

# INFORMATION

Yukon Agriculture Branch Quarterly Bulletin

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## MESSAGE FROM THE AGRICULTURE BRANCH

Over the winter, the Agriculture Branch conducted a survey of Yukon livestock producers to gather information on steps that will enable further development of the livestock industry. One of the limitations identified in sector development was limited meat processing infrastructure. Producers were asked a number of questions on what they raised now, how it was processed, what improvements they would support and if those improvements would encourage them to expand production.

As was expected, just about all livestock producers are currently involved in some form of processing their animals whether it is for farm gate sales or retail sale of animals that go through the mobile abattoir. Most respondents said they would be willing to pay the same to a little more than it costs them now if they could have abattoir and processing services provided. Considering that current producers have experience in processing their livestock, it wasn't surprising to hear that a high percentage of respondents said that they would be willing to participate in the work of providing processing services if it would keep their costs down. Opinions were mixed on who should run the facility, what services it could provide and how it should be funded but the answers are relevant to any investor looking to develop this step in the process.

Beyond the responses the questions asked, it was also really interesting to read the additional comments provided. Comments ranged from how to structure service costs, to local supply of product, to the need for a business plan and potential additional uses for a facility. There were also thoughts about the requirements for grading and standards for local products entering retail markets and the need for partnering between producers, processors, retailers and the consumers to insure everyone gets what they need to be successful.

Earlier this winter Kevin Bowers and I had the opportunity to visit with the Kruze family at McCabe Creek and the Bradley's at Pelly Farm to get some of the views of central Yukon livestock producers on how they could benefit from improved processing facilities. These visits involved discussions on partnerships where it made sense to grow grain, finish animals for market and develop business relationships. The survey was a good opportunity to open the discussion and I encourage anyone getting into the business or even getting out of it to give us ideas on how, or what is needed, to encourage local livestock production.

Inside this newsletter is a more detailed breakdown of the responses from the survey. Anyone that didn't get a survey and would like one should send us a note and we will send one out to you. Of course any thoughts in addition to the questions asked are still gratefully received. Thanks to all those that replied.

Best wishes for good spring planting conditions,  
Tony Hill, Director, Agriculture Branch

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## CIRCUMPOLAR AGRICULTURE CONFERENCE 2010

CAC 2010 ALTA, NORWAY  
SEPTEMBER 6-8, 2010

Applications to attend the 7th Circumpolar Agriculture Conference in Alta, Norway are being accepted until May 7 under the Circumpolar Education Exchange Initiative of the Canada-Yukon Growing Forward program. If you have an idea for a presentation or have reason to participate in the conference the time to apply is now.

Yukon has sent farmers, agri-business people, researchers, First Nations and 4-H delegates to previous conferences. Applicants need to fill out a Growing Forward application form available at [www.agriculture.gov.yk.ca](http://www.agriculture.gov.yk.ca) or drop by the Agriculture branch to pick up an application. There are a limited number of sponsorships available. Proposals will be evaluated according to the Circumpolar Education Exchange Initiative guidelines. This is a great opportunity to exchange information and develop contacts with other circumpolar agriculturalists and it is only available once every three years.

### Details of the Circumpolar Education Exchange Initiative

This initiative will provide opportunities for farm managers, workers, youth and service providers to participate in information exchange with other circumpolar agricultural regions.

The primary function of this initiative will be to sponsor participation at circumpolar agriculture conferences, such as Circumpolar Agriculture Conference 2010. Emphasis will be placed on information exchange that provides for the sustainability of circumpolar agriculture.

### Eligible activities

Activities may include, but are not limited to, travel for presentations, information gathering, network development, youth development or other activities that contribute to the development of circumpolar agriculture, such as accommodations, meals and conference registration fees.

Proposals for attendance should contain an outline of benefits to Yukon agriculture, and an information dissemination plan

CIRCUMPOLAR AGRICULTURAL ASSOCIATION  
CAC 2010 Secretariat: Bioforsk, Arctic Agriculture and Land Use Division

### Call for Papers and Posters

The Circumpolar Agricultural Association (CAA) announces the 7th Circumpolar Agricultural Conference to be held in Alta, Finnmark, Norway September 6 – 8, 2010. This year's conference is titled Circumpolar Agricultural and Land Use Resources – prospects for Productions and Industries.

### Background

The CAA is a non-governmental organization which aims to be a forum for people involved in Northern Agriculture as farmers, advisors, politicians, and students. To date, five conferences have been held in countries throughout the circumpolar world, including Canada, United States, Norway, Iceland, and Sweden. Topics are broad in scope and involve all northern regions of the world. For more information, please refer to the CAA website ([www.caa-cac.org](http://www.caa-cac.org)).

Agriculture throughout all northern latitudes is facing mounting challenges but also opportunities due to the global climate change situation. It is important to be aware of how farming will be affected and how to adapt to and combat climate change. Opportunities and challenges can both affect productivity, costs and markets

outlining how the applicant plans to share the knowledge with other members of the agricultural industry.

### Eligible funding

Assistance may be provided for up to 100% of the actual cost for conference attendance. Reimbursement for travel costs must be consistent with Yukon government travel expense guidelines. The maximum available, based on receipts provided is \$5,500. Deadline is May 7, 2010.



for agricultural and other natural resources. The world food situation is rapidly being redefined by income growth, climate change, high energy prices, globalization and urbanization. The role of agriculture and food production is receiving renewed global attention.

There is also strong pressure to increase efficiency and improve productivity while lowering costs. The challenge is to combine productivity and competitiveness with more traditional aspects of multifunctional agriculture. Agriculture is not just about the production of food and fibre but also includes genetic resources and biodiversity, landscape preservation, food security and safety, cultural heritage and rural viability. Our northern climate gives rise to commercially interesting gene resources, organisms and compounds.

## CIRCUMPOLAR AGRICULTURE ASSOCIATION - CALL FOR PAPERS

There is a new focus on the potential of increased export of traditional products based on natural resources from the Circumpolar areas. Quality aspects such as clean nature and good animal and plant health are stressed as comparative advantages. This is in line with demands from the customers who increasingly are focusing on quality aspects of food, like the origin of raw materials, processing methods, and traditional and ethically sound production chains.

To be sustainable, arctic communities need stable sources of income, probably through a mix of traditional harvest of natural resources and modern industry and tourism. It is expected that through the exchange of information and networking amongst various stakeholders during conferences such as the Circumpolar Agricultural Conference, significant developments will occur. The primary activity of this event will be the sessions which will feature speakers from throughout the circumpolar region addressing a wide variety of topics related to northern agriculture.

### **Agricultural and Land Use Resources – prospects for Circumpolar Productions and Industries**

Participants are invited to present papers or posters on any of the following sub-headings:

- Global climate change; challenges and opportunities in northern agriculture and land use
- Unique qualities in circumpolar food products – a basis for business development
- Traditional knowledge as a basis for commercial exploitation/ business development of our natural resources.

- Rural tourism industries in circumpolar areas supports multifunctional agriculture.

More details on the conference such as tours, accommodations, travel information and fees will be available on this website.

Deadline for submissions is April 15, 2010.

## THOUGHTS ON CLIMATE CHANGE

Farmers know how to adapt to weather; it is part of the business. The concept of climate (weather over a longer time frame) has been studied around the entire globe. As we hear frequently the climate is changing. It has always changed and regardless of people it will continue to change.

The concern right now is that we are altering or accentuating the natural climate change through high rates of greenhouse gas emissions, meaning the climate is going to change or fluctuate more than normal. On a global scale this increased level of change is going to have some positive and some negative effects.

For Yukon agriculture it would appear that in general it is a good news story. The forecasted effects of this future climate is for a slightly warmer and wetter Yukon. A warmer climate could result in higher yields or in new crops being grown. There will hopefully be fewer frosts and a longer growing season. Increased precipitation could be positive. In all likelihood it will remain important to keep the irrigation system available, but timely rains could reduce irrigation requirements.

One concern with the warmer Yukon would be the frequency of extreme events, such as heavy rain that causes erosion on slopes, or hail,

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N-9269 Tromsø, Norway  
post@bioforsk.no  
Tel: + 47 45 22 05 00  
Fax: + 47 7765 51 43

or a mid summer 30°C heat wave. There could also be negative effects of new pests and weeds that have not been a concern in the past. This means that, as in the past, farmers will need to continue to adapt and adopt technologies that make sense.

One thing to keep in mind when we look forward to adopting new technologies or changing practices is the variability that will come with a changing climate. Technologies or practices should be adopted if they

- reduce the emissions of greenhouse gases
- improve the farm's bottom line, while at the same time
- help to reduce your risk to a variable climate (i.e. reduce exposure to a heat wave, a cold spell, or storm events)

One example of an affordable practice is the use of high tunnel row covers. These provide for optimum yields per area reducing greenhouse gas emissions, reducing the exposure to extreme weather events through covering the crop, and protecting the crop from storms which, in turn, should improve the bottom line.

When new technologies or practices can meet the above criteria they are well worth consideration as we adapt to the changing conditions faced by farmers in Yukon.

## TIPS AND TRICKS

## FLOATING ROW COVERS

Growing vegetables in Yukon can be a challenge. A short growing season, frequent frosts, erratic weather, birds, squirrels and insects challenge us constantly throughout the summer.

One product that can solve many of these problems is floating row cover. This product is made of a light-weight woven synthetic material that allows air, light and water through while providing a greenhouse effect for crops growing beneath it. Row covers hold heat and moisture to hasten germination and harvest, raises CO<sub>2</sub> levels which increases yields, reduces the drying effect of wind, and provides several degrees of frost protection. In addition, row cover provides a physical barrier to prevent insects from damaging crops such as turnips, radishes, broccoli and cauliflower.

Row cover can be used early in the growing season to get cool season crops off to an early start. They work by trapping the sun's heat and warming the soil an extra one to three degrees. The material floats on top of the plants as they grow while the cover's edges are secured down with soil. After four to six weeks remove the covers from your cool-weather crops when there is less risk of frost.

There are a variety of weights and fabrics available that provide a range of frost protection while still maintaining good light transmission. Floating row covers come under a range of trade names such as Remy or Agribon. They are

available in rolls five to 12 feet wide and in various lengths. The material can be reused for a few years if it is handled carefully to prevent tears.

To discuss this or any other growing technologies please feel free to contact Matt Ball, Agrologist, Yukon Agriculture Branch at (867) 393-7410.



## GROWING PEAS

Growing peas in Yukon is not a new idea. Field peas provide a good feed grain or, alternatively if the seed does not form, can be used as forage. In the Peace River region of Alberta and British Columbia field pea seed can achieve yields of over 5 T/ha when grown in the presence of irrigation and fertilizers. However, attempts through the 1980s to mature peas around Whitehorse were met with limited success.

In 2009, we thought we would try it again and focus on new, shorter season varieties that offer hope of consistent maturity, especially in the Whitehorse area. The trials took place in central Yukon and at the research farm by Whitehorse. The varieties used were Meadow, Polstead and Agazzi.

The peas were seeded on May 29, at a rate of 210 kg/ha. All sites were irrigated and fertilized according to soil test recommendations. Field pea seed was inoculated with

*Rhizobium leguminosarium* bacteria to enhance nitrogen fixing ability and maximize yields. Inoculant was added to the seeds at seeding (you can purchase pretreated seed as well).

The results of the trials were beyond expectations. Yields in central Yukon were over 6 T/ha across all varieties. Varietal differences at the research farm were more variable, with Polstead achieving over 5 T/ha, Meadow yielding 4.6 T/ha, and Agazzi yielded 4.4 T/ha. All of these yields were exceptional and compare favorably with the results found in southern Canada.

Field peas may prove to be a good crop choice as part of a rotation for feed rations or forage.

For more information on the trial results, check out the Research and Demonstration 2009 Progress Report on the Agriculture's Branch website (under publications) [www.agriculture.gov.yk.ca](http://www.agriculture.gov.yk.ca).

## SURVEY SYNOPSIS

### TOWARDS THE DEVELOPMENT OF MEAT PROCESSING INFRASTRUCTURE IN YUKON

During December and January, the Agriculture Branch surveyed Yukon livestock producers to get their views on how to develop meat processing infrastructure that would assist in market access and expansion of the livestock sector. To date, we have received 26 written responses and conducted both formal and informal interviews with another half-dozen producers to try to gather this information.

Here is a summary of the responses gathered and a selection of the comments received:

- twelve producers raised beef,
- twelve producers raised chickens,
- eleven raised turkey,
- nine raised pigs,
- four raised goats,
- four raised sheep,
- two producers for each of elk, duck, rabbits and geese, and,
- one each raising pheasants and bison.

All but two producers participated in slaughter, processing and marketing their livestock. Most often labour in this process was provided by friends, family, other farmers or customers and paid for with product or an exchange of labour or cash.

Sixty-five percent of respondents said that they would be willing to pay the same or more than they pay now to have a service provider do the butchering. In terms of what they would pay, red meat producers were willing to pay more than twice as much per pound as the average poultry producer for these services. Red meat producers typically pay a butcher to process to meal size portions and currently pay between

\$0.50-0.75/lb. The survey reflected this with the response being that red meat producers would pay an average of \$0.63/lb for processing while poultry producers would prefer to pay an average of \$0.30/lb.

Fifteen producers indicated that they would be willing to take a food safe/handling course that would allow them to work in a processing facility, to reduce the costs of using a service provider.

Eighteen producers would participate by transporting their animals to a fixed abattoir/processing facility. However, almost all producers that lived outside an 80 km radius of a facility said that they wouldn't be able to use the facility due to the live animal transportation costs.

When asked what ownership/operational model producers would prefer for a meat processing centre, the response was mixed. Seven thought it should be privately owned and operated, seven thought the government should own and operate, six thought producers should do it and five didn't respond.

Comments on ownership ranged from concerns that private ownership could lead to restricted use and cutting corners to save money, to others seeing private ownership as a reason to be efficient and creative. Proponents of a producer-operated facility liked the idea of the facility being managed by the people that used it. Many comments received supported the continuation of farm-gate sales and not being forced into supporting inspected processing

facilities. Many comments referred to the importance of a business plan. Some pointed out that current production didn't warrant a meat processing facility and that government price supports or market guarantees for products were required to improve the economics of small scale livestock production before a processing centre would be required.

Some producers wanted to be able to just rent the facility or pay by the day for a processing room or cooler space. In addition, some saw potential to use the facility to teach courses in food safety, processing and value-adding products.

The next steps will be to look at various business and operational models for improved meat processing infrastructure and to get a better grasp on the resident market for locally produced meats. The outcome will be information that any proponent will need to make a decision on the scale and scope of the project and what inputs will be required to make the project successful.

If you have thoughts on the subject or would like to fill out a survey call the Agriculture Branch or send us a note and we would be glad to gather the information.



## SPRING FERTILIZING WITH MANURE

Placement and timing of fertilizer is critical for the management of nutrients on your farm. With the new Yukon Agricultural Association owned manure spreader this article takes an upclose look at manure as a fertilizer.

Manure is a valuable source of nutrients and organic matter and when used properly can be a valuable resource to improve crop production and soil quality. Using manure can provide a low cost alternative to chemical fertilizers.

Spring is an excellent time for the application of manure (after the soil is completely thawed); plants can efficiently use nutrients and the high uptake reduces losses associated with runoff to surface water bodies, leaching to ground water or transformation to nitrous oxide.

Calculating application rates depends on the soil type, the nutrient demand of various crops and the nutrient content of the manure. It is a good idea to get a laboratory nutrient analysis of the manure and a soil test recommendation. Soil sampling can give you an idea of the nutrients available to plants and other chemical factors important for growth. Soil nutrients vary from year to year and likely from field to field.

### How to take a soil test

You want to make sure to take representative samples from each area. Ten random samples are recommended from each area. These samples can be mixed in one sample bag. Samples can be taken with an auger, available from the Yukon Agriculture Branch. Each sample should be placed in a well labeled and sealed plastic bag (zipper bags work well). Drop

your samples off at the Agriculture Branch to be sent to the laboratory. Soil samples can also be scheduled by the Agriculture Branch for staff to come and sample your field with you.

Later in the season, plant tissue analysis can evaluate the effectiveness of the fertilizer recommendations and can diagnose problems with crop nutrition production. An adequate sample must contain 20 to 50 individual plants. Samples should be taken in the morning (or on cool or cloudy days) because heat and moisture stress often occurs during the mid-day and mid afternoons, on hot sunny days or immediately following a rain. Plant samples should be cut with a clean, sharp, rust free knife, blade or scissors. Clean plastic containers should be used for sample collection. In subsequent handling, a clean brown paper bag can be used.

Commercial fertilizers do not generally have the same soil

building properties or contain as many micronutrients as manure. However, manures and composts are generally too low in phosphorus for many crops. A combination of manure and commercial fertilizer can be used to produce the balanced fertility level required.

Did you know...

\*\*A 454 kg cow will produce about 13.6 metric tonnes of manure per year, containing approximately 78 kg of nitrogen, 21 kg of phosphorous and 67 kg of potassium!

\*\*Soils tested throughout Yukon since 1986 showed an average of 87 percent nitrogen deficiency.

*Adapted from Government of Alberta, Agriculture and Rural Development, Government of Saskatchewan, Agriculture, and the Yukon Gardener's Manual*



We are sad to announce that the Yukon agriculture industry recently lost a friend and supporter. Pete Jensen passed away recently. Pete was always proud of the production from his ranch south of Carmacks, the image of his stoic character is etched in our souls. He will be missed.

## WEED MANAGEMENT

Integrating a combination of different practices to manage weeds provides the best solution. Reducing the reliance on one specific control technique reduces the possibility of weed adaptation to that technique.

Proper weed management can include:

- managing the resource to prevent weeds from invading;
- proper identification and knowledge of invasive weed species;
- inventory, mapping and monitoring of weed populations and damage;
- making control decisions based on knowledge of potential damage, cost of control method and environmental impact of the weed and control decision;
- using control strategies that may include a combination of methods to reduce the weed population to an acceptable level; and,
- evaluating the effectiveness and effects of management decisions.

A pre-seeding burnoff can be an effective way to control weeds before seeding. To decide on what herbicide to use, scout each field prior to spraying to see what weeds are present, the concentrations and the stage of growth. Always read and follow product labels and directions and determine that the chemical is registered for use on the weeds of concern. There are many effective herbicides available for pre-seeding control such as glyphosate.

After applying herbicides, fields can be scouted again to determine the effectiveness of the treatment. Weed patches that are not affected should be noted and checked, as they may be herbicide resistant. Things to note are a change in leaf colour and herbicide contact on the leaf (herbicide will leave a uniform pattern).

In rotation with herbicides weed management could include shallow pre-seeding tillage, post-seeding tillage, hand pulling, summer fallowing, seeding competitive species, or mowing. Always keep in mind the best weed control is to prevent weed introduction.

*Adapted from Government of Alberta, Agriculture and Rural Development*

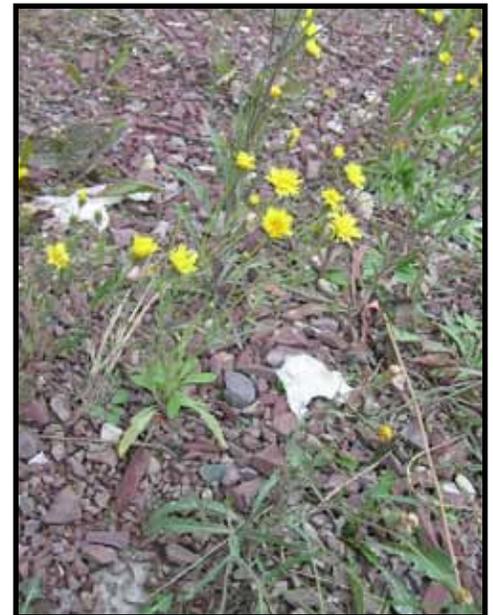
### Regulation Reminder:

In Yukon, farmers require permits for using pesticides on their own land when:

- using pesticides within 30 metres of an open body of water;
- using Restricted pesticides;
- applying pesticides from an aircraft; or,
- possessing or using particularly toxic pesticides as identified in Schedule 4 of the Pesticide Regulations.

If a farmer hires a person or business to apply pesticides, that person or business must have a Pesticide Applicator Certificate and Pesticide Service Permit.

One problem weed found in Yukon is narrow-leaved hawk's-beard. Narrow-leaved hawk's-beard is a winter annual and a prolific seed producer. Winter annuals are huge users of water, a valuable resource in the Yukon. Early control of the weed can save up to eleven percent of the available soil moisture. At the rosette stage it looks similar to a dandelion. The best control occurs before the four leaf stage, or soon after emergence.



Narrow-leaved Hawk's-beard

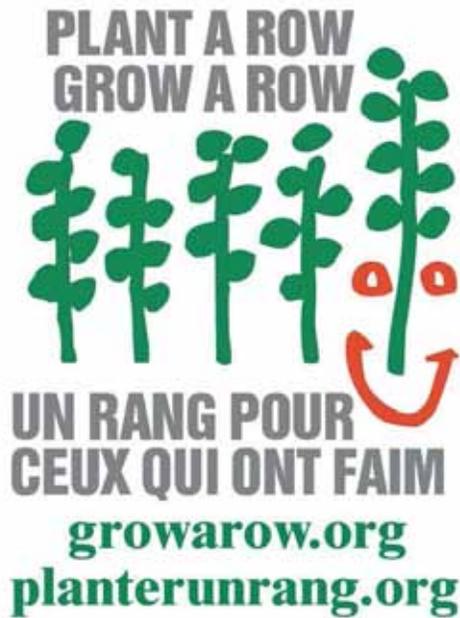
Two farmers, one from Tagish and one from Mayo, were having a friendly chat.

The farmer from Mayo asked the farmer from Tagish how big his home parcel was, and the fellow answered, "Oh, I'd say I own about a hundred acres. How 'bout you?"

The farmer from Mayo replied, "Well son, if you got in a truck and drove from sunup to sundown, you still wouldn't reach the end of my property."

The farmer from Tagish responded, "Yep, I had a truck like that once."

## PLANT A ROW - GROW A ROW



Everyone loves fresh veggies. Plant an extra row in your garden and donate the harvest to people in need through the Whitehorse Food Bank. All fresh produce is needed and will be appreciated!

It's as easy as 1, 2, 3!

- 1) Plant your seeds.
- 2) Harvest your produce. Wipe the excess soil off and deliver to the Food Bank during drop off hours.
- 3) Feel good about helping your community!

The Food Bank is located at 306 Alexander Street.

Phone: (867) 393-2265

Drop off times:

Monday & Wednesday 1 p.m. to 4 p.m. and

Tuesday & Thursday 9 a.m. to 12 p.m.

[www.whitehorsefoodbank.ca](http://www.whitehorsefoodbank.ca)

Check out the nation-wide campaign at:

[www.growarow.org](http://www.growarow.org) or call 1-877-571-4769

## ANNOUNCEMENTS

## RENTAL EQUIPMENT

Yukon Agriculture Association has a new no till seed drill and an aerator available for rent. For more information contact the Yukon Agricultural Association (867) 668-6864 or [admin@yukonag.ca](mailto:admin@yukonag.ca)

## ORGANIC VERIFICATION OFFICER

Seeking an individual with membership in the International Organic Inspector Association (IOIA). If you are interested please contact Claire (867) 393-1949 or Matt at the Agriculture Branch.

## FIREWEED COMMUNITY MARKET

"It's about more than good food"

First market is scheduled for May 20th, and every Thursday 3 p.m. to 8 p.m. for the rest of the summer.

## ABATTOIR

The mobile abattoir is available for inspected slaughter services of cattle, hogs, bison, elk, goats and sheep. The mobile abattoir can also provide inspected transportation of the meat to a processor for further processing. To book the mobile abattoir or for information phone Art Lock at 867-393-4978.

## CIRCUMPOLAR AGRICULTURE CONFERENCE

September 6 - 8, 2010 in Norway

Deadline for funding May 7, 2010 (see page 2).

## INFARMATION IS:

A Government of Yukon newsletter published by the Department of Energy, Mines and Resources, Agriculture Branch. If you would like to add or remove your name from the newsletter mailing list, comment on an article or contribute a story, please feel free to contact us.

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Visit: Agriculture Branch on the third floor, room 320 of the Elijah Smith Building, 300 Main Street in Whitehorse.