

INFORMATION

Yukon Agriculture Branch Quarterly Bulletin

Summer 2010

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MESSAGE FROM THE AGRICULTURE BRANCH

It's another busy summer. Branch staff are out in the field, running trials, inspecting grazing agreements and land development contracts, mapping potential farm lands and meeting with producers. Farmers are tending their crops, everybody's gardening, and farm products and produce are making their way to the market.

One of the projects we have going this summer is an investigation into what is required to outfit the red meat mobile abattoir so that it can be used to process poultry. Although this isn't a long term solution to a poultry abattoir, the investigation will explore the modifications required to use the unit for poultry and whether or not this is a cost effective alternative that can be used in the short term to produce an inspected product. The Agriculture Branch is collaborating with local poultry producers and the contractor operating the mobile abattoir later this summer to schedule a couple of trial runs and we will be reporting on the results of the trial later this fall.

Both the Agriculture Branch and industry continue to work on numerous fronts to find solutions to liquid and solid processing by-products generated by the mobile abattoir. It seems that we may be on the right track finding a partner to incinerate Specified Risk Material from cattle in Yukon and this will eliminate the current practice of hauling this material to a permitted landfill in Dawson Creek, B.C. Meetings with the Environmental Health Branch have determined that liquid waste water will have to be held on site in tanks that can be pumped out by a sewage disposal service. As for solid waste, we are still seeking partners to compost this material and guidance on how to best do this in a way that addresses environmental concerns. Getting stakeholders and potential partners involved in discussions on composting has been a challenge so far but we will continue to work towards a reasonable solution that meets industry needs.

Earlier in June, the Agriculture Branch hosted the annual meeting of the Canadian Agriculture Extension Council. Representatives from across Canada and Alaska attended and were duly impressed by the farms they visited and the glorious weather we had on the day of our tour. There is an article on the meeting and council inside this edition of the newsletter.

Hope the weather holds and the harvest goes well. Have a great summer.

Tony Hill
Director, Agriculture Branch

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NEWS

CANADIAN AGRICULTURE
EXTENSION COUNCIL -
MEETS IN WHITEHORSE

The 64th annual meeting of the Canadian Agriculture Extension Council (CAEC) was recently held in Whitehorse June 6-9th. The council is made up of one director from each province, territory and the federal government. These directors are responsible for agricultural extension, related areas of technology transfer, or rural development. This year's meeting included guests from the Alaska Cooperative Extension Service, a representative of a new federal branch called Agri-Environmental Services and the Yukon's extension agrologist, Matt Ball.

The mandate of the council is to exchange information regarding the management and delivery of extension programs and to make recommendations that will improve the effectiveness and efficiency of agricultural and rural extension.

The meetings included a jurisdictional scan and analysis of extension programs within Canada, the USA and other selected countries, discussions on provincial and territorial Growing Forward initiatives, new initiatives to be considered under Growing Forward's successor program and a discussion on extension methods for new farmers including the use of social media.

Halfway through the meetings, the Agriculture Branch provided a tour of farm operations and

processors that helped provide the council with a better understanding of the Yukon agriculture industry and our needs in terms of technology transfer.

Thanks to Len Walchuck, Steve & Bonnie MacKenzie, Jonathan Lucas, Bob Baxter, the Yukon Wildlife Preserve and the extension staff at the Agriculture Branch for their assistance in providing the tour and to mother nature for providing such a

beautiful day for us to showcase our industry.

The council really enjoyed getting out to see some of our local producers and processors. We took the council to the campground at the Takhini Hot Springs at the end of the day and enjoyed grilled arctic char filets, elk steaks and Yukon Brewing Co. products to round out the Yukon experience.

Y.A.A. ADDS A
NEW PLOUGH
TO THEIR
EQUIPMENT
RENTAL FLEET

This spring the Yukon Agriculture Association

(YAA) added a KUHN reversible plough to their fleet of agriculture rental equipment. The plough was funded by the Canada-Yukon Growing Forward Program and is now available for rent by any Yukon farmer, including non-members, at a cost of \$130/day or part day. The plough is a small 3 bodied unit, and will allow you to:

- turn over the upper layer of the soil, bringing fresh nutrients to the surface, while burying sods, weeds and the remains of previous crops.
- aerate the soil, allowing it to hold moisture better.
- maintain a high quality soil structure with an efficient burial of organic matter and an even aggregate spread throughout the soil profile.

The plough provides a wide range of working width settings and good maneuverability.

YAA has three other implements available for rent:

- Leon 375 manure spreader at \$160/day;
- 12 foot Aerway Aerator at \$185/day;
- John Deere 15 foot no till drill at \$300/day.

A rental agreement is required for each implement. If you are interested in renting one of them, please contact Y.A.A. for more information at (867) 668-6864.

NEWS

GRAZING POLICY REVISION

On April 1, 2010, the Yukon Grazing Policy was revised. The policy revisions apply to Grazing Agreements entered into after March 31, 2010. They will not affect the terms and conditions of existing Grazing Agreements held by current Agreement holders.

Many of the revisions to the policy are minor updates that do not significantly change the nature of the Yukon's grazing program. The revised policy document has new page numbers, new formatting and some heading changes. Terms used in the new policy have been made consistent throughout. For example, the term "Grazing Agreement" is used to refer to the authority to graze, rather than using the variety of terms as done in the original policy.

The revised policy was updated to make it consistent with current Agriculture Branch practices and recent changes in related government policies and practices. For example:

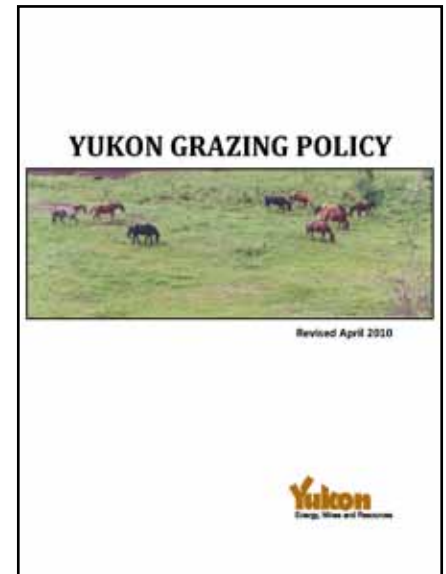
- The need to consider land use plans when processing grazing applications is acknowledged.
- Current environmental review processes are referenced.
- More recent land and soil classification systems are recognized.
- The circumstances under which agriculture land applications are considered within a Grazing Agreement area are clarified.

The revised policy permits Grazing Agreement area boundaries to abut surveyed road right-of-ways rather than maintaining a 50-metre setback from the centerline of the road as in the original policy.

One revision will create a significant change for new Grazing Agreements. In the original Grazing Policy, written in 1987, there is no reference to any requirements to remove fencing after the Grazing Agreement ends. The revised policy, however, includes a clause that states the following:

Upon the expiry or termination of a Grazing Agreement, the Agreement holder will be fully responsible for the decommissioning and the removal of all improvements, materials and belongings left on the site within 90 days, as laid out in the terms and conditions of the Grazing Management Plan, unless an alternative arrangement has been made in writing with the Director of Agriculture.

The purpose of this clause is to ensure that former grazing areas will be free of fences and "improvements" that could potentially become safety concerns or environmental hazards. This will enhance the responsible stewardship of land and resources within the government's grazing program.



The only circumstance where the above policy revisions will affect existing Grazing Agreements is in cases where a current Agreement Holder applies to transfer the Agreement to another eligible individual. The revised policy includes the following clause:

Upon application for transfer, the Grazing Agreement shall be subject to review and revision. A transfer will only be approved if the Grazing Agreement is updated, as necessary, to be in compliance with all relevant grazing policies and practices that are in effect at the time of the transfer.

The revised Grazing Policy is available at the Agriculture Branch office or on the Agriculture Branch website at: www.agriculture.gov.yk.ca/grazing.html

If you have questions about the revised Grazing Policy please contact: Patricia Smith, Grazing Management Coordinator (867) 667-3698.

NEWS

NATIONAL AGRICULTURE AND FOOD TRACEABILITY SYSTEM

THE AGRICULTURE BRANCH BEGINS DEVELOPMENT OF A PREMISES IDENTIFICATION SYSTEM FOR YUKON

Federal, provincial and territorial agriculture ministers have committed to phasing in a National Agriculture and Food Traceability System (NAFTS), beginning with livestock and poultry. The vision is for Canada to establish a secure National Agriculture and Food Traceability System to better serve citizens, industry and government. The system will provide timely, accurate, and relevant information to enhance emergency management, market access, industry competitiveness, and consumer confidence. To comply with the new federal regulations, provinces and territories are required to have a premises identification system for livestock in place by January 1, 2011.

Each province and territory is responsible for development of a Premises Identification Record capable of tracing the origin of livestock back to the herd or flock and farm that it came from. The system will be designed to meet the specific needs of each jurisdiction while following a national template.

What does this mean for the Yukon agriculture industry? Over the next couple of months, the Agriculture Branch will be working to develop a Premises Identification System and collecting information regarding where livestock is kept in Yukon. This system will identify species of

livestock (not including horses) and the specific geographical location of the farm.

The information collected will then be fed into a National Information System. To ensure that this information is used appropriately, a national regulatory framework is being developed to protect the interests of all who participate in this system.

FIREWEED COMMUNITY MARKET

The market has moved. Well sort of. The market is still in Shipyards Park, but now located in the skating oval next to the old parking lot location.

It is still the same time, Thursdays 3-8 p.m. and offers the same locally produced food, arts, crafts, and entertainment.

This year there are free workshops and events open to everyone:

July 15: Lunch in the Yukon. Make your own waste-free lunch.

July 29: Local Fibre workshop. Learn about Yukon-made fibres and fibre art.

August 12: Celebrate berries!

August 26: Create a vegetable instrument of your invention.

September 9: Food mapping. Where does your food come from?

September 16: Final market. Celebration of harvest!

Come out and support our amazing local producers and artisans.

Once the Yukon template is completed, the Agriculture Branch will be conducting personal interviews with producers. This should begin in late fall of 2010 in order to meet the deadline of collecting this information by January 2011.

Further information will be available in our fall newsletter. If you have any questions, please contact the Agriculture Branch at (867) 667-5838.



NEWS

AGRICULTURE DEMONSTRATION DAY AND BARBEQUE

Wednesday, August 4, 2010.
10 a.m. to 2 p.m.

The Agriculture Branch is hosting a demonstration day and barbeque. The event gives the Branch a chance to bring the agriculture community together during the summer and discuss the research being conducted at the site and share information with each other.

For 2010, staff are excited to show off the new centre pivot irrigation system. We will also be conducting a field tour of the Agriculture Branch research and demonstration projects. These projects include:

- wheat and oat variety assessment
- dryland forage demonstration
- market garden city compost evaluation
- raspberry orchard yield and fertilizer evaluation

The Yukon Agriculture Association and the Growers of Organic Food Yukon will be on hand to discuss equipment rentals, regulations, memberships and other issues related to their associations.



The research farm is located in the Gunner Nilsson and Mickey Lammers Research Forest just north of Whitehorse near the corner of the North Klondike Highway and the Hotsprings Road; we will have a sign out on the North Klondike to point you in the right direction.

Please come join us and take a tour of the research farm. We will be barbequing Yukon Grown, Yukon inspected and Yukon processed elk burgers.

Hope to see you there,
The Agriculture Branch.



CANADIAN AGRICULTURAL
HUMAN RESOURCE COUNCIL

CONSEIL CANADIEN POUR LES
RESSOURCES HUMAINES EN AGRICULTURE

Do you operate a small-scale farm? Have your say!

The Canadian Agricultural Human Resource Council is researching the labour needs on farms with less than \$100,000 in gross receipts. Your responses will be used to better understand employment needs of smaller farms and will ensure that operations from Yukon are represented in the research.

Go to www.cahrc-ccrha.ca
or call CAHRC at 1-866-430-7457 ext. 228
to complete the survey by phone.

All respondents can enter for a chance to win \$100

The Canadian Agricultural Human Resource Council (CAHRC) was created to address human resource issues facing agricultural businesses across Canada. CAHRC works with industry leaders, governments, and education stakeholders to research, develop and communicate solutions to the challenges in agriculture employment and skills development.

TIPS AND TRICKS

ALTERNATIVES TO SUMMER FALLOW USING GREEN MANURE FOR SOIL ENHANCEMENT AND WEED SUPPRESSION.

The traditional practice of summer fallow, keeping land out of production for a season, was developed to enhance soil moisture and conserve soil nutrients. Weed suppression in this system is a priority, using either spray or tillage to reduce weed populations in the subsequent year. Mechanical fallow, however, facilitates soil erosion and aeration through repeated tillage and is no longer considered a sustainable agronomic practice (Derksen et al., 1994). Alternatives to summer fallow have been the topic of considerable research over the past decade with green manure practices showing the most potential as a replacement.

The concept of green manure is to grow a crop, but till it back into the soil before it goes to seed. This process adds organic matter to the soil, conserves nutrients, protects against erosion, and suppresses weeds (Alberta Ministry of Agriculture and Rural Development, 1993). Though some tilling is required, it is significantly less than conventional mechanical summer fallow. A study comparing barley, wheat, and canola production under different tilling regimes found that using green manure and minimum tilling facilitated faster soil warming and nutrient mineralization than zero tilling

with herbicide weed control (Arshad and Gill, 1997). It was also found that green manure promoted greater soil moisture than a traditional summer fallow (Arshad and Gill, 1997).

Seeding of green manure occurs in late spring following weed seed germination. Tilling prior to seeding destroys early weeds and the shortened growing season is not a concern as green manure is incorporated into the soil before it reaches maturity.

Approximately six to seven weeks later, the green manure is tilled back into the soil, and any new weed growth is also destroyed before going to seed (Alberta Ministry of Agriculture and Rural Development, 1993). It is critical that tilling be done before the green manure or weeds go to seed to prevent volunteer growth the following year.

Green manure crops should meet at least four basic requirements:

- provide adequate ground cover
- demonstrate high use of water efficiency
- compete against local weeds
- produce relatively good biomass

(Alberta Ministry of Agriculture and Rural Development, 1993).

Traditionally, oats have been used as a green manure in Yukon; other options include brassicas (mustard and kale) and a number of legumes.

Brassica species are grown across the continent and are known to be successful even in areas with poor growing conditions. As a green manure crop, they produce sufficient biomass, reclaim leachable nutrients, and add considerable organic matter to the soil (Al-Khatib et al., 1997). Brassicas also demonstrate allelopathic properties that effectively suppress weeds (Haramoto and Gallandt, 2005).

Allelopathy is the biological phenomenon of an organism producing at least one biochemical that influences the life processes of other organisms. Brassicas contain glucosinolate, a non-toxic substance during the growth and maturity of the plant. Upon decomposition, however, these sulphur-containing compounds break down into a number of phytotoxic chemicals (Haramoto and Gallandt, 2005). These chemicals inhibit or delay seed germination, reduce seedling emergence, and stunt seedling growth (Al-Khatib, 1997). Pineapple weed and shepherd's purse are among many of the weeds that are negatively affected by decomposing brassica tissues (Al-Khatib, 1997). To maximize effectiveness of brassica's allelopathic weed suppression, fertilizers increase biomass and chemical composition (Krishnan et al., 1998).

Legumes, like brassicas, meet the basic requirements for a green manure crop and have an

TIPS AND TRICKS

additional beneficial property: nitrogen fixation. Choosing the appropriate legume for different locations is important as legumes may reduce soil moisture and crop yield the following year under severe drought conditions (Alberta Ministry of Agriculture and Rural Development, 1993).

A basic overview of legume crops listing their advantages and disadvantages is available online on the Alberta Ministry of Agriculture and Rural Development website. The following is a summary (Doon, 2009):

Peas

- adequate dry matter production and nitrogen fixation

Sweetclover

- biennial and is seeded with previous crop
- out competes weeds very successfully
- seed reasonably priced
- good nitrogen fixation and dry matter production
- early removal critical due to high water use and potential to become an invasive species

Maintaining soil integrity and low weed density is neither a simple nor easily achieved task. Weeds in particular cannot be managed by a single method due to the species diversity, range of germination periods, and variable life cycles (Krishnan et al., 1998). The use of green manure is another tool for the agricultural community to consider when evaluating how best to improve soil and control weeds here in Yukon.

Looking closer at yellow sweetclover (*Melilotus officianlis*) as a green manure crop, a study by Blackshaw et al. (2001) found weed densities were reduced by 75-97% in the following year. Unfortunately, the aggressive and competitive nature of sweetclover makes the potential of dispersal from agricultural areas very high. A single plant can produce 350,000 seeds in ideal conditions and the seed is viable in the soil for more than twenty years (Conn et al., 2008). Studies conducted in Alaska following a sweetclover outbreak found that the seed also disperses readily in water and can be transmitted fair distances by moose (Conn et al., 2008; Conn and Seefeldt, 2009). White sweetclover (*Melilotus alba*) can already be seen disrupting native ecosystems on Yukon roadsides and is threatening to disperse into the Yukon River drainage. Use of sweetclover as a green manure is therefore not recommended unless you have a strict management strategy in place, due the potential for serious negative ecological impacts.

LOOK FOR THE YUKON GROWN LOGO

This summer look for the Yukon Grown Logo.



For livestock production, Yukon Grown is defined as livestock or the meat or meat products derived from livestock that was born and raised in Yukon, and/or has spent a minimum of 51% of its life in Yukon and/or has lived in Yukon for no less than one complete year.

For crop production, Yukon Grown is defined as plants or plant material and the products derived from these plants that originated from a Yukon source and/or were imported from an outside source and grown in Yukon for no less than 51% of its life cycle and/or is a plant that continues to grow and be nurtured in Yukon for no less than one complete year.

If you sell locally produced agricultural goods please contact the Agriculture Branch to pick up some marketing materials, including bags, and temporary tattoos.



ANNOUNCEMENTS

RENTAL EQUIPMENT

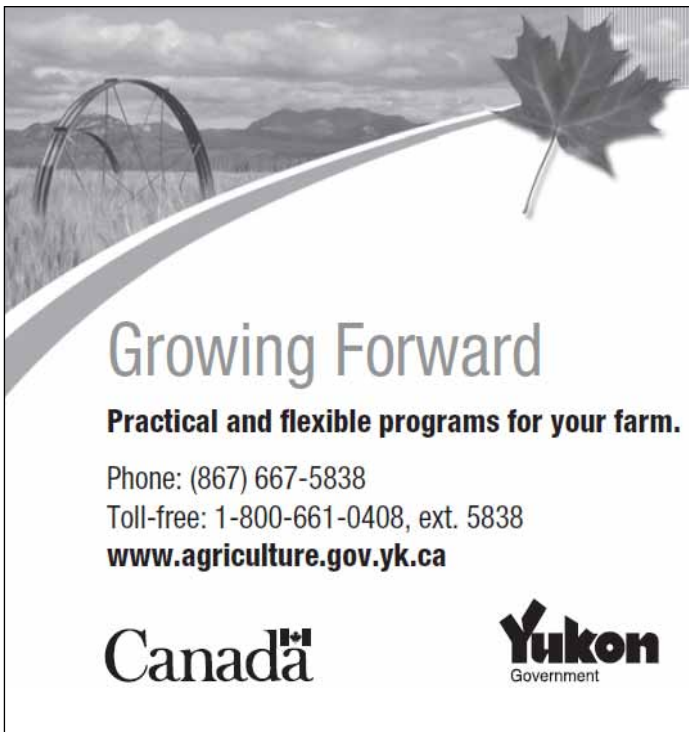
Yukon Agriculture Association has a no till seed drill, aerator, manure spreader and plough available for rent. For more information contact the Yukon Agricultural Association (867) 668-6864 or admin@yukonag.ca

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.

YUKON MADE STORE

Open 11 am to 5 pm Tuesday to Saturday. You can find the work of over 20 local artisans as well as information about the outdoor market and a library for the Growers of Organic Food Yukon and information about the Yukon Food Processors Association production of nutrition facts. More information is available at: yukonmadestore@yukonfood.com



Growing Forward

Practical and flexible programs for your farm.

Phone: (867) 667-5838
Toll-free: 1-800-661-0408, ext. 5838
www.agriculture.gov.yk.ca

Canada
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CLASSIFIEDS

2" BANJO POLY SELF-PRIMING CENTRIFUGAL WATER PUMP 6 HP Briggs engine, 11,700 GPH, never been used. Cost \$600 new, asking \$300.

Phone: (867) 633-4379.



HORSE LOVERS CAMP AT HEART BAR

RANCH: visit www.heartbarranch.ca for schedule and prices. For registration, availability or general information contact: Gail at heartbarranch@yahoo.com or (867) 393-1955.

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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