

INFORMATION

Yukon Agriculture Branch Quarterly Bulletin

Spring 2009

Volume 22 Issue 1



New Yukon Grown
Logo - see page 2

MESSAGE FROM THE AGRICULTURE BRANCH

The combination of good fall moisture and lots of snow this winter should be a good sign for dryland hay producers this summer. Crop management decisions, such as how much fertilizer to apply, are often based on long range weather forecasts, soil moisture conditions and soil test results. As we heard in the soils seminar last fall, "it's not rocket science, it's way harder than that." If the long range forecast is for another wet summer this year, applying fertilizer could be money in the bank and a safer bet than investing in the stock market.

It has been another busy winter at the Agriculture branch and there are a couple of new developments to tell you about. First, Environment Minister Elaine Taylor and Energy, Mines & Resources Minister Brad Cathers recently announced funding to hire a Chief Veterinary Officer (CVO) and a Field Veterinarian for the Yukon over the next year. The CVO position will be responsible for work with the Chief Medical Officer on animal disease concerns, legislation and initiatives like the national health strategy. The Field Vet will be responsible for delivering hands on veterinary services currently required within the two departments. For the Agriculture branch, this means the services of a primary animal health inspector, support for a developing livestock and poultry sector, and veterinary support to the abattoir meat inspectors. The vets will be located with the Department of Environment but 50% of their time will be devoted to Agriculture needs.

I would also like to congratulate this year's Yukon Master Gardener graduates and send out best wishes to all gardeners and growers for a good growing season to come.

Last but not least, Jeff O'Farrell has moved on from his position as Assistant Deputy Minister (ADM), Sustainable Resources to become the Deputy Minister at Community Services. Good luck Jeff and welcome to Ray Hayes, our new ADM.

Tony Hill
Director, Yukon Agriculture Branch

YUKON AGRICULTURE RISK MANAGEMENT PROGRAMS	2
LAUNCH OF NEW YUKON GROWN LOGO AND GUIDELINES	2
SUFFERING DAMAGE FROM WILD ELK?	3
DO HORSES GET CAVITIES?	4
LEGISLATION CORNER	5
2009: INTERNATIONAL YEAR OF NATURAL FIBRES	6
FUNCTIONAL FOODS & NUTRACEUTICALS	7
ANNOUNCEMENTS & CLASSIFIEDS	8

NORTHERN AGRICULTURE

YUKON AGRICULTURE
RISK MANAGEMENT
PROGRAMS

Risk Management is designed to help farmers move beyond crisis management to long-term profitability and competitiveness through assistance in managing business risks, especially those posed by uncontrollable factors such as weather and disease.

The suite of Business Risk Management Programs comprises AgriInvest, AgriStability, and AgriRecovery. These programs respond to industry's needs for programs that are simple, responsive, predictable and bankable.

AGRIINVEST

A producer savings account, AgriInvest accounts help producers protect their margin from small declines. AgriInvest replaces the coverage for margin declines of less than 15%. Each year, producers can make a deposit into an AgriInvest account and receive a matching contribution from federal and territorial governments.

Producers will have the flexibility to use the funds to cover small margin declines or for risk mitigation and other investments.

AGRISTABILITY

An income stabilization program, AgriStability, together with AgriInvest, replaces the coverage previously provided under the Canadian Agricultural Income Stabilization (CAIS) program.

You receive an AgriStability payment when your current year program margin falls below 85% of your reference margin. AgriStability is based on two margins:

- Program margin - your allowable income minus your allowable expenses in a given year with adjustments for changes in receivables, payables and inventory. These adjustments are made based on information you submit on the AgriStability harmonized form.
- Reference margin - your average program margin for three of the past five years (the lowest and highest margins are dropped from the calculation).

Should your production margin fall below 85% of your reference margin in a given year, you will receive a program payment.

AGRIRECOVERY

A disaster relief program, the purpose of the program is to help affected producers resume business operations and/or take actions to mitigate the impacts of a disaster as quickly as possible.

AgriRecovery is a framework that provides a process for governments to quickly determine whether further assistance beyond existing programming already in place (e.g. AgriInvest, AgriStability, or targeted sector payments) is warranted and if so, what form that assistance should take. Where federal and territorial governments agree that assistance is warranted, the form of assistance will be unique to the specific disaster situation.

Please contact the Agriculture branch for further details.

(see back page for contact info)

LAUNCH OF NEW YUKON GROWN LOGO AND
GUIDELINES

The Agriculture Branch, in partnership with industry, has developed a new Yukon Grown logo and Yukon Grown guidelines.

Yukon Grown guidelines:

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

Want to eat local? Look for the new Yukon Grown sticker this summer.



NORTHERN AGRICULTURE

SUFFERING DAMAGE FROM WILD ELK?

YUKON AGRICULTURE BRANCH ADMINISTERS TWO PROGRAMS THAT MAY HELP.

WILDLIFE DAMAGE PREVENTION PROGRAM

This program provides assistance to protect high value crops and pasture lands from damage by wildlife through the installation of high fences and the use of wildlife deterrents, such as hiring a contractor with herding dogs to herd wildlife away from crop areas to more suitable areas.

ELIGIBLE ACTIVITIES

- Fencing with approved game farm fencing material made of woven wire that stands at least 7 feet (2.1 meters) high and is secured to solid posts no greater than 20 feet apart.
- Hiring a herding contractor.

ELIGIBLE APPLICANTS

Any individual producer who resides in a documented high risk area and has suffered wildlife damage in excess of \$1,000, caused by elk, moose, deer or bison, to cultivated land that is currently in production is eligible for assistance. Assistance is not intended for the protection of feed crops which have not been brought in from the field or are stored in a manner which they cannot be protected.

ELIGIBLE FUNDING

Individual producers are eligible for 50% of costs to a maximum of \$3/linear foot for installation of 7' game fencing to protect titled crop lands from damage by elk, moose, deer and bison. Maximum amount of funding available to individuals is \$15,000.

Producers are eligible to hire the herding contractor at 100% funding up to \$2,500 per year to herd elk, moose, deer and bison from titled crop lands.

WILDLIFE DAMAGE COMPENSATION PROGRAM

This program is available for producers who have attempted prevention and mitigation of crop damage caused by wild ungulates. The compensation program is available to maintain the viability and sustainability of agriculture operations by providing financial assistance to recover forage crop and improved pasture losses that occur because of wild elk, deer, moose, or bison.

ELIGIBLE ACTIVITIES

Damage to forage crop and losses to improved pasture that occur because of wild elk, deer, moose, or bison. The potential effects of wildlife damage include potential loss to farm income, decrease in the amount of feed available for livestock use and damage to fences. Wildlife damage to forage crops, seeded pastures and fences can vary substantially from year to year depending on the severity of winter weather conditions.

The forage fields must be within Yukon. Eligible damage is limited to cultivated forage crops currently in production. Assistance will not cover protecting feed crops not brought in from the field that could have been harvested or crops which are stored in a manner that cannot be protected.

Eligible forage crops include wheat, oats, barley and other cereal crops, alfalfa, clover, tame grasses and legumes used for livestock feed that are in seedling stage and/or standing crop stage.

Forage crops not eligible for compensation include crops that have been mowed, swathed, in sheaves, stooks or baled, and crops stacked, in silage, or in storage.

ELIGIBLE APPLICANTS

Individuals who have crop damage caused by wild elk, moose, deer, or bison.

- Applicants must provide proof of ownership or lease confirmation for damaged fields.
- Applicants must show a firm commitment to preventing and/or reducing the amount of damage caused by wildlife.

ELIGIBLE FUNDING

A maximum of 80% of the verified losses documented in each eligible claim are paid with a minimum eligible claim of \$1,000.

Contact the Agriculture branch for more information.

(see back page for contact info)



SPRING BITES

DO HORSES GET CAVITIES?

BY CLIFF HANNA

I have a weakness for chocolate! My horse doesn't though – which is a good thing!

He actually doesn't even care much for sugar. There are horses that do. Maybe yours is one of them. The question of horses getting cavities often comes up.

“Will my horse get cavities if I feed him sugar cubes?” The short answer to this question is no. However there is more to this subject.

There are fundamental differences between horse teeth and human teeth. And they are the reason horses don't normally get cavities.

The nerve and “live” part of a horse's tooth is placed much deeper than that of a human tooth.

This is especially true of a horse's molars. The part of a horse's molar that you can see above the gum is solid. The pulp chamber is below the gum line.

The second interesting part about a horse's molar is the material that the tooth is made of.

There are three materials in the make-up of a horse molar: dentum, cementum and enamel. These three materials are “marbled”, or folded over each other, through the tooth. And they have different levels of hardness.

The folding of these three materials throughout the tooth and their different hardness result in the grinding surface of the molar wearing in a rough, uneven fashion.

The resulting corrugated, uneven surface is a very efficient grinding platform.

If a horse's molars were made just of enamel, for example, their wear surface would tend to be smooth like porcelain. This kind of surface would not grind very well at all.

You likely have noticed that your horse chews in a lateral motion. He literally grinds his teeth together when he chews.

This is another reason why the nerve and pulp chamber are located so deep in the horse's molar. If he had a nerve structure like our human molars it would be way too sensitive. It would hurt when he grinds his food with that sideways motion.

So, because of these factors, cavities are very rare in horse's teeth. But yes, horses sometimes can have cavities.

If a horse does have a cavity it is usually as a result of an injury, where the tooth is damaged bad enough to expose the nerve and pulp chamber of the tooth. Fortunately, this is pretty rare.

One other occurrence that can cause a cavity-like problem is where a baby tooth comes off too soon. This can expose the adult tooth beneath it, before it is completely developed and the pulp chamber is closed over.

Again, this circumstance is usually injury related and does not happen too often.

The fact that a horse has molars with deep-set nerve structures has another benefit. This fact makes it possible for your equine dentist to work on your horse's molars without it being painful.

Floating the sharp edges and points off your horse's molars can be done without it hurting him.

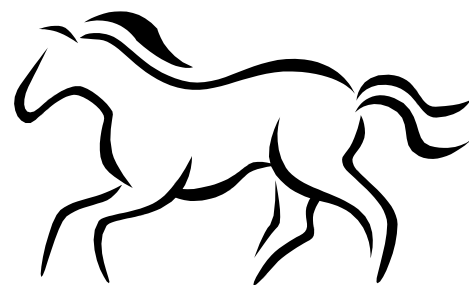
So, if you have a horse that has a taste for sugar it is very unlikely that he will end up with cavities from it.

Sugar, like other “people food” is probably not something you want to feed your horse much of anyway. His whole digestive system is designed to process “horse food!”

So keep the sugar and chocolate for yourself! I personally am glad my horse doesn't like chocolate – that leaves more for me!

Cliff Hanna practices equine dentistry in northwestern Canada. His main focus is providing hands-on knowledge to the individual horse enthusiast. Cliff holds equine dental awareness seminars, speaks at conferences, and writes articles for horse magazines and online horse sites. He is also author of the horse owner's dentistry handbook, “Look A Gift Horse In The Mouth” and “How To Age A Horse By His Teeth.”

Contact Cliff at:
TheHorseDentistryHandbook.com
AgeingHorseTeeth.com



LEGISLATION CORNER

YUKON GOVERNMENT
ANNOUNCES ANIMAL
HEALTH PROGRAM

On March 3rd, 2009, Environment Minister Elaine Taylor and Energy, Mines and Resources Minister Brad Cathers announced the Yukon Government will be establishing a Yukon Animal Health program that will assist with emerging animal health issues.

“The new animal health program will help us keep our wild and domestic animal populations healthy and viable, which in turn will benefit all Yukoners,” Taylor said.

The \$320,000 program will establish a Chief Veterinary Officer for the territory, along with technical support staff. These full-time animal health professionals will:

- Provide program oversight, advice and veterinary services to the government’s various animal health and animal protection initiatives.
- Improve animal health surveillance, building links between animal and human health issues.
- Assist with the development of policies, regulations and legislation regarding animal health and animal protection.

“The animal health program will help ensure the quality and safety of animal food sources - whether domestic or wild,” Cathers said. “It complements the government’s ongoing support for the agriculture sector and improves our ability to support the production of Yukon-grown food.”

Enhanced surveillance of and a co-ordinated response to animal health issues will significantly minimize risks posed to public health as well as to our wildlife populations due to changes in our climate.

DOMESTIC AND WILD
SHEEP DON’T MIX

Healthy domestic sheep and goats are capable of transmitting potentially lethal diseases to wild sheep.

Environment Yukon asks all livestock farmers to let their local Conservation Officer know immediately of any contact or sign of possible contact between wild and domestic sheep or goats to help protect the wild population.

In B.C., N.W.T. and many U.S. states it is policy to prevent contact and kill any wild sheep that could transmit diseases in order to protect the health of the wild population. Yukon takes a similar approach.

Healthy domestic sheep can transmit pathogens that are potentially lethal to wild sheep, including pastuerella bacteria and to a lesser degree malignant catarrhal fever (MCF virus) and contagious ecthyma (CE virus). Despite huge effort and costs, treatment of these diseases in wild sheep has not been successful in other jurisdictions.

Due to the threat of this type of disease transfer to wild populations Environment Yukon recently had to shoot a young wild ram that had ‘visited’ domestic sheep.

Environment Yukon extends its thanks to the sheep owner who reported the incident and would ask all sheep and goat owners in Yukon to do the same in future.

Please contact the Environment Yukon tips line at 1-800-661-0525.

THE YUKON BRANDS
ACT

Prior to micro chips and electronic ear tagging for stock (cattle and horses) the use of a branding device to uniquely identify one’s animals from the neighbour’s animals was the standard used across the country.

Similar to most other jurisdictions, the Yukon has a *Brands Act* that has been in use for decades. This legislation allows individuals to register a unique brand that can be used to distinguish their stock from all others.

If you are interested in finding out more about the *Brands Act* or registering a brand in the Yukon, contact the Agriculture Branch. *(see back page for contact info)*

SPIDER WEBS ON YOUR LAWN

As the snow melts this spring you might see some spider web like structures on the surface of your lawn. This is snow mold. After the snow melts, rake the webbing off your lawn as soon as it appears to avoid prolonged damage.

Other management strategies include cutting the grass regularly through the summer, removing built up thatch and avoiding late summer nitrogen fertilizer applications.

NEWS

2009: INTERNATIONAL YEAR OF NATURAL FIBRES

The passing of 2008 marks the end of the year of the potato, and we now focus our attention on another market opportunity in the Yukon: The International Year of Natural Fibres.

Natural fibres are greatly elongated substances produced by plants and animals that can be spun into filaments, thread or rope. Woven, knitted, matted or bonded, they form fabrics that are essential to society. Like agriculture, textiles have been a fundamental part of human life since the dawn of civilization. Fragments of cotton articles dated from 5000 BC have been excavated in Mexico and Pakistan. According to Chinese tradition, the history of silk begins in the 27th century BC. The oldest wool textile, found in Denmark, dates from 1500 BC, and the oldest wool carpet, from Siberia, from 500 BC. Fibres such as jute and coir have been cultivated since antiquity.

While the methods used to make fabrics have changed greatly, their functions have changed very little. Today most natural fibres are still used to make clothing, containers and to insulate, soften and decorate our living spaces. Increasingly, however, traditional textiles are being used for industrial purposes as well as in components of composite materials, in medical implants, and geo- and agro-textiles.

Plant fibres include seed hairs, such as cotton; stem (or bast) fibres, such as flax and hemp; leaf fibres, such as sisal; and husk fibres, such as coconut.

Plants fibres used include abaca, coir, cotton, flax, hemp, jute, ramie, and sisal.

Animal fibres include wool, hair and secretions, (such as silk). Animal fibres used include alpaca, angora, camel, cashmere, mohair, silk, and wool.

The Yukon Food Processor's Association developed a paper in 2007 titled "Options for Successful Fibre Processing in the Yukon; a feasibility report examining various fibre options for the territory."

The executive summary of this report states:

This feasibility report examines the possibility of building and operating a craft size fibre mill in the Yukon. Initially thought of as an opportunity for a sustainable business to complement the fledgling fibre market in the Yukon, this study on small scale fibre processing revealed that there is a much larger demand for processors than is currently being met.

This report gives some history on the animals and their fibre and a brief description of the milling equipment and processes commonly used in craft fibre mills.

Research on the internet, in the library, in local and telephone discussion with producers, and visits to different mills in Alberta provided information that was compiled and analyzed on the current state of the milling industry.

The current market environment and competition were also examined. Analysis was done on the market, machinery, management and operating options to provide a business model by examining the strengths, weaknesses, opportunities and challenges of each option.

Actual craft fibre mill requirements were developed from this analysis, including the estimates for an operating facility and equipment.

Marketing was examined and financial costs were calculated. Using comparative data from similarly sized mills, the resulting current market prices were used against the estimated cost of production to confirm or preclude the feasibility of a mill. Although there are many unknown parameters until an actual craft fibre mill goes into production, this study reveals that with a secure niche market, properly sized machinery, trained personnel and a well developed business plan, a craft fibre mill in the Yukon is possible.

The full fibre mill feasibility report can be found at: www.yukonfood.com.



Alpaca

NEWS

FUNCTIONAL
FOODS AND
NUTRACEUTICALS

Consumers are increasingly interested in the health benefits of foods and have begun to look beyond the basic nutritional benefits of food to the disease prevention and health enhancing compounds contained in many foods. This, combined with a more widespread understanding of how diet affects disease, health-care costs and an aging population, means a market has been created for functional foods and natural health products.

Functional foods and nutraceuticals provide an opportunity to improve the health of Canadians, reduce health care costs and support economic development in rural communities. They also offer a way for some producers to diversify their agriculture and marine-based crops. According to market statistics, the global functional food and nutraceutical market is growing at a rate that is outpacing the traditional processed food market.

What are functional foods and nutraceuticals? While there is no universally accepted definition for functional foods and nutraceuticals, according to Health Canada:

- A functional food is similar in appearance to, or may be, a conventional food that is consumed as part of a usual diet, and is demonstrated to have physiological benefits and/or reduce the risk of chronic disease beyond basic nutritional functions, i.e. they contain bioactive compounds.

- A nutraceutical is a product isolated or purified from foods that is generally sold in medicinal forms not usually associated with foods. A nutraceutical is demonstrated to have a physiological benefit or provide protection against chronic disease.

Canada is emerging as a leading world supplier in this growing market. The country boasts more than 300 companies - from small start-ups to multinational enterprises - many that are internationally recognized for their bioactive ingredients, such as soluble fibre from oats, barley and pulses; omega-3 fatty acids from fish and flax oil; unsaturated fatty acids from canola oil; plant sterols and stanols from vegetable oils; and protein from soy. Industry is also interested in incorporating into food products functional ingredients, such as probiotic bacterial cultures; prebiotics (e.g. fructo-oligosaccharides) from corn; bioactives concentrated from berries and flax; and novel fibres from pulses.

The knowledge of functional foods and nutraceuticals is growing, but advertising or making health claims around functional foods and nutraceuticals remains difficult. The Canadian Food Inspection Agency (CFIA) limits such health claims on foods but in response to increasing consumer awareness, CFIA has included diet related claims based on sound scientific evidence that have established a relationship between certain elements of healthy diets and reduction of risk of certain diseases. In general, it is felt that the use of functional foods and nutraceuticals should not be prescribed like a drug but be used in the context of the total diet

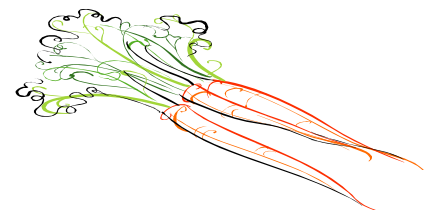
and other relevant lifestyle factors, such as physical activity, smoking, obesity and alcohol consumption.

Although the health benefits of functional foods are not advertised directly on products, many foods have functional components, including Yukon grown foods. Yukon foods such as carrots, berries, meats, and green vegetables are generally recognized as having components key to improving human health, for example:

- Carrots: carotene is the functional component that has potential benefits to help neutralize free radicals (free radicals may cause damage to cells).
- Cranberries: tannins (proanthocyanidines) in cranberries improve urinary tract health. Cranberries also reduce the risk of cardiovascular disease.
- Meats: Conjugated Linoleic Acid (CLA) in meats improves body composition and can decrease risk of certain cancers.
- Green vegetables: the functional component Lutein aids in reducing the risk of macular degeneration.

As the knowledge of foods and the healthy components within them grows, consumers can continue to make choices that will improve their health. And these healthy choices can come from locally grown foods.

*Adapted from information available from Agriculture and Agri-Food Canada.
www.agr.gc.ca*



ANNOUNCEMENTS

FIREWEED COMMUNITY MARKET & KITCHEN

The 2009 Fireweed Community Market starts May 21, 2008. The outdoor market is held every Thursday evening from 3 p.m. to 8 p.m. continuing through to September 17, 2008. The market is located in Whitehorse at Shipyards Park.

The Fireweed Market Kitchen located in Shipyards park in the Frank Slim Building is still open and serving a variety of foods and drinks. Each day offers something different. The kitchen is open from 11 a.m. to 6 p.m. Monday to Friday

The Fireweed Community Market "We're about more than good food!" www.fireweedmarket.yukonfood.com

WANT TO SAVE ON FERTILIZER COSTS?

Ordering in bulk can help. Contact the Yukon Agriculture Association to learn more about how the YAA fertilizer bins can save you money. Yukon Agricultural Association (867) 668-6864 or admin@yukonag.ca

NO TILL DRILL

Yukon Agriculture Association has ordered a new "no till" drill. The new drill is on order and should be available for the upcoming growing season. For more information contact: Yukon Agricultural Association (867) 668-6864 or admin@yukonag.ca

MASTER GARDENER CLASS 2009

The Master Gardener class offered in Whitehorse wrapped up in early March. Congratulations to the twenty students who completed the 38 hours of coursework. There was a tremendous amount of material covered, from taxonomy to botany, into the depths of soils, over to tips on lawn care and through to gardening techniques.

One section of the course was on greenhouse structures, with the two teachers presenting differing methods of greenhousing. This sparked some good class discussion around the use of different equipment and greenhouse designs.

Through the course students are provided a range of different views on gardening, from organic to synthetic fertilizer use and various methods of pest control.

If you are interested in attending the 2010 Master Gardener Course contact the Agriculture Branch.

CLASSIFIEDS

HAY

Yukon grown hay, clean timothy brome mix, stored inside.
Phone: (867) 393-3477



TRACTOR

Farm Tractor Deutz Dx 160, 3428 hours on the machine. Manual Four Wheel Drive, 160hp, 3pt. hitch, 6 ton hydraulic winch UNIFOREST with remote control and pto shaft, front end loader with bucket and grapple. \$36,900
Phone: (867) 660-4124

LOCAL FOODS

For those of us who like to support and eat local, this is the best time to contact local producers and place our order for locally grown food. Some producers only raise or plant what they need and may produce more if they have encouragement at the beginning of the season.

Producers might want to consider adding a few more rows of cabbage or raising a few more birds or animals, as there is a greater effort by consumers to eat local. The Fireweed Community Market, the red meat mobile abattoir and the poultry processing equipment can help producers supply the local market.

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.

Agriculture Branch Contact Information:

Energy, Mines and Resources,
Agriculture Branch
P.O. Box 2703, Whitehorse, YT, Y1A 2C6

(867) 667-5838 | Fax: (867) 393-6222
toll-free outside of Whitehorse
1-800-661-0408 ext. 5838

E-mail: agriculture@gov.yk.ca

Online: www.agriculture.gov.yk.ca

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