

INFARMATION

Yukon Agriculture Branch Quarterly Bulletin

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MESSAGE FROM THE AGRICULTURE BRANCH

For the second year in a row, the snow is melting when it's supposed to. For those of us growing perennial plants and crops it is a real bonus when we get through the winter with a good snow cover and we don't have a mid-winter thaw followed by 40 below. It's a good start to a new growing season.

Speaking of growing, this winter marks the first year the Yukon Master Gardener course was offered in a community outside of Whitehorse. The Faro campus of Yukon College teamed up with the Agriculture Branch to offer the course this March calling on local master gardeners to provide the bulk of the instruction. Congratulations to the fourteen new graduates from the central Yukon.

Another event taking place over the winter that deserves mention is the workshop hosted by the Yukon Agricultural Association called "Exploring Relationships and the Future of Agriculture in the Yukon." Despite being held on one of the coldest days this winter, 44 individuals including farmers, First Nations, government departments, stakeholders and the public came together to identify issues that need further investigation and to gather views on land management practices and land use decisions regarding wildlife populations and the environment. The workshop was a good step towards continuing development of a sustainable agriculture industry that reflects the social, economic and environmental views of Yukon people.

Last but not least, Minister Archie Lang recently signed a continuity agreement to extend the Canada-Yukon Agriculture Policy Framework programs for the 2008/2009 program year, ensuring that there will not be any disruption in the delivery of programs while the new five year "Growing Forward" agreement details are negotiated. Local assistance programs in skills and market development, farm product safety, environmental farm planning, science and innovation and business risk management will be available to farmers as they have been in the past. For eligibility and program information visit our web site: www.emr.gov.yk.ca/agriculture.

And for those that didn't know, it's the International Year of the Potato! Check out the details inside this issue of the newsletter. Have a good spring.

Tony Hill
Director Agriculture Branch

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YUKON
AGRICULTURAL
ASSOCIATION
WORKSHOP ON
“EXPLORING
RELATIONSHIPS
AND THE FUTURE
OF AGRICULTURE IN
THE YUKON”

The Yukon Agriculture Association hosted a workshop on February 7th, 2008, to discuss issues and identify ways and means that would support agriculture as a legitimate and important use of land, while respecting and serving stakeholders' multiple needs and values.

One of the key objectives was to identify agricultural concerns that need further investigation and to suggest suitable future research projects to gather information on the effects of land use decisions and land management practices on wildlife populations and the environment. The spirit of the workshop was intended to facilitate the gathering of relevant facts on which to base future decisions and policy making.

Sixty people registered for the conference, and forty four people were able to participate due to the cold temperature. Several participants from the communities were not able to travel to Whitehorse, so, although attendance was lower than expected, it was very good overall.

The workshop was conducted using the 'Open Spaces' process, and led by Angela Walkley of Whitehorse. 'Open Spaces' was chosen specifically to maximize the interaction and exchange of ideas between all participants.

The process is specific enough to indicate the direction, while open enough to allow for the imagination of the group to take over.

As a result of the 'Open Spaces' group setting its own agenda, there were six main topic themes identified for detailed discussion: Education; Biodiversity; Local & Global Sustainability; Impacts of Agriculture (Genetically Engineered Foods, Invasive Species, Water); and Planning and Policy. Break out groups discussed each of the main topics and identified recommendations for Yukon Agriculture consideration. For the full report on the workshop contact Yukon Agriculture Association (see contact information below).

SUMMARY

The workshop opened the door for dialogue, new relationships and changed perceptions among stakeholders along with identifying agriculture concerns and challenges and generating new ideas. The organizing committee will be meeting over the next few weeks to review the results and suggest the next steps in engaging all stakeholders in the work of building Yukon's agricultural sector. Yukon Agriculture is committed to serving the needs of the community, while maintaining harmony with the values of Yukoners, and respecting the needs of everyone that use and depend on our land and natural environment.

Thanks to all for participating.
Yukon Agricultural Association
Phone 867-668-6864 or
E-mail: admin@yukonag.ca.

WANT TO EAT LOCAL? IT'S TIME TO...

The days are getting longer and the changing of the season marks the time when our agricultural producers are gearing up for the upcoming growing season. For those of us who like to support and eat local, this is the best time to contact local producers and place your order for locally grown food. Some producers only raise or plant what they need and may produce more if they had encouragement at the beginning of the season.

Producers and hobby farmer's 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 red meat mobile abattoir, the Fireweed Community Market and the new poultry processing equipment all help consumers access local food.

For a list of all things agricultural (producers, suppliers, market gardens), the New 2008 Yukon Products Guide is now available and On-line. To pick up your copy visit Yukon Agriculture Branch, the Yukon Agriculture Association, the Fireweed Community Market or ask your agriculture retail suppliers.

On line visit <http://farmproducts.yukonfood.com/index.htm>

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FARM CREDIT CANADA – FINANCING YUKON AGRICULTURE

Submitted by Farm Credit Canada

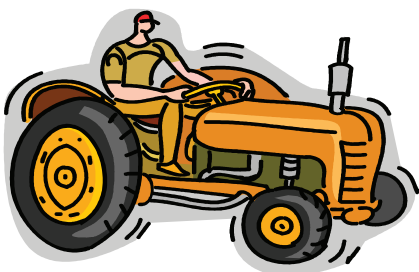
Farm Credit Canada (FCC) has been working with customers in the Yukon for more than 30 years to help them grow, diversify and prosper.

The corporation does this by providing specialized business and financial services and products to farming operations, including family farms, and businesses directly related to agriculture.

Because FCC specializes in agriculture, employees understand the business and have a solid track record.

“We’re used to working with northern customers using technology such as the phone, fax and e-mail. We understand the unique agriculture challenges in the area and can offer lending products tailored to meet the customer’s needs,” says FCC relationship manager Lorraine Spreadbury, who doesn’t let being based in Westlock, Alberta, deter her from working with Yukon customers.

FCC lends to all sectors of agriculture with a lending portfolio as diverse as agriculture in the Yukon. Many Yukon-based FCC customers don’t farm full time, but are working to develop their farms.



“One of the advantages of dealing with FCC is that we will consider off-farm and on-farm income in lending decisions. Sometimes, this can make all the difference,” says Spreadbury.

In an area where irrigation is vital, FCC can finance both irrigation and mobile farm equipment.

FCC can also finance land that doesn’t have a home on it. And if there is a house on the property, FCC is able to include the full value of the land.

Together, FCC and the agricultural community are facing transformations in production, technology and markets. And through all the years, one thing remains unchanged – FCC’s unwavering commitment to customers and a 100 per cent focus on agriculture.

For more information about FCC products and services, visit the FCC website at www.fcc.ca. You can also contact Lorraine Spreadbury or Tammy Round at 780-349-3202 or e-mail Lorraine.Spreadbury@fcc-fac.ca or Tammy.Round@fcc-fac.ca.

THE STATE OF THE INDUSTRY FOR 2005 - 2007 IS COMING SOON...

The State of the Industry report for 2005-2007 will be released shortly. Some of the industry highlights from this period include: public land lotteries held at Gentian Lane and in Haines Junction; the release of the Canada-Yukon Agriculture Policy Framework (APF) program guide making available 14 new local agriculture programs; the opening of the Fireweed Community Market on the Whitehorse waterfront; the release of the new agriculture policy “A Vision for Yukon Agriculture: 2006 Yukon Agricultural Policy”; the release of new census of agriculture statistics; the acquisition of a new, custom designed mobile abattoir; Federal Agriculture Minister Chuck Strahl’s first visit to the Yukon; and the new Multi-Year Development Plan for the industry.

The report also details the geography of the Yukon, how to obtain agricultural lands, growing season statistics, production from various agricultural sectors, past research results, infrastructure development, funding programs and program expenditures, policy initiatives, and information regarding industry associations.

Copies of the report will be available online www.emr.gov.yk.ca/agriculture, at the Agriculture Branch office, or the Yukon Agricultural Association office.

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YUKON
AGRICULTURAL
CLIMATE REPORT

The Agriculture Branch collects weather data recorded by Environment Canada, Yukon Government Community Services and from the Branch's own weather station to determine agriculture potential in the Yukon. The weather data is then used to determine the length of the growing season and compute Effective Growing Degree Days (EGDD), agricultural climate capabilities, frost occurrences and seasonal precipitation. The data is published yearly in the Research & Demonstration report. This article summarizes the last 3 years data for four key agricultural areas in the Yukon along with a prediction of the 2008 season.

Key agricultural areas included:

- Whitehorse area: This area is home to a majority of the producers and consumers and includes the Southern Lakes, Takhini River valley and the Yukon River valley up to and including Lake Laberge.
- Central Yukon: The area includes the river valleys in the central Yukon from Carmacks up to Dawson. This area is known to have Yukon's warmest summers. Historically Dawson was the first agricultural area to be developed in the Yukon.
- Haines Junction: The area has a strong agriculture presence and was historically the home of an Agriculture Canada research station from 1944 to 1968. The research station evaluated agriculture suitability for the area.
- Watson Lake: Another area of the Yukon known to have a warmer growing season compared to Whitehorse and the area traditionally receives the most precipitation.

2005 WEATHER SUMMARY

2005 was a normal year for the Whitehorse area as seen by the Class 4 land capability, although frost sensitive crops would be challenged by the 25 frost occurrences. For the central Yukon, 2005 was on the cooler side, reducing the land capability for this area to a Class 3. Watson Lake had the warmest average temperature and most precipitation for 2005.

2006 WEATHER SUMMARY

All areas of the Yukon experienced lower levels of precipitation for 2006, which resulted in increased stress to dryland crops and amplified demand for irrigation. The central Yukon was the warmest area, reaching a Class 2 land capability, followed by the Class 3 achieved in Watson Lake and Class 4 in the Whitehorse Area. Haines Junction was the coolest of all the agricultural areas with only 773 EGDD due to the late start of the season and high incidence of frosts in 2006.

2007 WEATHER SUMMARY

This was an exceptional year for the central Yukon as the area reached a Class 1 land capability, therefore having no significant limitations to common Canadian agricultural crops. The central Yukon experienced a warmer than normal summer along with a growing season that extended into the second half of September. Watson Lake also experienced a long growing season, although this did not result in a higher land capability class. A three year high, 300 mm of rain experienced in Watson Lake provided good moisture for dryland producers. Whitehorse and Haines Junction although slightly warmer for 2007, did not see an increase in land capabilities remaining at Class 4 & 5 respectively.

PREDICTIONS FOR 2008

Environment Canada's Weather Office publishes predictions for the upcoming year on their website. These predictions are based on available global climate data and on numerical and statistical weather prediction models. These models forecast seasonal air temperature and precipitation. The forecasts are presented in 3 categories: below normal, near normal and above normal, which is compared to 30 year normals from the period of 1971-2000. Although the prediction models do provide a mathematical insight into the upcoming season, the confidence level for 2008 forecast is low and for most Yukon areas is considered to be no better than chance.

The Weather Office forecast for April, May and June is for below normal temperatures for the whole of Yukon. Precipitation for this period is forecasted to be above normal in the Watson Lake area, average to below normal in the Haines and Whitehorse areas and average to above normal in the Central Yukon.

For June, July and August, Haines Junction and the Whitehorse area forecast are for above normal amounts of precipitation with seasonably cooler temperatures. In contrast to Watson Lake, that is forecasted to have a warmer summer with normal rainfall levels. The central Yukon forecast is for normal temperatures with the above normal rainfalls.

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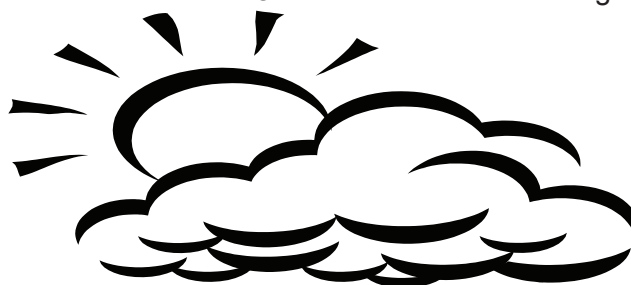
CLIMATE SUMMARY FOR 2005 - 2007, FOR THE YUKON AGRICULTURAL AREAS.

Year		2005	2006	2007
Whitehorse Area	Growing Season	Apr.25-Aug.20	May 19-Sept.16	May 18-Sept.9
	EGDD	979	963	1031
	Land capability class	Class 4	Class 4	Class 4
	Number of frosts during growing season	25	16	13
	Precipitation (mm)	190	145	185
Central Yukon	Growing Season	Apr.25-Aug.29	May 6-Sept.10	May 2-Sept.21
	EGDD	1114	1224	1431
	Land capability class	Class 3	Class 2	Class 1
	Number of frosts during growing season	10	16	17
	Precipitation (mm)	168	160	176
Haines Junction	Growing Season	Apr.27-Sept.1	May 20-Aug.30	May 22-Aug.28
	EGDD	*	773	816
	Land capability class	*	Class 5	Class 5
	Number of frosts during growing season	*	18	12
	Precipitation (mm)	*	*	197
Watson Lake	Growing Season	Apr.23-Sept.26	May 19-Sept.15	May 17-Sept.30
	EGDD	1197	1103	1171
	Land capability class	Class 3	Class 3	Class 3
	Number of frosts during growing season	15	1	9
	Precipitation (mm)	259	219	321

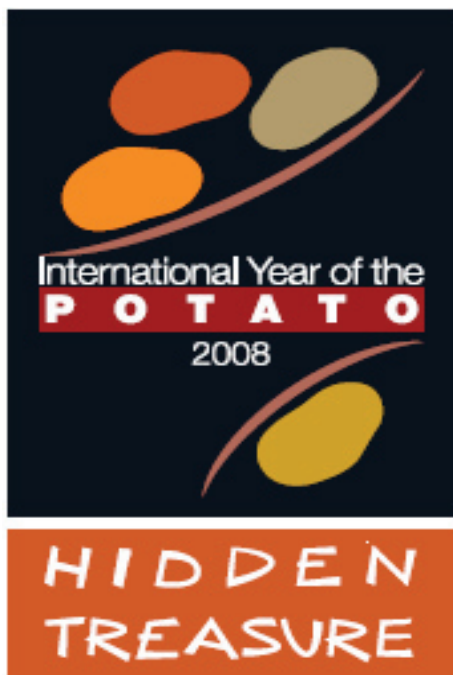
In the case of the Whitehorse area and Central Yukon, multiple weather stations are used and the data is reported as an average for the area. The data for Haines Junction and Watson Lake is recorded from a single weather station either at the airport or in town. Micro climates do exist in all these areas and it is recognized that the data reported for the key agricultural areas may be slightly different than what may be experienced at a specific farm site within that area. Precipitation is reported as a total for the season from May to September. Growing season is calculated starting on the

5th consecutive day of temperatures above 5°C and ending with the first killing frost of -2.2°C. The effective growing degree days (EGDD) is calculated from the growing degree days (GDD). GDD is a tally of degrees greater than 5°C within the growing season. The GDD is then adjusted to the EGDD by a factor related to day length to account for the boost in energy plants received from the long daylight hours. The total EGDD equates to the land capability class for each of the areas. The higher the capability class, the less restrictions to crop selection and growth. For example,

Class 1 land has no limitation for common Canadian agricultural crops, whereas Class 5 land has severe limitation that restrict the range of crops that can be grown. The number of frost occurrences during the growing season refers to temperatures below 0°C. It should be noted that these frost occurrences are calculated only during the growing season and include all frost occurrences before July 15 and only frost occurrences above -2.2°C after July 15th. A temperature of -2.2°C after July 15th would signal the end of the growing season.



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Adapted from the Food and Agriculture Organization (FAO) of the United Nations: www.potato2008.org

THE CELEBRATION OF THE INTERNATIONAL YEAR OF THE POTATO (IYP) will raise awareness of the importance of the potato and of agriculture in general in addressing issues of global concern, including hunger, poverty and threats to the environment. Over the next two decades, the world's population is expected to grow on average by more than 100 million people a year. More than 95 percent of that increase will occur in the developing countries where pressure on land and water is already intense. A key challenge facing the international community is, therefore, to ensure food security for present and future generations, while protecting the natural resource base on which we all depend. The potato will be an important part of efforts to meet those challenges.

WHY THE POTATO?

The potato is grown worldwide, and has been consumed in the Andes for about 8,000 years. Taken by the Spanish to Europe in the 16th century, it quickly spread across the globe: today potatoes are grown on an estimated 195,000 sq km, or 75,000 square miles of farmland from China's Yunnan plateau and the subtropical lowlands of India, to Java's equatorial highlands and the steppes of Ukraine. In terms of sheer quantity harvested, the humble potato tuber is the world's No. 4 food crop, with production in 2006 of almost 315 million tonnes (about 347 million US tons). More than half of that total was harvested in developing countries.

POTATOES FEED THE HUNGRY

The potato should be a major component in strategies aimed at providing nutritious food for the poor and hungry. It is ideally suited to places where land is limited and labour is abundant, conditions that characterize much of the developing world. The potato produces more nutritious food more quickly, on less land, and in harsher climates than any other major crop - up to 85 percent of the plant is edible human food, compared to around 50% in cereals.

POTATOES ARE GOOD FOR YOU

Potatoes are rich in carbohydrates, making them a good source of energy. They have the highest protein content (around 2.1 percent on a fresh weight basis) in the family of root and tuber crops, and protein of a fairly high quality, with an amino-acid pattern that is well matched to human requirements. They are also very rich in vitamin C. A single medium sized potato contains about half the recommended daily intake and contains a fifth of the recommended daily value of potassium.

DEMAND FOR POTATOES IS GROWING

World potato production has increased at an annual average rate of 4.5 percent over the last 10 years and exceeded the growth in production of many other major food commodities in developing countries, particularly in Asia.

The world potato sector is undergoing major changes. FAO data shows that for the first time in 2005 the developing world's potato production - some 162 million tonnes - exceeded that of the developed world (156 million tonnes). China is now the biggest potato producer and almost a third of all potatoes are harvested in China and India.

POTATOES IN CANADA

Potatoes were first grown by settlers in New Brunswick on Canada's Atlantic coast as early as the mid-1600s. Today, Canada ranks as the world's 12th largest potato grower with 2006 output of almost five million tonnes. The potato accounts for one third of all vegetable farm cash receipts making it Canada's most important horticultural crop. Since the early 1990s, Canadian potato production has expanded to meet international demand for frozen potato products. In 2004, 37 percent of the total harvest was needed to meet export demand. Most exports are in the form of frozen french fries destined mainly for US markets. Despite the potato's popularity, however, annual consumption in Canada declined from 89 kg per person in 1994 to around 85 kg a decade later. They obviously have not been eating Yukon grown Potatoes.

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MASTER GARDENER
COURSE COMPLETED

This past winter two Master Gardener courses were offered. One in Whitehorse and the other in Faro at the Yukon college campuses. The Whitehorse course covered a broad range of horticultural topics including plant botany and physiology, soils, outdoor and greenhouse gardening, lawns, flowering plants, ornamentals, woody plants and pests and pest control. The Faro course had some additional material on edible plants, herbs, and growing small fruit.

The Whitehorse course, which took place during the cold snap in February, had 21 graduates. The Faro course, the first Master Gardener course to be held outside of Whitehorse, had 14 graduates.

A special thanks to the course organizers and the people of Faro. The course was a great success thanks to them.

If you are interested in attending a future Master Gardener course, please contact the Agriculture Branch to have your name and added to the list.

Contact information available on the back page of InFARMation.

CHOOSING VEGETABLE VARIETIES
FREQUENTLY ASKED QUESTIONS

Article Adapted from Ropin the Web

“What variety of... should I grow this season?” It is a perennial question that vegetable growers ask themselves. Arriving at the answer is not easy. However, there are a number of factors that may influence the choices that growers make. There are also a number of resources that growers can use to help them decide.

FACTORS INFLUENCING CHOICES

- Market demand
- Consumer demands
 - Specialty markets (e.g. cabbage rolls)
 - Regional preferences
- Variety performance comparisons (current vs. new varieties)
- Grower preferences
- Regional suitability
- Growing season length
- Availability of seed
- Seed cost
- Equipment needs or limitations
- Pest problems and/or Pest resistance
- Crop problems/issues (e.g. bolting)

RESOURCES

- Recommendations by seed companies can give input into performance in various situations
- Variety evaluations by public research institutions
- Grower variety trials (Performance of varieties under typical growing conditions at the farm level)
- Information exchange between growers
- Recommendations based on industry variety standards

SUMMARY

Generally, the best practice is to use a range of decision factors to make a choice about a new variety. Answer the following questions.

- What problems have I had with my current varieties that might be fixed by selecting a different variety?
- Will it grow in my field under my conditions (growing season length, moisture, rotation, etc.)?
- What are my customers demanding?
- What information is available about my potential variety choices?
- Are there any special considerations or adjustments that may make the difference in successfully producing the crop (e.g. plastic mulch, transplants, etc.)?
- What are the risks associated with growing a new variety? Is there anything that I can do to reduce the risk?

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2007 CARROT VARIETY EVALUATION AT THE AGRICULTURE BRANCH RESEARCH FARM

In 2007, the Agriculture Branch set out to determine if a profitable carrot operation is possible in the south central Yukon and which varieties would provide the best yield. For the evaluation a range of carrot varieties were purchased and planted at the Agriculture Branch research farm in the Whitehorse area. The carrots were planted in 5x6 m rows split in half with 0.5 m between each row to allow for ease of cultivating and weeding.

Carrot varieties planted, supplier and days to maturity

Carrot Variety	Supplier	Days to Maturity
Sweetness III	OSC	60 days
Little Finger	McKenzie	55-60days
Tenderlong Imperator	McKenzie	65-80 days
Scarlet Nantes	McKenzie	68 days
Mezza Lunga Nantes	Gusto Italia	55-72 days
Nantes Touchon	McKenzie	60-70 days
Tendersweet Long Hybrid	McKenzie	75 days
Red Cored Chantenay	McKenzie	60-70 days
Red Cored Danvers	McKenzie	65-80 days
Nantes Coreless	Pike	-

The carrot trial was fertilized with conventional fertilizers, weeded and irrigated as required. The carrots were seeded by hand and thinned to 5cm spacing during the season as the carrots matured. The carrots were seeded May 18th and harvested Aug 29th, leaving the carrots in the ground for 103 days.

The extended maturity time and cooler weather experienced toward the end of August resulted in improved flavour of the carrots. Although differences in flavours could not be quantified, some varieties tasted noticeably sweeter later in the season. After harvest, the carrots were cleaned, sorted and weighed. The sorting separated the small and abnormal carrots from the Grade-A carrots, and the Grade-A carrot weights were averaged and used to calculate an estimated yield for large scale and small market garden operations, as seen in Tables 1 & 2. The best yielding Grade-A carrots were the Red Cored Chantenay and the Red Cored Denvers. The calculated output ignores losses during harvesting for carrots that are not Grade-A, or possibly damaged during the harvest. The estimated output also uses the recommended seeding rate of 5 cm between seeds and a row spacing of 30 cm. The yields reported in this trial were based on averages from the trial. As a result of hand seeding and insufficient thinning, high densities within the row may have reduced potential yields. More controlled seeding may allow for growth of larger Grade-A carrots, which would result in better total production. Also alternative rowing techniques would allow for a better utilization of the land and increased production per hectare without creating high density stresses.

The estimated yields per hectare for a large operation and the value per hectare were calculated using the 2006 Alberta Carrot FOB Market Prices Report from Agriculture and Agri-Food Canada. For 2006 the carrots ranged from \$13.50 to \$16.00 for a 10 x 5lb unit in Alberta. Prices in Manitoba were higher in contrast to the big markets of Ontario, Quebec and British

Columbia where the prices were lower. Traditionally, Yukon products come from Alberta distributors therefore an average Alberta price of \$14.75 per 10 x 5lb unit or \$0.65 per kg was used to calculate estimated value per hectare.

Table 1: Large scale operation outputs for each variety of carrot

Carrot Variety	Estimate yield per hectare (tonnes/ha)	Value per hectare based on 2006 Alberta FOB price of \$0.65/kg
Red Cored Chantenay	70.3	\$45,698
Red Cored Denver	65.5	\$42,620
Nantes Coreless	50.7	\$32,995
Nantes Touchone	50.0	\$32,496
Scarlet Nantes	47.5	\$30,892
Little Finger	44.5	\$28,941
Tender Long Imperta	43.8	\$28,486
Mezza Lunga Nantes	42.9	\$27,900
Tendersweet Long Hybrid	41.9	\$27,228
Sweetness III	40.9	\$26,600

One hectare of land was calculated to produce an estimated 40.9 to 70.3 tonnes of carrots. At \$0.65/kg, would generate \$26,600 to \$45,698. Information from a British Columbia fact sheet "Planning for Profit" outlines the expense costs for a topped carrot operation. Using the projected expenses from this fact sheet as a base line and increasing the labour cost to \$15 per hour, the projected expenses are approximately \$9,400 per hectare.

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This would reduce the gross profit to between \$17,200 and \$36,500 per hectare.

A smaller operation, of 1,000 m² or a quarter of an acre was estimated to produce between 4,090 to 7,030 kg and at the Alberta FOB price would generate \$2,700 to \$4,600. If sold at the Fireweed Community Market, where prices are approximately \$4.41/kg or \$2.00/lb, the resulting income per 1,000 m² would range from \$18,000 to \$31,000 per 1,000 m². The \$2.00/lb Fireweed Community Market price is an estimate value based on a survey of market gardeners. It should be noted that these market gardeners are organic producers.

Information from "Planning for Profit" for organic operation outlines the estimated expense for smaller more labour intensive operations. Using the projected expenses from this fact sheet as a base line and adjusting the labour cost to \$15 per hour and converting to

1,000 m², the projected expenses are approximately \$2,500.

Expenses of \$2,500 can almost eliminate the profitability of an operation selling at an FOB price but at \$2/lb profitability is only slightly affected.

The information from the BC Ministry of Agriculture and Lands, Planning for Profits is available online at www.agf.gov.bc.ca/busmgmt/budgets/vegetables.htm.

The carrot evaluation proved that a profitable carrot production can be achieved for both a large and small scale operation. The level of profitability is largely dependent on the selling price that can be achieved for the carrots. The trial used a conservative FOB price for a large scale operation and a local Yukon product sold in this market may achieve higher margins that would result in better profits. For the small market garden operation the premium market price has some room for fluctuations as the market fills, nonetheless lower prices would

still allow for good margins.

For more information on carrot production, Alberta Agriculture industry has published a fact sheet on Fresh Market Carrot Production in Alberta.

The Alberta fact sheet includes:

- Carrot description
- Seeding
- Plant Populations
- Soil/seedbed preparation
- Fertilizer requirements
- Irrigation
- Insects and Diseases
- Frost effects
- Harvesting/harvesters
- Washing/packing
- Storage
- Marketing

Also, the full trial report or any of the fact sheets can be obtained from the Agriculture Branch.

Table 2: Small scale (1000 m²) operation outputs for each variety of carrot

Carrot Variety	Estimate yield per 1000 m ² plot (kg/1000 m ²)	Value per 1000 m ² based on 2006 Alberta FOB price of \$0.65/kg	Value per 1000 m ² based on \$4.41/kg (\$2.00/lb) Fireweed Market price
Red Cored Chantenay	7027	\$4,569.91	\$30,982.42
Red Cored Denver	6553	\$4,262.07	\$28,895.37
Nantes Coreless	5073	\$3,299.52	\$22,369.66
Nantes Touchone	4997	\$3,249.66	\$22,031.61
Scarlet Nantes	4750	\$3,089.24	\$20,944.00
Little Finger	4450	\$2,894.13	\$19,621.22
Tender Long Imperta	4380	\$2,848.60	\$19,312.57
Mezza Lunga Nantes	4290	\$2,790.07	\$18,915.74
Tendersweet Long Hybrid	4187	\$2,722.87	\$18,460.11
Sweetness III	4090	\$2,660.00	\$18,033.88



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NEW POULTRY
PROCESSING TRAILER

The mobile poultry processing trailer is truly one of last year's successful ventures under the Canada-Yukon Agriculture Policy Framework program. Here are extracts from the report put together by the farmers who used the equipment. Also included is information on how to book the trailer.

In 2007, seven Yukon farms applied to the Canada-Yukon Agriculture Policy Framework for funding to purchase poultry butchering equipment. In the words of the application, the objectives of the project were "to streamline the on-farm processing of animals used as food and ensure a safe and humane process." The equipment would allow the farmers to process poultry more efficiently on their own farms. They would thus be able to respond more adequately to the tremendous consumer demand for local poultry. Meat processed in this way does not meet inspected standards therefore all sales are considered farm gate sales.

The equipment was purchased through Berry Hill Ltd. of Saint Thomas, Ontario and was housed in an enclosed trailer purchased from Tait Trailer Sales of Whitehorse. An operating manual for the equipment and a checklist for each farm using the equipment were developed.

EQUIPMENT

- Five shackles: For the killing process, five chickens or two turkeys are hung from a shackle which is hung from a grounded scaffold (built by a member of the proponent group).
- Electric stun knife: This delivers a measured voltage to the bird, stunning it, so that cutting the jugular vein does not result in pain or struggle. The shock also increases heart rate, so that bleeding happens more quickly.
- The scalding: The temperature of the water in this vat is thermostatically controlled and heated by a propane burner.
- The Dunk Master: The birds on their shackles are transferred manually from the scaffold to this device which repeatedly dunks them in the hot water, thus ensuring that the water penetrates to the skin. Power for the dunkmaster is provided by a compressor loaned to the project by a group member. It is the group's intention to buy a compressor before next season.
- The Featherman hands-free plucker: The birds are removed from the shackles and placed in the plucker. The action of the plucker removes all but a few tiny, concealed feathers.
- Eviscerating table: This is a stainless steel table equipped with drainage holes and hoses for washing the table and rinsing the birds.
- Trailer: All the group-owned equipment is transported from farm to farm in an enclosed dual-axle trailer equipped with electric brake. The trailer interior was modified by a member of the proponent group, through the provision of storage compartments and tie-down systems. The trailer can be hauled by a half-ton truck with the correct electrical connection and hitch.

Ancillary equipment not included in the original proposal but is provided either by members of the proponent group or from other revenue.

To complete this equipment, each farm must provide potable water, propane and power to the butchering site, at least two tubs for rinsing and chilling birds (with ice) and receptacles for blood and offal, as well as all wrapping, weighing and labeling supplies and facilities. A local business, Icy Waters, provided ice for processors at low cost as well as the use of a large cooling tank.

FIRST YEAR OPERATIONS

The equipment was used for seven days in late summer and early fall of 2007. Birds belonging to four members of the original proponent group and four other farms were butchered in 2007 totaling 933 chickens and turkeys. On each butchering day at least one (usually several) member(s) of the proponent group hauled the equipment to the butchering site and participated in the work. The poultry farmer also participated and made arrangements for other helpers, so that a team of five to ten people were available. In this



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way many people learned about poultry butchering. The farmer also took responsibility for providing power, water and propane for the equipment, disposing of feathers, offal, wash water and feeding the team. The farmer took care of all arrangements regarding the birds (wrapping, weighing, freezing, and distribution) once they left the eviscerating table. At the end of each day a member of the proponent group took charge of the trailer containing the equipment and hauled it to his/her farm for safe storage until next use. Care was taken to ensure that, where organic and non-organic birds were to be butchered on the same day, the organic birds were processed first.

FINANCIAL

Revenue for the trailer was generated in the following way: Each proponent producer paid \$1.00 per bird processed. Non proponent producers paid \$2.00 per bird of which \$1.00 should have gone to the proponent producer assisting on that day and the other dollar to the project. The producer was also charged \$20.00 travel fee and \$0.35 per kilometer to and from Whitehorse City limits.

It should be noted that members of the proponent group contributed to the financial success of the project this season. All chose to forego the fees due to them, so that all fees paid by non-proponent producers went to revenue and were thus available for additional costs. Some members of the group volunteered to help on nearly every butchering day, a significant investment of time, energy and enthusiasm. Some also spent hours on minor modifications and improvements to the equipment, at times offering their own materials.

SUMMARY

This equipment as it currently exists can be used to process about 25 to 30 birds per hour with an experienced crew of 8 – 10. This would allow for the processing of approximately 200-250 birds in a day. The crew involves 2 people catching, hanging and killing, 1 managing the dunking machine, 1 managing the plucker, 3 to 4 people on the eviscerating table and 1 person weighing and packaging. Birds with darker feathers may need an additional person for plucking prior to eviscerating.

About 300 gallons of water is needed to process 100 birds. This includes filling the dunker, filling the chilling tanks and final cleanup. A 3 – 4 kW generator is sufficient for power requirements. A 4 cfm continuous flow of compressed air is required for the dunker. For a full day of butchering, a 20 lb cylinder of propane is required for the scalding.

Before using the trailer, a poultry producer will have Food Safe Level 1 certification, read the operating manual created for the trailer and volunteer at someone else's farm during the processing of poultry with the equipment. The volunteer time will give the user some experience operating the equipment safely and an understanding of what is involved in setting up in terms of people-power and supplies needed. The Food Safety and Quality Procedures Manual for On-Farm Poultry Processing is available online at www.yukonfood.com (bottom left of the home page). The Food Safe Level 1 certification provides information on how to handle and prepare food in a way that protects them and their customers from injury and illness. Taking the food safe course and using the

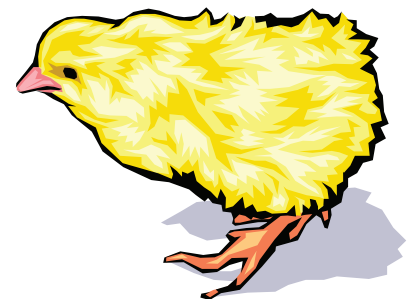
equipment does not bridge the gap to a federally inspected product but is a step towards developing the industry and increasing the consumption of local food.

The user of the trailer is responsible for finding the people power and providing the supporting resources for the operation. Whenever the equipment is used, at least one member of the proponent group will be on hand to supervise set-up and use. This is not an on-call butcher service but a sharing of equipment thanks to the efforts of local producers that brought the equipment and trailer together.

Producers who wish to use the poultry processing trailer or require more information can contact Susan Ross at (867) 633-4201 or lendrumross@northwestel.net.

Canada

Yukon



ANNOUNCEMENTS

FIREWEED COMMUNITY MARKET

The 2008 season for the Fireweed Community Market starts May 15th, 2008. The outdoor market is held every Thursday evening continuing through to September 11th, 2008. The market is located in Shipyards Park on the riverfront in Whitehorse. The market will be held rain or shine from 3 pm to 8 pm.

ELDORADO VIP BOARDING KENNELS

Recently Eldorado Game Ranch opened up a new Very Important Pet (VIP) boarding service with 3 kennel sizes to suit single or multiple pet needs. The kennel has heated floors, raised beds by Kaunda and private outdoor runs. Your pet will be spoiled with three play times daily in a large central play area and clean blankets from the in-house laundry facilities.

For more information contact Eldorado VIP boarding kennels at 633-2942 located on the Takhini River Road, Mile 1 (km 1.6).

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.

CLASSIFIED



TRAILER

2007 Goose neck trailer
30 feet long usable deck, 37 000 lbs axels, GVW (gross vehicle weight 21,000lbs), heavy duty brake shoes, electric brakes on each wheel drum, drop down end can be used as extended deck.
\$9,800

Contact:

Sonja Seeber & Paul Kloepfer
Tel.&Fax.# 867 660 4124
E-mail; paulk@northwestel.net

EQUIPMENT FOR SALE

Used Agshield 200 Reconditioner
Reconditioners are used by many producers to cut drying time in half for hay and oat greenfeed. The unit produces a greener, fluffier bale with higher protein levels and palability. This unit has been reconditioned and is field ready.
\$6,500.00 OBO

For more information contact:

Dave or Tracey at Rafter A Ranch
Tel.# 867-667-7844

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