

InFARMation



Potato Info
Inside



Yukon Agriculture Branch Quarterly Bulletin

Summer 2004

Volume 17 Issue 2

Inside this issue...

Update on APF	2
Research and Demonstration Field Day	2
What Causes Potato Scab	2
Becoming Certified Organic	3
Is Pressure Treated Wood Safe in Gardens	4
Planting Suggestions for Selected Varieties	4
Weather	4
Study 'very good news' for Elk Industry	5
Avian Flu	5
What Causes Potatoes to be Hollow Inside?	5
Mad Cow Timeline	6
Green Potatoes	6
West Nile Concerns	6
Yukon Horse & Rider Association	7
Homemade Bug Spray	8
Photo Contest	8

Message From the Agriculture Branch

Well summer is here and it appears that things are off to a good start in terms of weather and growing conditions. We hope all of you have a really good production year and that the weather cooperates.

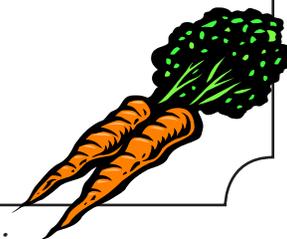
The Agriculture Branch passes along sincere congratulations to Hugh Bradley on receiving a 50th anniversary award from the Department of Environment for his service in collecting weather data. This is truly an outstanding achievement. Hugh and all the Bradley's have contributed significantly to the growth, development and belief in agriculture in the territory. As many of you are aware the Bradley's were also named Farm Family of the Century in November of 1999.

The Yukon Agricultural Association held its annual general meeting towards the end of March, 2004. A new slate of directors was elected. Doug Craig was once again elected president; Dave Andrew was elected vice president and Bill Drury Treasurer. Best wishes to YAA, the executives and all directors for a productive year in 2004. The YAA will certainly have a busy year administratively as the association has received approximately \$280,000 of Federal Agriculture Transition funding to further industry growth and development.

The Agriculture Branch will soon be releasing the agriculture policy options paper for broad public consultation through the summer and early fall of 2004.

On a final note the Yukon government is considering entering into the Canadian Agricultural Income Stabilization program for Yukon farmers. This is a business risk management program that helps cover farm income losses. It is designed as a long term program and helps to stabilize farm income.

Have a great summer.
Dave Beckman, Director



Update on the Agriculture Policy Framework (APF)

The APF Industry Advisory Committee met four times since the beginning of 2004 to discuss the programs being developed for the five chapters of the APF.

In January the focus was on the Environment chapter. A draft Environmental Farm Scan covering all areas of the Yukon was reviewed by the committee. The Environmental Farm Scan, which provided an overview of agri-environmental problems in the Yukon, shows there is minimal impact from farming. An Environmental Farm Plan document is currently being drafted for individual farmers to go through and determine if they are posing any risk to the environment or themselves. Funding will be available for specific actions to remediate environmental concerns on farms once the Environmental Farm Plan is complete.

In February the focus was on options for business risk management. Based on a study of industry needs by the Alberta Financial Services Corporation, the Canadian Agricultural Income Stabilization Program was recommended as the most suitable option. This option was endorsed by the committee because it provided the most comprehensive benefit to the growth of the industry. The Yukon government is now considering this recommendation.

In early March the Renewal programs were discussed. Six Yukon and six federal programs were chosen that fit with the local industry. Renewal programs involve access to consultants, industry training needs, value added and diversification options, market development and new or young farmer initiatives.

In late May the Food Safety and Quality and Science and Innovation chapters were reviewed. Kevin Bowers presented four programs on Food Safety and Quality including: Food Safety Strategies Initiative; Regulatory Compliance of Food Safety Initiative; Traceability Initiative; and Food Safety Processing Initiative. The committee supports these programs as they fit well for the current level of development in the Yukon.

Dave Beckman, Agriculture Branch Director, laid out four programs under the Science and Innovation chapter: Circumpolar Education and Exchange Initiative to tie in with the Circumpolar Agriculture Conference; Circumpolar Research and Demonstration; Yukon Research and Demonstration; and Circumpolar Ambassador.

Based on consultation with the APF committee, a program guide is currently being produced laying out all the programs that will be available to Yukon producers. Producers will be able to apply to any of the programs in the guide provided they meet certain criteria. This program guide is scheduled to be available this July.

Research and Demonstration Field Day

We would like to invite everyone out to our research and demonstration site on July 29 for a tour of the research currently undertaken by the Agriculture Branch. We will be there all day from 10:00 to 4:00. At 12:30 we will be holding a detailed talk on the site research, feel free to stop by anytime and we will be happy to answer questions and demonstrate what is taking place. There will be strawberries to enjoy. The site is located at the Takhini Forestry Farm, the entrance is on the left just before the Takhini Corner. Please come and join us.

What Causes Potato Scab?

Common scab is caused by a soil bacterium that is present in all soils. It is most severe in soils with pH between 5.2 and 6.8, but will also grow outside this range. When populations of the bacteria are high and soil moisture is low during the period of tuberization the disease can be severe on susceptible cultivars. Warba and Carlton are very susceptible. Russet Burbank, Norland, Yukon Gold and Viking are moderately resistant. Scab can be reduced by rotating potatoes throughout the garden or if possible moving the garden site to another location. Planting scab-free seed pieces of resistant cultivars will help, but maintaining soil moisture during tuber growth will keep the incidence of scab to a minimum. Heavy applications of manure have been implicated in severe cases of scab and therefore should be avoided.

Becoming Certified Organic

“Organic farming is an agricultural production system that promotes and enhances biological diversity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain, and enhance ecological harmony.”

- COABC March 2003

Following is a brief introduction on certifying a farm as organic.

If you were thinking of becoming a certified organic grower or livestock owner, I would suggest that you start documenting your farming activities. Document everything! A look at the application forms for certification will tell you more about what to keep track of. Dates such as the last time a prohibited product was used will be helpful to determine exactly when you can start using the Certified Organic label. The difference between someone calling themselves an organic producer, and being a certified organic grower is that activities can be verified. If you are thinking of using a fertilizer or other input, you can look up products to determine its status (acceptable, restricted or prohibited) by going to the Certified Organic Association of BC's website, or getting a copy of the Standards and Brand Name List from whatever Certification Body you decide to become certified with.

Steps to Certification:

(The following steps are for Certification with PACS. Most Certification Bodies follow similar procedures).

1) Complete a Certification Registration Form, pay required fees.

2) You will receive the Organic Operator Handbook, BC certified Organic Management Standards and Appropriate Production Application (Farm Plans) and related forms. These forms are long and complicated but are a necessary part of the organic certification audit trail. The completed forms become documents in your enterprise file kept securely in the PACS office.

3) Sign a PACS Client agreement

4) Once your farm plan has been reviewed and deemed complete, PACS will assign a Verification Officer (VO) to review your application and inspect your farm.

5) The VO will submit an Inspection Report to PACS

6) Your file will be sent to the Certification Committee, which will determine the organic status of your operation.

7) There is an annual inspection to retain the Certified Organic label.

The Yukon is blessed in having an organic growers group. The name of the group is GOOFY (Growers of Organic Food Yukon). Three of their members have been inspected this year. They would be a great resource for anyone wanting information on how to proceed. Their names and phone numbers are as follows: Simone and Tom Rudge at 393-4628, Brian Lendrum and Susan Ross at 633-4201, Heidi Marion and Garrett Gillespie at 821-4003.

The Certification Body (CB) that the 3 above farms have used is PACS (Pacific Agricultural Certification Society). Their office is in Vernon, BC. PACS is a member of COABC (Certified Organic Association of British Columbia). You can find out more information about the above two organizations on the website: www.certifiedorganic.bc.ca.

I hope this information is helpful. If you need clarification on anything, don't hesitate to call or email.

Claire Desmarais
 cdesmarais@northwestel.net
 867-393-1949



Q: Where did the sheep get its haircut?

A: The ba-ba shop

Is Pressure Treated Wood Safe in Gardens?

Some people build the borders of raised garden beds with pressure treated wood. Pressure treated wood has been saturated, under pressure, with chromated copper arsenate, a fungicide that prevents rot. Chromated copper arsenate contains copper, chromium and arsenic. Some portions of these chemicals may leach from the wood into surrounding soil, resulting in concentrations higher than naturally occurring background levels.

A study cited in "Forest Products Journal" found 12-13 per cent of the chromated copper arsenate leached from treated wood buried in compost during a 12 month period. Once these chemicals have leached from the wood, they are likely to bind to soil particles, especially in soils with clay or soils that are more alkaline. Chemicals that are bound to soils are not easily absorbed through plant roots and do not move quickly through the soil. Nevertheless, plants growing within six inches of treated wood may have higher levels of copper and arsenic than plants growing more than six inches away from the wood. According to the US Institute of Environmental Toxicology, the potential for contamination of fruits and vegetables is very small, any residues would be at levels far below those known to cause toxic effects.

However, others disagree. The magazine "Organic Gardening" recommends that pressure-treated wood not be used in raised beds. Their philosophy is that since the wood is soaked in a chemical pesticide, it has no place in the organic garden. Some organic gardening experts recommend constructing raised beds out of naturally rot resistant wood such as cedar or redwood, or treating other wood with linseed oil to make it last longer.

Adapted from: Oregon State University Extension & Experiment Station Communications, April 2000.

Weather

May was a warm month throughout the Yukon with mean temperatures over two degrees above normal in the Whitehorse area. The forecast for the rest of the summer is for above normal temperatures with normal rainfall.

Planting Suggestions for Selected Varieties

Broccoli - Plant in rows 18" apart, thin plants to 18" spacing.

Cabbage - Select a non-bolting variety (one that will not go to seed early in the season). Allow three or more square feet per plant.

Carrots - Plant in rows 18" apart; thin to 2" to 4" spacing between plants.

Cauliflower - Thin so that the plants grow in an area 2' x 1.5' to allow enough room.

Swiss Chard - Thin 8" to 10" spacing while still in the seedling stage.

Head Lettuce - Plant in rows 2' apart; thin to 1' apart.

Leaf Lettuce - Plant rows 12" apart; thin to 18" spacing

Peas - A good stand of peas should have plants every 1".

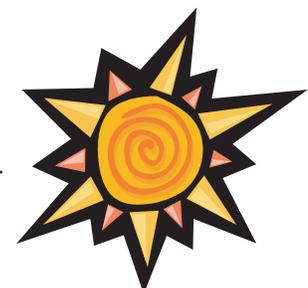
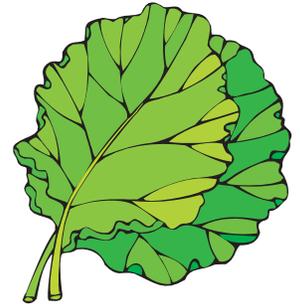
Potatoes - Plant in rows 3' apart; 18" spacing. Hill as needed to keep the tubers covered. Green sprouting can be used to decrease the amount of time required for emergence.

Radishes - Plant in rows 6" apart; thin to 1" spacing.

Rutabaga - Plant in rows 6" apart; thin to 1" spacing.

Turnip - Thin to 8" spacing.

Source: Alaska Cooperative Extension University of Alaska Fairbanks. Gardening in Southeastern Alaska. 1995.



Study 'very good news' for Elk Industry

A recent study by the University of Montreal discovered that elk antler velvet helps dogs fight arthritis. Over the long term it may open up North America to this eastern medicine. "It is very, very good news," Glenda Elkow, chairman of the Alberta Elk Commission, said of the University of Montreal study.

Elkow says having a market right here in Canada and the U.S. would mean a tremendous difference to our industry.

She said ranchers are still able to sell elk antler velvet, but prices are down due to the discovery of chronic wasting disease, and the mad cow crisis.

But the use of elk antler velvet to treat dogs with arthritis has long been known to be effective to industry insiders.

Sharon Holowaychuk said for years she sprinkled it on her springer-spaniel's food once daily.

"She was much more limber and active," said Holowaychuk of the 13-year-old pooch.

Shirley Ford of Ford Elk Farms has long been a supporter of velvet antler pills. Shirley's customers use the product to fight arthritis, high cholesterol, and poor circulation.

We have a number of local elk farmers who produce velvet antler pills. For animals the product is sold through Duffy's and the Feed Store, and for people through the health food stores, or from the farm gate.

Avian Flu

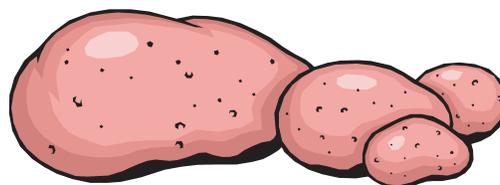
The Fraser Valley of BC is experiencing a serious problem with Avian Flu. Although it is not of great concern in the Yukon, farmers should do anything they can to prevent infection and be aware of signs of infection. Clinical signs a bird has avian influenza include: diarrhea, lack of coordination, sudden death, and lack of energy and appetite.

If you would like more information, you can pick up a brochure at the Agriculture Branch.

What Causes Potatoes to be Hollow Inside?

Hollow heart is a common disorder of Russet Burbank and Norgold Russet potatoes that appears when one of two conditions occur. If growing conditions are very good the potatoes grow so fast that a hollow center forms - usually in oversized tubers. Hollow heart can also occur if the potatoes are watered heavily following a dry period and start to grow very rapidly. It can never be avoided entirely, however uniform and moderate tuber growth rates will reduce the incidence of hollow heart. Speed of tuber growth can be reduced by using small whole seed tubers that result in few misses and high tuber populations; maintaining uniform moisture levels; adequate but not excessive nitrogen; and close plant spacings.

Source: Alberta Potato Marketing Board



Ol' Farmer Giles

Three kids were being chased by ol' Farmer Giles. After running around for a while they spotted a barn and ran inside. Once inside they each hid in an old sack against the barn wall. The farmer went into the barn but did not see where they went, he was about to turn back when he saw three suspicious looking sacks. He walked forward and prodded the first sack. The kid inside said ... "Meow".

"Just cats," thought the farmer.

He then prodded the second sack. The kid inside said ... "Woof".

"Just dogs," he thought.

As he walked towards the last sack, the last kid worked out what he was going to say. As soon as the farmer prodded the sack the kid inside said ... "potatoes!"

Mad Cow Timeline

1986: Discovery of bovine spongiform encephalopathy (BSE), commonly called mad cow disease, in cattle in Britain.

1988: British government bans cattle feed containing cow parts and begins destroying BSE-infected cattle. (Eventually 3.7 million cattle are killed)

1993: Canada reports its first case of mad cow disease.

1996: The British government admits BSE-infected beef may transmit mad cow disease to humans in the form of vCJD, or variant Creutzfeldt - Jakob disease. (The classic form of CJD previously appeared mostly in the elderly)

1997: The United States and Canada ban cattle feed containing cow parts.

July 2001: The European Union tightens BSE testing; now, one out of four cows is screened.

September 2001: Japan reports its first case of mad cow disease.

October 2001: Japan begins BSE testing on all cattle slaughtered for human consumption.

May 2003: Despite increased safety measures, scientists discover a single new case of mad cow disease in Canada.

December 23, 2003: The United States reports its first case of mad cow disease in Washington State.

December 30, 2003: The USDA announces new regulations on cattle slaughter, including bans on using downer cattle and mechanically separated meat for human consumption.

Source: Lindsey Hodel, *Mother Earth News* April/May 2004

Green Potatoes

Why do potatoes turn green? When exposed to sunlight, even indirect light, potatoes will develop chlorophyll in their skin and turn a light to dark green colour.

Chlorophyll itself is a natural plant pigment which is harmless and tasteless. The concern with green potatoes is that the coloured areas also develop a bitter compound called solanine which is a potentially toxic alkaloid compound. The susceptibility of potatoes to greening depends on their variety, maturity and age. Greening can also be affected by temperature, type of light and the intensity of light.

If you make the decision to eat potatoes that have a small amount of green on them, be sure to remove and discard all the coloured sections before cooking and eating the potato. It is best to steam or boil any suspect potatoes because this also helps to remove solanine.

By keeping the tubers completely covered with dirt you avoid this problem altogether.

West Nile Concerns

There have been no reported cases of West Nile transmission in the Yukon, but it is expected to arrive here some time in the future. Mosquitoes are carriers of the West Nile virus, therefore the best way to avoid infection is to avoid mosquito bites. Mosquitoes lay eggs in standing water and tend to stay in the vicinity of their hatching site. By eliminating standing water around your house and property you keep the hatching sites to a minimum and reduce the chance of getting bitten.



**Get rid of any
standing water on
your property ...
even small amounts
on tarps**



Yukon Horse & Rider Association

The Yukon Horse & Rider Association (YHRA) is a non-profit organization of about 70 members that has been registered under the *Societies Act* since November 1969. The association's objects are to promote a respected public image of the horse through sport and recreation and to work with other associations and agricultural groups to develop the interests of the light horse industry in the Yukon. Throughout the years the association has been very active, holding clinics, gymkhanas and horse shows at the show grounds in Porter Creek (near Mountainview Golf Course), as well as hosting group trail rides, and educational seminars (many with support from the Agriculture Branch). There has been strong support for the 4H Horse Club and family participation in events is encouraged.



Memberships are reasonably priced and offer many benefits. Members receive a monthly newsletter with the calendar of events and have the use of the facilities at the show grounds (near Mountainview Golf Course on Range Road). There are many knowledgeable, experienced and friendly horse people involved in this association who are very happy to share information and contacts, especially with new horse owners.

Gymkhanas, which are games on horseback, are always popular and will take on the following Sundays: July 18 (at the Horse Show) and August 1. There is fun for everyone with barrel racing, pole bending, keyhole race, and other speed and accuracy events. Pre-registration is not required (except for the Horse Show), just come with your horse (a copy of a negative Coggins test is required for each horse.) Dash for Cash: Madeline Boyd 668-5977 Horse Show: Tena Fox 633-4901

Our annual Charity Trail Ride takes place on September 11 this year. This ride has been held at the Takhini Hotsprings for the past two years and is a pleasant way to enjoy the fall colours with a friendly group.

This year's YHRA clinicians cover a broad range of interests. There are also private establishments that hold clinics.

From July 9 - 12 the very popular Parelli Natural Horse.manship program is being delivered by Glenn Stewart, Level 3 Instructor from Baldonnel, B.C. There may still be space available. Don't miss the opportunity to learn more about this method of working with horses. Spectator tickets are only \$25 for the day! Contact Jerry Wald 668-4677.

Our Show Judge this year, Mr. Allan Trimble, will stay on after the show July 19 and 20 to deliver a clinic in showing, flat classes and over fences. There will also be up to four mentor judge positions available. Contact Inge Sumanik 633-5047.

Aug 28 and 29, Sue Falkner-March, Centered Riding Instructor/Clinician Level 3 from Calgary, Alberta, is back for her third visit. Centered riding is a new way of expressing the classical principles of riding, using body awareness, centering and imagery, developed by Sally Swift. Contact Clara Sharp 668-4965 or Judy Linton 633-4438.

This year YHRA is celebrating the 25th Anniversary of the Annual Summer Horse Show on July 16 - 18. Riders of all ages and abilities demonstrate their horsemanship skills and have fun at this three-day annual event. The show has grown from less than 20 classes in 1979 to over 95 classes in 2004. Exhibitors come from many other Yukon communities as well as Atlin, Juneau, Skagway and Haines. Admission is free to this colourful event and spectators are encouraged to spend some time watching the various classes and visiting with the friendly local horse people. Contact Tena Fox 633-4901.

The Yukon is a great place to be involved with horses. We are fortunate to have private boarding and riding establishments, local forage producers, local tack and feed stores, veterinarians, riding instructors, horse trainers, farriers, an equine dentist and other equine specialists, and of course lots of wonderful trails.

For more information about YHRA or any of the clinics, please call Vibeke Coates at 633-3012 or visit our new website at www.yhra.ca.

YHRA
Box 31482
Whitehorse YT Y1A 6K8

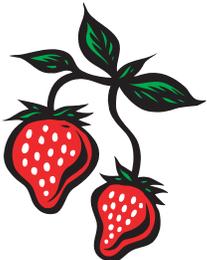
Homemade Bug Spray

Homemade garlic oil-soap spray with garlic. Garlic not only repels some species of insects, it is renowned as an antifungal and natural antibiotic. This spray seems effective against cabbage moths, earwigs, leafhoppers, mosquitoes, aphids, slugs and hornworms. It does not control grasshoppers or ants.

GARLIC OIL-SOAP SPRAY

20 garlic cloves, unpeeled
2 teaspoons mineral oil
2 teaspoons of liquid non-detergent soap
1 pint warm water

Method: Crush garlic cloves and mix with mineral oil in a container and let set for 24 hours. Next, blend garlic-oil mixture with soap and water in a bowl. Strain the mixture and place in a jar in the refrigerator for several weeks. To use add one or two tablespoons of the mixture to one pint of water and spray on plants. Don't forget to spray under the leaves where pests also hide. It's a good idea to test the spray on a few leaves of delicate plants to see if it will damage the plant in any way.



Strawberry Fact

The strawberry is a small plant of the *Rosaceae* (Rose) family.

InFARMatIon is...

A Yukon government newsletter published by the Agriculture Branch of the Department of Energy, Mines and Resources. If you would like to add your name to the newsletter mailing list, comment on an article or contribute a story, then please write to:

InFARMatIon
Department of Energy, Mines and Resources
Agriculture Branch
Box 2703 Whitehorse, YT Y1A 2C6
Phone: (867)667-3417
Fax: (867)393-6222
Email: tony.hill@gov.yk.ca

Or call Tony Hill at 867-667-3417, outside of Whitehorse at 1-800-661-0408 local 3417, or stop by the Agriculture Branch. We are located on the third Floor Elijah Smith Building.

Web site: www.emr.gov.yk.ca/agriculture

Classifieds

CUSTOM LAND CLEARING
Summer and Winter.
Phone 667-7844

RED WRIGGLER COMPOSTING WORMS
FOR SALE
\$5 for a tub, each tub has at least 50 worms
Phone Randy at 633-4379

Photo Contest



Get out your camera this summer ... we are holding a photo contest for the best Yukon Agriculture Photo. The deadline for submissions is September 30th, 2004. The winner will be announced at the Agriculture Banquet in early November. The winner and runners up will be showcased at the Banquet. Prizes will be announced in the fall addition of InFARMatIon. Bring your photos into our office on the third floor of the Elijah Smith Building in room 320, or,

Mail your photos to:
Agriculture Photo Contest
Department of Energy, Mines and Resources
Agriculture Branch K-320
Box 2703 Whitehorse, YT Y1A 2C6

Tips

Slippery Clean Lawn Mower

On the clean, plastic underside, spray with a heavy coating of vegetable oil. Grass doesn't stick.



Drying Herbs

On a hot sunny day, pick fresh herbs. Place in a large paper bag. Place the bag inside your vehicle, allowing only one window to be open a half inch to allow moisture to escape. It takes all day for the herbs to dry out. Strip leaves from stems and store in an air tight container. Herbs also make a great car freshener.

We are located in the Elijah Smith Building room 320. Stop by for a visit anytime.