

The Division of Agriculture Activities

January 3, 2014 Find us on the web at: http://dnr.alaska.gov/ag

Director's Office

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To add or remove your name from our newsletter list <u>click here.</u>

Questions or Comments? <u>E-Mail</u> or call 907-761-3864.

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Director's Note

The winter solstice has come and gone, the 2013 holiday season is behind us and now the 2014 year is just beginning to unfold. It is that time of year to recognize all of your accomplishments over the past year and write your new resolutions for 2014. Hopefully, this year's resolutions are new and exciting goals and not just a repeat of last year's!

As each New Year brings change, this year was no exception for the Division of Agriculture. At the close of 2013, PMC manager Stoney Wright retired. He was recognized for his 30+ years of service to DNR at the PMC Holiday Potluck on December 17, 2013. DNR Commissioner Joe Balash and Deputy Commissioner Ed Fogels attended the Holiday Potluck and presented Stoney with an Alaskan Flag and letters of appreciation in recognition of his dedication and service to Alaskan agriculture. I wish Stoney well in his new life of "retirement".

January is already upon us, which means that the legislative session is just around the corner; with the 28th Legislative Session beginning January 21, 2014 and running through April 20, 2014. Legislation that may impact agriculture will be covered in the monthly newsletter, but I encourage you to stay informed and provide public comment/testimony on legislation that interests you. Your voice is YOUR most powerful tool.

Chirikof Island and the cattle that have inhabited the island for over 100 years are in the news once again. The U.S. Fish and Wildlife Service (USFWS) are seeking public comment on their proposal to remove the cattle from Chirikof and Wosnesenski islands as well as other alternatives to removal. The USFWS has determined that the cattle are destroying archaeological sites and the habitat of native wildlife and bird populations due to overgrazing. The deadline to submit comment is January 31, 2014 and they may be sent to fw7_akmaritime@fws.gov.

On December 19, 2013 the Board of Agriculture and Conservation (BAC) voted unanimously to write a letter in support of the animals remaining on the two islands. Scientists have found that the Chirikof cattle are genetically quite unique when compared to other commonly used commercial breeds and concluded that the Chirikof cattle and their genetic samples may be worth conserving; both for their uniqueness and that they may have benefits for the cattle industry.

As always, please take the time to peruse the newsletter and mark upcoming conferences and events, such as the <u>Alaska Food Resource Working Group</u> on January 9th.

If you have any questions or concerns, please give me a call at 761-3867 or send me an e-mail at <u>franci.havemeister@alaska.gov</u>.

May you have a healthy, happy, and prosperous new year!

~ Franci Havemeister

"Goals are the fuel in the furnace of achievement." — Brian Tracy

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Agriculture Calendar

Alaska Food Resource Working Group. Plant Materials Center, 5310 S. Bodenburg Spur, Butte/Palmer. 9:30 a.m.; <i>Details:</i> <u>here</u>
Board of Agriculture & Conservation Meeting.
1800 Glenn Highway, Suite 12, Palmer. 1 p.m.; Details: here
Alaska Peony Growers Winter Pre-Conference
and Courses. BP Energy Center, 900 E. Benson Blvd.,
Anchorage. 2 p.m.; Details: Pre-Conference and Financial Class
Alaska Peony Growers Winter Conference
BP Energy Center, 900 E. Benson Blvd.,
Anchorage. 2 p.m.; <i>Details:</i> here

If you have an event that you would like to add to the calendar, please contact Lora Haralson.

Marketing Section 2014/2015 Alaska Grown Source Book Information Needed Soon!

The first quarter of the year is always an incredibly busy time for the marketing team, and this year is no exception.

Soon we will be asking producers from all over Alaska to submit their data for the 2014 Alaska Grown Source Book. Watch for a link in the next newsletter and on our web site. The Source Book is the 'go to guide' for finding Alaska Grown products; the Division will print and distribute over 5,000 copies and has spent hours upgrading the online version of the tool. Don't forget this is **FREE ADVERTISING** for you and your farm business, so watch for the link with relevant information and deadlines. Remember that we CAN NOT include your data unless you respond to the information request each year. If your farm business was included in 2012, we cannot automatically include you in 2014 – we need your permission each time. Also, just because you signed up to be a member of the Alaska Grown program, DOES NOT mean your information will be included in the 2014 Book. Again, you must respond to the new request for information each time.

We will also soon be announcing the opening of application periods for upcoming grant cycles. Visit the "<u>Grants</u>" section of our website for application links. We will speak about the grant options at upcoming producer meetings and also plan to host multiple online webinars. Watch the next newsletter, our webpage, and Facebook for announcements.



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Quest Volunteer Completes VISTA Year of Service

It seems like such a short amount of time has passed since I began my term as an AmeriCorps VISTA, but already, my year is almost up. At the end of January I will be leaving my post as the Farmers Market Quest Program Coordinator, feeling grateful for the opportunity to contribute to such a great effort—increasing access to fresh, healthy foods to low-income Alaskans. Although its future is uncertain, with widespread community support and the successes of this year, I have high hopes for the program.

This is the third year of the Farmers Market Quest Program and it has come a long way. Six markets and four farm stands from around the state are now participating. This summer they served 530 individual SNAP (aka Food Stamp) beneficiaries, resulting in nearly \$17,000 in sales—triple that spent last year. With the addition of a robust matching incentive, in which markets matched up to the first \$20 spent with a Quest card, the program brought in almost \$30,000 for farmers and other food vendors. Not to mention the \$85,000 in debit/credit transactions accepted because of the card reader machines they were provided.

Not only was the program a success, but my experience here was invaluable. I was lucky enough to be able to meet with numerous local food advocates around the state, from farmers to market managers to concerned citizens. While they were frank about the challenges that face food production in Alaska, their passion and ideas only served to strengthen my faith in the local food movement. I leave with an arsenal of new lessons, skills and experiences to serve me as I continue my career promoting fresh, nutritious, Alaska Grown foods!

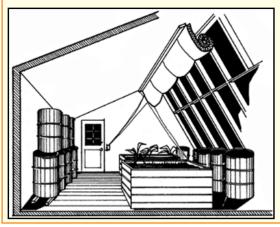
> Wishing you a successful 2014! ~ Kyla Byers

Considering an Attached Solar Greenhouse to Help Supplement Your Heating Costs?

Winter is the perfect time to start designing your Attached Solar Greenhouse. With proper planning a solar greenhouse can be useful to grow plants certain times of the year if temperatures are regulated, help heat your home, and can even assist in heating your water supply!

Below are some tips from <u>UAF Cooperative Extension</u>. For more detailed information and to start planning please visit their <u>Attached Solar Greenhouse page</u>.

- The greenhouse should face south if the north side of it is not transparent.
- Use heavy insulation in the end walls and roof.
- Don't use glass in the roof.
- Don't install glass in the end walls unless you are prepared to leave movable insulation over the glass permanently during the winter months.
- Use heavy insulation at the slab or other floor perimeter.



Solar Greenhouses work by the sun passing through the windows and warming dark surfaces of concrete floors, brick walls, water-filled drums or other "storage masses." Once heat is stored it will remain until the sun sets and indoor temperatures drop. This stored heat can help to raise the temperature inside your home by natural convection or drawn inside your home by a low powered fan. Designs can be customized to suit the needs of your family, whether it is growing plants or heating your home or both!

Plant Materials Center

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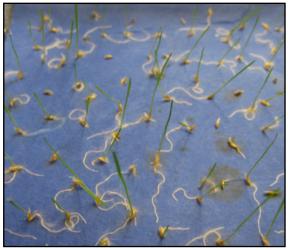
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Plant Materials Center

The Importance of Seed Testing

The Alaska State Seed Laboratory is part of the Alaska Plant Materials. Center. The seed laboratory has been in operation for more than twenty years. The seed lab is a member of the Association of Official Seed Analysts (AOSA). AOSA members are seed analysts from official state, federal and university seed laboratories in the U.S. and Canada. When seed is tested in one of these laboratories the same rules and procedures for seed testing are followed which ensures



Bluegrass germination test in progress

standardization from analyst to analyst and laboratory to laboratory.

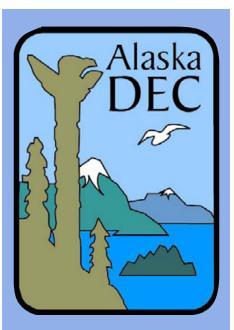
Seed laboratories are an important link between the seed producer and the customer. By testing the seed, the laboratory ensures that the seed producer will receive fair price for his/her crop. On the other side, the laboratory protects the customer from paying high price for low quality seed.

The Alaska State Seed Laboratory tests seed for several state and federal agencies including, but not limited to, the <u>Department of Transportation</u>, the <u>Department of Natural</u> <u>Resources</u>, the <u>Bureau of Land Management</u>, and the <u>U.S. Fish and Wildlife Service</u>. Other customers include large and small scale seed growers, local greenhouse businesses, environmental firms, and hobby gardeners.

Alaska Seed Laboratory performs the following seed tests: Germination Test, Purity Test, Noxious Weed Test, Tetrazolium (TZ) Test, Seed Moisture Test, Seed Weight (seeds/g or seeds/lb), and Seed Identification.

How do you know what tests are needed when? When you have a newly harvested and cleaned seed lot you need purity, germination, and noxious weed tests to be able to sell the seed in the state of Alaska. When you have a seed lot that has been sitting in storage for more than 18 months since the last germination test, you will likely need a new germination test conducted. Purity and noxious tests do not need to be repeated unless the composition of the seed lot is altered (re: cleaning or mixing with other seed lots). TZ tests are used when customers need quick results on seed viability. Results are available within 48 hours. Seed moisture tests are conducted mostly on grains. Grains need to be dried under a certain moisture percentage to ensure safe storage. Seed weight tests determine the number of seeds per unit.

For more information or if you have any questions <u>email Lyubo Mahlev</u> or call (907) 745-8782.



Environmental Healt

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Alaska Department of Environmental Conservation: Division of Environmental Health

Winter Herd Management

Cold weather can have a drastic impact on the performance of cows and calves especially in the extremes of Alaska. Understanding how animals respond to the frigid climate can help farmers manage their resources to prevent weight loss, body condition or performance during the winter. The result will be a healthy herd and good calf crop in the spring.

The thermoneutral zone is the range of temperature where weight gain and metabolic efficiency are at their peak, the animal's comfort zone. So when cattle are in their thermoneutral zone, they do not use extra energy to maintain a constant core body temperature. For adult cattle, 32° to 55°F is the range, for baby calves its 45-60°F. The term "lower critical temperature" is the point where cattle begin to experience cold stress and require more feed/energy to maintain their core body temperature. For cattle with a normal winter coat that is dry, the lower critical temperature is 32°F. If the coat is extra heavy, it drops to 18°F. But, environmental factors such as wind (wind chill factor), relative humidity and precipitation (snow, sleet or rain) can make a higher ambient air temperature seem colder to the livestock. This is called the "effective temperature."

The most practical and cost efficient way to deal with the stress of the cold temperatures is by providing some sort of shelter from wind and precipitation. Shelter can be in the form of a building, wind break or natural protection. This shelter will have cattle experience a higher effective temperature when the thermometer is dropping. Building new wind breaks and shelters can be expensive and time consuming. But effective pasture rotation can ensure cattle are in areas with natural shelter during the coldest winter months.

If shelter is limited and cattle are not able to avoid cold stress, they will need additional feed to increase their metabolic rate and generate the heat needed to keep the core body temperature stable. So when they are stressed by the cold temperatures or inclement weather they need good quality feed and will eat more to stay warm. Livestock may need to increase feed intake by 20% to meet this energy demand. This can mean an extra 4 to 5 pounds of good quality hay or 2.5 to 3 additional pounds of grain supplement.

In general, for every one degree below the critical temperature a cow's energy requirement increases one percent. You must make sure there is an adequate source of water available since decreased access to water can reduce feed consumption and further increase the impact of the cold stress.

Also remember that wet or muddy pasture will also have an effect on energy and nutrient requirements of livestock. Estimates vary but having livestock in wet bedding or muddy pasture can increase feed intake by 20 to 30%. Ideally you want to rotate feeding areas and increase feed supplement for cattle that may have to deal with constantly wet conditions. This is especially of concern in the spring during calving season. If cattle are calving in muddy or wet conditions, calves can experience fatal cold stress very quickly.

In less severe conditions cold stress, can have a negative impact on the immune

system of the cows and calves predisposing them to infection and the effects of parasites. Your best management strategy is to provide shelter from wind and precipitation and ensure that calves have colostrums in the first 12 hours after calving.

Cattle are healthier, have more successful pregnancies and have better rates of gain when they have access to quality nutrition and facilities during the cold winter months. Good management and preparation pay big dividends.







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UNIVERSITY OF ALASKA FAIRBANKS School of Natural Resources & Agricultural Sciences

Friends Tackle Challenge of Growing Peonies in Permafrost

Story contributed by Nancy Tarnai

Two Fairbanks women have answered the age-old question about whether friends remain friendly while operating a business together.

"Yes," say Janice Hanscom and Carolyn Chapin, owners of Polar Peonies, the state's first privately owned commercial peony farm.

"We had a few tiffs," Hanscom said. "But we decided the friendship was more important. We're both strong women." The solution was to put each in charge of one area; Hanscom is in charge of production and Chapin marketing.

"This allowed us both to be in charge and yet have one business," Hanscom said. "It's worked very well for us," Chapin said.

Both women come from agricultural backgrounds. Chapin grew up in Palmer working in a greenhouse, belonging to FFA and earning a degree in Natural Resources Management at the University of Alaska Fairbanks. She raised livestock for years and prefers peony growing to shoveling manure.

Hanscom was raised on a potato farm in Maine, earned a biology degree at the University of Maine and worked for UAF's School of Natural Resources and Agricultural Sciences for decades.

While employed at the Georgeson Botanical Garden, Hanscom learned about peonies and in 2001 suggested to her friend that they grow them on Chapin family land on Chena Ridge. All Chapin knew was that it was a flower, but since then both women have learned a tremendous amount and offer workshops to share their knowledge with newbies. Their advice? Be patient. "You're not going to see a return in short order," Chapin said. "Do your homework. Start small."

"We made mistakes that others can learn from," Chapin said. First off, the black spruce forest land they chose was permafrost soil with poor drainage. Clearing the land they got the tractor sunk up to its axles. "We've had a lot of adventures," Chapin said. "We've learned how not to do this."

Still, they have 4,000 peony plants in the ground and sell their blooms to not only locals for events and weddings, but have buyers from all across the U.S. and as far away as Asia. They helped form the Arctic Alaska Peony Cooperative, are active in the Alaska Peony

Growers Association and run a packhouse for themselves and seven other farms. Hanscom visited New Zealand in 2009 to study peony operations.

Curiously enough, both admit you won't find vases of peonies decorating their homes during the summer; they're too busy to bother. Chapin takes time off from her job advising biology and wildlife students at UAF and Hanscom is retired.

"It's been a blast," Hanscom said. "I wouldn't say it's successful. We are growing peonies but it's a challenge."

The soil on their farm is so bad that both admit they'd be better off pulling up their stock and moving on. "I'm just plain stubborn," Hanscom said. "I am going to grow peonies there."



Janice Hanscom (left) and Carolyn Chapin enjoy growing peonies together in Fairbanks. (Photo courtesy Polar Peonies)

"We will," Chapin added. "We are learning how to farm in the Interior on marginal soils."

Recalling a highlight of the venture, Chapin said she did a happy dance the first time she shipped a box of peonies to Hawaii. Usually brides find them through the internet and then inform florists in their area where peonies can be purchased in July or August. "We sell everything we've got," Chapin said. "For every one stem we sell we could sell eight more."

www.polarpeonies.com

This column is provided as a service by the UAF School of Natural Resources and Agricultural Sciences and the Agricultural and Forestry Experiment Station. Nancy Tarnai is the school and station's public information officer. Email her at ntarnai@alaska.edu.