and milk products that are produced within the State. This is accomplished by adhering to the requirements of the Pasteurized Milk Ordinance (PMO), the Code of Federal Regulations (CFR), the State of Alaska Statutes, and the State of Alaska Regulations, Title 18 of the Alaska Administrative Code, Chapter 32 (18 AAC 32). These requirements regulate the production, transportation, processing, handling, sampling, examination, labeling, and sale of Grade “A” milk and milk products and other dairy products like cheese and ice cream.

Mastitis is defined as the inflammation of the udder. It can be associated with several different types of bacteria that can cause the inflammation. In most healthy cows, no microorganisms are present in the milk or the internal part of the udder, but can possibly be found in the teat canal and the sphincter of the teat. That is why it is important to disinfect the teat prior to milking and “strip” milk from the teat before the milking process. Any type of “watery, stringy, or clotting” milk should be considered a potential indicator of a mastitis infection. The bacteria that most frequently cause udder infections can be divided into either environmental pathogens or contagious pathogens. A pathogen is a bacteria or microorganism that can cause disease. The contagious pathogens are bacteria that are well adapted to survival and growth in the udder and are the main source of these organisms in the herd. These bacteria (strep agalactiae, staphylococcus, mycoplasma) spread during the milking procedure from one animal to another. The sources of environmental pathogens (coliforms like E.coli or Kleisella, campylobacter, environmental strep, Enterobacter) include manure, bedding, feedstuffs, dust, dirt, mud and water. Other environmental conditions that can increase exposure include: overcrowding; poor ventilation; inadequate manure removal from stalls, alleyways, feeding areas and exercise lots; poorly maintained free stalls; access to farm ponds or muddy exercise lots; dirty maternity stalls or calving areas; and general lack of farm cleanliness and sanitation. Milking dirty teats or having unclean hands during milking can also introduce organisms into the raw milk supply. In order to protect the dairy...
product consumer, the amount of bacteria in the milk must be limited and the growth of bacteria in milk during storage should be avoided. To reduce the growth of bacteria, milk needs to be cooled quickly and stored at a temperature of 45°F or less. Contamination of raw milk by pathogens is always possible during collection, processing or handling, although preventive measures may lower the potential risk.

Milk is a nutritious food and a very rich source of nutrients that allows for microbes to grow very rapidly. During the microbial growth in raw milk, some toxins may be formed that are heat-resistant and these toxins can cause disease. Some bacteria can also survive heat treatment, which is the exception to the rule. The heavier the pathogen contamination of the raw milk, the greater the risk of illness for the consumer. The proper pasteurization of raw milk eliminates likely pathogens in the product and reduces the risk of disease. Home pasteurization of raw milk can be accomplished by heat treating the milk on the stove for 30 minutes at a temperature of 145°F. All parts of the milk should reach 145°F, so thorough stirring is very important.

There are currently two Grade “A” dairy farms in Alaska that produce raw milk for transportation directly to a milk processing plant and are permitted by the Dairy Program in the Office of the State Veterinarian:

1. Northern Lights Dairy (NLD) located in Delta Junction was permitted in 1984. This processing facility is providing fluid milk to the area around Delta Junction and the Fairbanks vicinity, as well as the military bases and schools in that area. The NLD also makes ice cream and ice cream mix.

2. The newest processing plant in the Matanuska Valley is Havemeister Dairy Products located in Palmer which was permitted in 2012. They are currently operational and providing fluid milk products throughout Anchorage and the Mat Su Valley. Products provided so far are whole milk, 2 % milk, nonfat milk and half and half.

Raw milk in the state of Alaska cannot be sold except to a processing plant for manufacturing into packaged product. The requirements do not apply to a person who owns a cow, goat, or sheep and uses the milk from the animal for that person’s own use. Since the rules do not exclude the use of the raw milk for personal use, the term “cow share” is often used. The OSV has provided more information for “cow, goat, and sheep shares” at the following website: http://www.dec.state.ak.us/eh/docs/vet/Dairy/RawMilkSharesAKFactsheet.pdf.
September Conference Addresses Northern Agriculture

The 8th Circumpolar Agricultural Conference and UArctic Inaugural Food Summit, to be held in Girdwood Sept. 29-Oct. 3, will bring together world leaders to discuss northern agricultural issues and challenges.

Milan Shipka of UAF’s School of Natural Resources and Agricultural Sciences is president of the Circumpolar Agricultural Association. “We Alaskans need to be learning from and discovering that our agriculture means are more like those in other high latitude settings than those in the lower 48. Without being part of the circumpolar agriculture system, we have few opportunities to interact with agriculturalists from other countries in the circumpolar region.”

The conference, which occurs every three years, offers the opportunity for face to face interaction between... continued on next page
farmers, lay people, agency representatives, scientists and elected officials. The goal is to learn and share ideas about agriculture in the north. “I hope some of the ideas can stimulate new activity to help Alaska discover what it really means to produce food in a sustainable means for all Alaskans,” Shipka said.

Carol E. Lewis, chair of the event, said, “Much attention has been focused on food supplies in deep Africa and underdeveloped nations. It is time to draw attention to the fragility of the food supply in the nations of the circumpolar north. We must broaden the agriculturally productive areas of the world and the circumpolar north is certainly one of them. It can become a leading production area for the world’s feed and food grains and horticultural crops because of its productive soils and long solar days.

“The potential, particularly where geothermal is available, for energy efficient, controlled environments is here as are diversified livestock opportunities in reindeer, yak, elk, and bison; species adapted to the north as efficient converters of feed stocks into food stocks that are high in protein and low in fat. The message must reach the world about our potential here and we hope this conference leads the way in making that happen.”

The conference and summit theme is advancing food security and sustainable agriculture in the circumpolar north, building an integrated vision, and creating a process for sustainable food security in northern communities. The four objectives will help lead to a balanced approach between traditional subsistence natural resource access and agricultural production:

1. Educate world leaders on the critical nature of food supplies in the circumpolar north.
2. Encourage the exchange of information, material and technology of agriculture and rural development in circumpolar areas.
3. Establish and maintain relations with organizations that relate to the Circumpolar Agricultural Association and the thematic network on northern food security, University of the Arctic.
4. Discuss and define the barriers, challenges and opportunities of expanding regional food economies.

“The conference and summit adopt the perspective that food security is a driver in community development and sustainability,” Lewis said. “Rather than a commodity-specific conference, we will bridge diverse but common key areas to support, strengthen, and expand the food resources and northern community development. Very important long-term impacts will come from this meeting. If the conference and summit can do that, we have implanted a base from which food security and food supply in the circumpolar north and beyond can grow.”

The conference will be held at Alyeska Hotel and Resort. For information and registration, visit www.uaf.edu/cac/. The early bird registration deadline has been extended to August 20. Register today before it’s too late!

The conference is hosted by the University of Alaska Fairbanks, the Circumpolar Agricultural Association, UArctic and the Organisation for Economic Cooperation and Development.