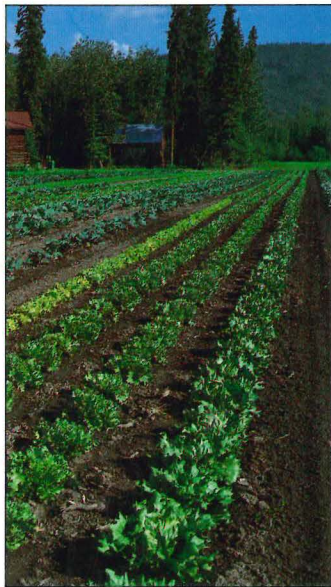


YUKON



AGRICULTURE

1992 – 1993
STATE OF THE
INDUSTRY

YUKON AGRICULTURE
STATE OF THE INDUSTRY: 1992-1993

Department of Renewable Resources

October, 1994

For additional copies of this report please contact: Agriculture Branch, Department of Renewable Resources, Government of Yukon, Box 2703, Whitehorse, Yukon, Y1A 2C6; Phone: (403) 668-5838; Fax: (403) 668-3955.

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INTRODUCTION

This report provides a summary of activities and developments in the Yukon agriculture industry during 1992 and 1993. Industry highlights during this period include:

- initiation of the Green Plan
- continued efforts to build an abattoir
- development of an egg grading station
- Circumpolar Agricultural Conference

Industry growth has been steady since the early 1980s. The territory now supports 137 farms with an average size of 55 hectares. A total of 7,355 hectares are devoted to farmland, 5,263 of which are in production or under development. Sectors generating the largest receipts are livestock, field crops, game farming, and horticulture.

Through 1992-93 the industry focused on developing infrastructure and marketing programs. The farmer's market has seen significant improvements and progress has been made on a proposed abattoir for the Yukon.

The primary goal of the Yukon agriculture industry is to replace imported foods with fresh, Yukon-grown products. The potential for continued industry growth is tremendous as 45 million dollars worth of food is imported into the Yukon each year.

THE AGRICULTURAL LAND BASE

A Brief Description of Geography, Climate and Soils

Less than two per cent of the 483,450 km² of Yukon land is suitable for agriculture because of the limitations of geography, climate and soils.

The Yukon is part of the Canadian cordilleran region characterized by mountainous terrain and the presence of glaciers and icefields in some areas. Agriculture is limited to the major river valleys including the Yukon, Takhini, Pelly, Stewart and Liard valleys.

The Yukon has a sub-arctic continental climate with temperatures reaching as high as 36.1° C in the summer and as low as - 60° C in the winter. The average frost free period ranges from 93 days in Watson Lake to 21 days in Haines Junction. The short frost free period is offset by long hours of daylight in the summer which accelerates the growth of certain crops.

Average annual precipitation ranges from less than 20 cm west of Whitehorse to more than 40 cm in Watson Lake. The southwest Yukon where most agricultural production takes place lies within the rainshadow created by the St. Elias and Coastal mountains.

Yukon soils are generally deficient in nutrients. Soil tests conducted since 1984 show that 70 per cent of sampled soils are low in nitrogen, 32 per cent are low in phosphate and 49 per cent are low in potassium. The most common micro-nutrient deficiencies are boron and magnesium. Soils throughout the Yukon are low in organic matter and salinity has been identified as a problem in some localized areas. Permafrost is scattered throughout the southern Yukon and continuous in the northern Yukon.

Yukon Agricultural Areas

The total amount of land devoted to agriculture in the Yukon is 7,355 hectares (1991). Forty per cent of this land is in production and another 23 per cent is under development.

Most of the land used for agricultural purposes in the Yukon is located near the major communities. Seventy per cent of the Yukon's 137 farms (1991) are located within 100 km of Whitehorse. The Takhini Valley agricultural area west of Whitehorse is the largest agricultural area in the Yukon. Other important agricultural areas include Dawson City, Watson Lake and Mayo.

The location of Yukon agricultural areas is illustrated in Figure 1.

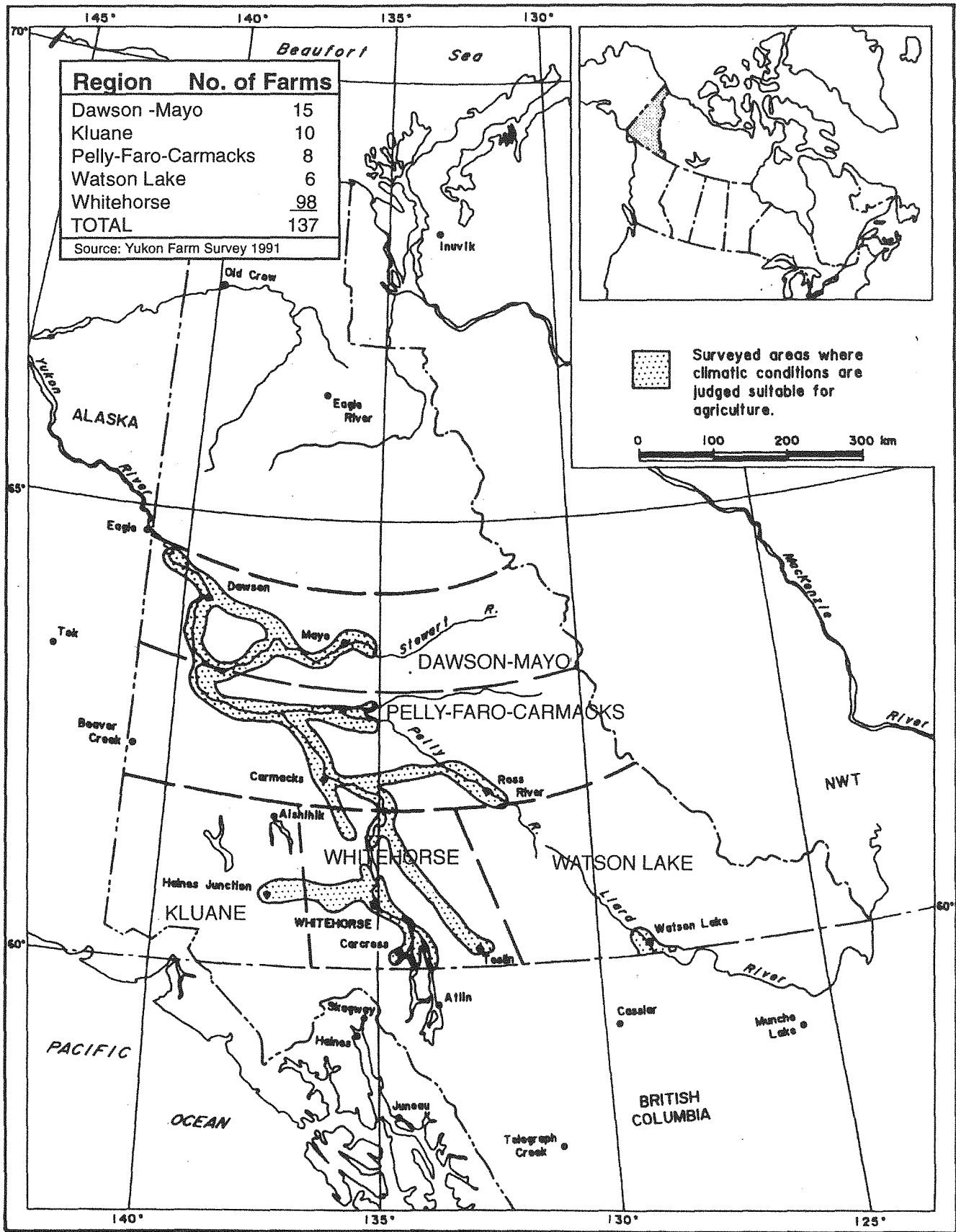


Figure 1. Yukon Agricultural Areas

Obtaining Crown Land for Agricultural Use

The Yukon is one of the few places in Canada where Crown land can be obtained for agricultural purposes. To qualify for Crown land, an applicant must be a Canadian citizen at least 19 years of age who has lived in Yukon for at least one year.

The process of acquiring Crown land for agricultural use takes 12 to 18 months. It begins with an application to the Lands Branch at the Department of Community and Transportation Services. The application must describe intended uses of the land. It must also certify that an acceptable farm development plan will be submitted within 30 days and that the applicant will remain a Yukon resident during the life of any agricultural land agreement.

Preliminary reviews of the application are conducted by the Lands Branch and by the Agriculture Branch at the Department of Renewable Resources. The Lands Branch determines if any conflicts exist with land use regulations, other land applications or known First Nation land claims. The Agriculture Branch provides an evaluation of site suitability and arability.

The Agriculture Branch also helps the applicant carry out an agriculture management review of soils, topography, access to water, location and other concerns. At the same time, other branches at the Department of Renewable Resources examine potential conflicts with fisheries, habitat, wildlife, environmental or recreational values. Once this is done, recommendations from Renewable Resources are presented to the Lands Branch.

The application is then reviewed by the Land Application Review Committee (LARC) to determine whether it meets agricultural policy requirements and sound land management principles. If it receives a favourable review at this level the application is forwarded to the First Nation which holds traditional territory in the area under application. Following review by the First Nation, an agreement for sale may be issued and a farm development agreement may be drawn up. (If the land is federally administered, an Order-in-Council must be passed by Cabinet before the land can be released.)

The land is released to the applicant with a value attached. With this figure in mind the applicant is required to meet all agreement-of-sale stipulations including development of the property. According to the Yukon Agriculture Policy, in the case of a sale, for every two dollars of approved development work done by the applicant, one dollar of the difference between the market value of the land, and the Yukon government's development cost, may be forgiven. At the end of a five year period, providing the applicant has met all requirements, the agreement for sale can be transferred and title can be issued.

At the end of 1993 there were 129 agricultural land applications on file at the Lands Branch (Table 1). About five per cent of the current applications originated with the transfer of federal agriculture leases to the Yukon government. The federal government

no longer disposes of territorial land for agricultural or grazing purposes.

Fifty of the 129 agricultural land applications on file at the Lands Branch are on hold (Table 2). Half of these belong to people who have applied for more than one parcel of land. In these cases, the applicants must complete the development of one parcel before government will issue an agreement-for-sale on another parcel. In other cases, applications have been put on-hold because they fall within areas undergoing land planning review or areas not covered by agricultural land disposition policies, such as the City of Whitehorse.

Table 1. Status of Current Agricultural Land Applications

Status of application	Subject to old policy	Subject to new policy	Total
Active/under review by YTG	29	27	56
Awaiting federal land transfer	23	–	23
On-hold	41	9	50
TOTAL	93	36	129

Table 2. Reasons for On-Hold Applications

Reason	Subject to old policy	Subject to new policy	Total
Awaiting City of Whitehorse agriculture policy	2	2	4
Awaiting Mount Lorne land use plan	2	3	5
Awaiting Gentian Lane land use plan	1	2	3
Unresolved land claim conflicts	7	–	7
Awaiting completion of prior agreements	25	–	25
Awaiting policies for game farming and non-soil-based agriculture	4	–	4
Miscellaneous	–	2	2
TOTAL	41	9	50

Since the Yukon government started its agricultural land disposition program in the early 1980s, about 120 agricultural land titles have been issued. In addition, about 60 agreements-for-sale have been issued along with 35 grazing leases.

Responsibility for the agricultural land disposition program may be shifted from the Lands Branch to the Agriculture Branch in 1994.

Obtaining Grazing Agreements

Applications for grazing agreements are also submitted to the Lands Branch where they are examined for potential conflicts with existing land tenures, other land applications or known land claims.

Applications are then presented to the Land Application Review Committee (LARC) for a preliminary screening. If there are no major conflicts LARC will recommend that the Agriculture Branch proceed with the field work required to evaluate the application. If the land has suitable grazing capability the Agriculture Branch will prepare a Grazing Management Plan. The plan, which incorporates Renewable Resource's recommendations for managing grazing activity on the land, is then submitted to LARC. Subject to a favourable review by LARC and any affected First Nations, the grazing agreement may be offered to the applicant. The Grazing Management Plan becomes part of the grazing agreement.

Twenty-six of the 35 existing grazing leases in the Yukon are 30-year agreements as laid out in the grazing policy of 1987. The remaining nine leases, which pre-date the grazing policy, are of various tenure and will eventually be converted to 30-year agreements.

PRODUCTION

Results of the Yukon Farm Survey (1991) indicate that the agriculture industry has undergone a period of rapid growth since the mid-1980s. Farm numbers, total production, value of production and capital investment have doubled or tripled between 1986 and 1991. This has been accomplished on a land base 40 per cent greater than that used in 1986.

Seventy per cent of the 137 farms identified in the survey are located within 100 kilometres of Whitehorse. The total amount of land devoted to agriculture is 7355 hectares. Forty per cent of this land is in production and an additional 23 per cent is under development.

Gross farm receipts totalled 1.7 million dollars in 1991. The total value of production in that year is estimated at 2.3 million dollars. Average capital invested in the farm was \$175,000.

The farmland inventory (Table 3.) and the sectoral descriptions which follow are based on information obtained through the Yukon Farm Survey.

Table 3. Farmland Inventory

Type of production	Area in production (hectares)	Value of sales (\$)
Livestock	2,038	914,945
Forages	702	192,050
Cereals	287	87,004
Game farming	388	228,500
Seed crops	88	—
Vegetables	16	58,125
Berries	2	—
Other	69	106,150

Livestock

Livestock is the largest sector of the Yukon agriculture industry in terms of sales, land use and number of operators reporting production. The fastest growing part of the livestock sector is egg production where poultry numbers have doubled since the farm

survey was carried out in 1991. Meat sales from cattle, hogs, broilers, turkeys and rabbits are carried out at the farm gate and dairy production (dairy cows and goats) is limited to on-farm consumption.

Field Crops

The field crop sector is based primarily on the production of grass hay and green-feed oats. More than 60 per cent of the land in crops is devoted to hay, 25 per cent is in green-feed oats, 10 per cent is in soil improvement crops and 5 per cent is in grains or legumes. Total value of all field crops (forages and cereals) was \$279,000 in 1991.

Game Farming

The game farming sector is focused primarily on elk raised for breeding stock and antler sales. This sector also includes a domestic reindeer farm and a wood bison operation. No meat sales have been reported.

Seed Crops

Arctic Alpine Seeds, the only commercial seed crop producer in the Yukon, is attempting to meet the need for locally bred and grown seeds. Four of the most promising seed varieties are established on a 16 hectare site. In 1993 a total of 907 kg of seed was sold in the Yukon N.W.T., British Columbia, Alberta, Saskatchewan and Ontario.

Arctic Alpine Seeds is a member of the Canadian Seed Growers Association. The association, which is responsible for the regulation of certified seed, is considering the certification of a local person to act as an association representative in the Yukon.

Vegetables and Berries

Vegetable production is carried out on small acreages. The most common crops are potatoes, carrots, radishes, brassicas and lettuce. Most produce is marketed fresh through retail outlets, farmer's markets and direct sales. Several producers also sell vegetables to exploration and mining camps.

No sales were reported in berry production although acreages are increasing. The major crops are raspberries and saskatoons.

INFRASTRUCTURE DEVELOPMENT

Abattoir Project

The development of an abattoir was first proposed in 1988 after a study indicated that up to 25 per cent of the meat consumed in the Yukon could be produced locally. Over the next few years the Agriculture Branch and the Yukon Agriculture Association (YAA) conducted feasibility studies and worked on preliminary plans, equipment lists and a suitable site for the project.

The Federal Forestry Reserve at the junction of the Takhini and Yukon rivers is one possible site for the abattoir. Other locations on private land and Yukon government land are also being considered.

The design of the facility was modified recently to include poultry processing.

There has been some controversy over the proposed abattoir. Although the industry sees it as a necessary piece of infrastructure, public concerns have been expressed about costs, location, feasibility and environmental impacts.

A steering committee has been set up to guide the development of the abattoir. The committee is made up of representatives from YAA, Community Futures, the Lands Branch, the Agriculture Branch and the Department of Economic Development.

Egg Grading Station

The Yukon's first egg grading station is operating at the Partridge Creek Farm north of Stewart Crossing. A second grading station is planned for the Whitehorse area and should be up and running by mid-1994. Egg grading stations assure consumers that the eggs they buy meet federal standards and are properly graded.

Vegetable Storage

The Agriculture Branch supports the development of a central vegetable storage facility that would operate on a cooperative basis. Such a facility could extend the marketing season for all vegetable producers. In the meantime, some producers are building their own root cellars to extend the life of their produce.

Veterinarian Services

Yukon is now served by two veterinarian practices staffed by three veterinarians. Yukon Veterinarian Services has a large animal practice and is providing most of the on-farm assistance. The Agriculture and Agri-Food Canada veterinarian from Dawson Creek, B.C. makes regular visits to the Yukon to monitor the health of game and domestic animals and to test for tuberculosis and brucellosis.

MARKETING AND PUBLIC AWARENESS

The Yukon Farm Survey of 1991 showed that Yukon grown produce is most commonly marketed through direct sales to wholesale distributors, restaurants, retail outlets and farmer's markets. Farm gate sales are also significant. Livestock can only be marketed at the farm gate and through direct sales to individuals.

Public awareness of the Yukon agriculture industry in 1992 and 1993 was promoted through contact with local media outlets, the production of a video about the industry and a series of school presentations.

Farmer's Market

The Whitehorse farmer's market moved to a waterfront location on First Avenue in 1993. The market accommodated up to eight vendors at a time who sold fresh vegetables, honey and crafts.

The Yukon Agriculture Association and the Agriculture Branch are now working on securing a permanent site for the market. Efforts are being made to obtain use of the old firehall at the base of Main Street. A high profile location like this could boost sales and increase public awareness of the Yukon agriculture industry.



Figure 2.

Farmer's Market

Agricultural Video

An educational video showing the current state of Yukon agriculture and its future potential was produced by the YAA in 1992. The video illustrates the diversity of Yukon agriculture and features locations throughout the Yukon and agricultural activity through the seasons. Taping and script writing were carried out by a local company, Images Unlimited.

The video has been used at agricultural seminars and training workshops and as a tool for tourism development. It was premiered at the Circumpolar Agricultural Conference.

School Presentations

The Yukon Agricultural Association presented information about the industry to grade four classrooms throughout the Yukon in 1993. Classroom visits were followed by field trips to local farms where students were able to talk to producers and observe the industry first hand. This continuing program was met with great enthusiasm by both students and teachers.

Media Coverage

Changes in the agricultural issues covered by local media from one year to the next are reflective of changes in the industry itself. In 1988-89 policy development, planning issues and land issues received the most media coverage. Animal welfare, policy development, the proposed abattoir and the Circumpolar Agricultural Conference were heavily reported in 1990-91.

Through 1992-93 the Whitehorse Star published 24 articles featuring the abattoir, the Circumpolar Conference and the Dawson mushroom industry. The Yukon News published approximately the same number of articles covering the same issues as well as the new egg grading station near Dawson.

The industry received additional exposure through an advertising campaign aimed at promoting the farmer's market. The campaign included a series of print and radio ads running from June through to September. The ads brought people to the market and also raised awareness of the industry in general.

INDUSTRY ASSOCIATIONS

Yukon Agricultural Association

The Yukon Agricultural Association (YAA) promotes the development of the agriculture industry and works closely with the Yukon government to achieve its goals. The association membership grew substantially in 1992 -1993 as a result of public interest in the abattoir project, the proposed relocation of the farmer's market, land issues and the circumpolar conference .

YAA efforts in 1992 and 1993 were devoted to the abattoir project (page 4), the new farmer's market site (page 13), production of the agricultural video (page 14), school presentations (page 14) and the Circumpolar Agricultural Conference (page 24).

The YAA can be contacted at #103-302 Steele Street; 668-6864.

Game Growers Association of Yukon

The Game Growers Association of Yukon was formed in 1989 to promote the game farming industry. In 1993 the association had six active members.

In 1993 the game farming industry in the Yukon consisted of 200 elk, 60 reindeer, 12 musk ox and 30-40 bison. Federal government testing in the fall of 1992 confirmed that Yukon game farm animals are free of tuberculosis and brucellosis.

There has been little growth in the industry since a moratorium was placed on the issuance of new game farming licences in 1991. A new game farming policy is now in place and the moratorium has been lifted. Draft regulations for the game farming industry are being prepared for public review and comment (see Game Farming Policy and Regulations, page 16).

The government elk herd of 25 breeding animals is managed by the Midnight Sun Elk Ranch. Eighteen calves were born in 1992 and 14 were born in 1993.

In 1993 the Yukon government contracted a local farm operator to manage a herd of wood bison that had been causing accidents on the Alaska Highway west of Whitehorse. The bison were part of a larger group that had been released along the Nisling River in an attempt to establish a free-roaming herd of the threatened species. Thirty-seven animals that had settled along the Alaska Highway were recaptured and transferred to the contracted operator's fenced enclosure. The herd now consists of 14 females and 22 males.

The 4-H Program

The 4-H program teaches responsibility and leadership qualities in the equestrian discipline. The Yukon program organized by Clara Sharp has about 25 members.

Fourteen members attended the four-day Larry Nelles clinic at the Sharp's farm in 1992. A second clinic was led by Jeannette Cootes from Olds, Alberta who concentrated on jumping and flat work. The kids enjoyed both clinics as well as the horse camp lessons with drill master Inspector Jube of the RCMP, Veterinarian Dr. Jim Kenyon and farrier Cliff Hanna.

Weekly meetings in the winter of 1993 focused on theory and social events. Once the riding season began members were occupied with lessons, trail rides, competitions and horse camp. A 4-H horse show held in the summer of 1993 attracted members from Juneau and Haines, Alaska as well as Whitehorse.

A 4-H club for dog owners may be set up in the near future.



Figure 3.

4-H Equestrian Lesson

FEDERAL GOVERNMENT SERVICES AND PROGRAMS

Yukon Land Resources Unit

The Yukon Land Resources Unit conducts soil research related to agriculture in the Yukon. The Unit maintains a network of soil temperature sensors in central and northern Yukon. Staff are also monitoring the degradation of permafrost following agricultural clearing in Dawson area.

In 1993 the Land Resources Unit published a generalized soil map of Yukon along with a colour poster of Yukon soils and landscapes. A detailed soil map of the Takhini Valley was also produced in 1993. These map products are available at the Agriculture Canada office.

Unit staff have been working jointly with the Agriculture Branch in administering research related to the National Soil Conservation Program and the agri-food component of the Green Plan.

In July, 1992 the head of the Land Resources Unit together with a group of American and Canadian soil scientists visited the Magadan region of Far Northeast Russia. The group examined agricultural development in a northern environment similar to central Yukon. Because Russia lacks a well developed infrastructure for transporting fresh and frozen foods, most northern communities produce many of their own staples. As a result, agriculture is more widespread in northern Russia than in northern Canada where most foods are imported from the south. Many of the same crops, however, are grown in both places.

In July 1993, Canada hosted an international soils tour together with the soil survey staff from Alaska. Fifty soil scientists from around the circumpolar north examined permafrost soils along the Dempster and Top of the World Highway. The exchange of information that took place will help soil researchers better understand northern soils.

Market and Industry Services Branch of Agriculture and Agri-Food Canada

The new Market and Industry Services Branch (MISB) was formed as part of the federal government restructuring announced in June 1993. It includes components of Agriculture Canada (the Agri-Food Development Branch; the International Trade Policy Division, Policy Branch; the Grain Marketing Bureau, Grains and Oilseeds Branch) and the Food Products Branch of Industry Science and Technology Canada. The restructuring is intended to increase the emphasis within government on the marketing of agriculture and food products. Services to Yukon producers are provided by the Alberta Regional Office of the branch.

During 1992 and 1993 the Market and Industry Services Branch (MISB) supported the Yukon Agricultural Association's work on the Circumpolar Agricultural Conference and

the development of a crop production manual. The branch was also involved in promoting sustainable development of the industry through the agri-food component of the Green Plan. MISB staff participate in the management and technical committees which consider funding applications under the Green Plan.

Prairie Farm Rehabilitation and Administration (PFRA)

The Prairie Farm Rehabilitation and Administration (PFRA) Shelterbelt Centre provides nursery trees free of charge to producers who wish to develop shelterbelts on their farms. In 1993, 25-30 Yukon applicants received 8,000-10,000 trees. The most successful transplants for Yukon conditions have proven to be willow, poplar, caragana, lilac, chokecherry and buffaloberry. (Freight costs have been covered by the Yukon Agriculture Branch but this policy is now under review.)

Farm Credit Corporation (FCC)

The Farm Credit Corporation (FCC) has a mandate "...to enhance rural Canada by providing specialized and personalized financial services to farming operations, including family farms, and to those businesses in rural Canada, including small and medium sized businesses that are related to farming."

The FCC provides loans with fixed interest rate terms of 3, 5, 10, 15 or 20 years. The corporation's loan portfolio in the Yukon currently amounts to approximately one million dollars.

Feed Freight Assistance

Feed Freight Assistance is available to producers who want to transport grain within Canada. Assistance is available for feed grain only; mixed feeds or supplements do not qualify.

Feed freight assistance in the Yukon amounts to \$54 per tonne of feed. Applicants must be registered with the plan and must provide weigh bills to verify proof of transport.

YUKON GOVERNMENT SERVICES AND PROGRAMS

Yukon Agriculture Branch

The Agriculture Branch has five permanent employees: a Director, Secretary, Agricultural Development Officer, Agrologist and Soils Technician. There is also an auxiliary Grazing Management Coordinator.

The Director is responsible for the overall management and administration of the Branch. Duties include developing policy and regulations, managing finances and budgets, administering extension programs, supervising staff and meeting the public both in the office and on-farm.

The Agriculture Development Officer's responsibilities include inspections related to land applications, extension work and coordination of the Canada Plans Service (CPS) and Prairie Farm Rehabilitation and Administration (PFRA) activities in the Yukon. This staff member also sits on committees related to land issues.

The Agrologist is responsible for the demonstration plots, extension work and publication of the InFARMed quarterly newsletter. The Agrologist also sits on numerous committees and is the current chair of the Economic Development Agreement Technical Advisory Board.

The Soils Technician provides technical support to the Agriculture Branch and is responsible for soil inspections required for evaluating agricultural capability. This staff member is also involved in grazing assessments, the research and development plots, data base compilation and analysis and numerous extension activities.

The Grazing Management Coordinator is responsible for identifying and evaluating plant species and natural vegetation communities on grazing agreement lands. This staff member is responsible for range improvement programs, grazing management agreements and related extension work. The Grazing Management Coordinator also handles insect and plant identification.

The Agriculture Branch had an operating and maintenance (O & M) budget of \$382,000 in 1991-92 and \$477,000 in 1992-93. The O & M budget has increased at about 10 per cent per year since the mid-1980s. The Agriculture Branch did not have a capital budget in 1991-92 or 1992-93.

About half of the Branch's staff time was devoted to extension services and administration in 1992-1993 and another 10 per cent was spent on inspections and regulatory functions. Remaining staff time was spent working on land issues, policy development, infrastructure development and Circumpolar Agriculture Conference activities as well as attending meetings of the YAA and the APAC.

Demonstration Plots

The Agriculture Branch has been conducting research and crop demonstration activities at the Takhini Forestry Farm Reserve since 1988. In 1992 and 1993 research focused on the use of legumes as soil improvement crops. Preliminary results suggest that legumes may have limited application for soil conservation (green manuring) because of poor nitrogen fixation. The Yukon's dry soil conditions inhibit growth of the rhizobium bacteria which helps with nitrogen fixation.

Research results are published in the InFARMation newsletter and in the annual summary titled Yukon Agriculture Research and Demonstration Report.

Extension Services

The Agriculture Branch provides on-farm and in-office consultations to producers throughout the Yukon. These services provide a link between new research and on-farm application. In 1992 and 1993 specialists were brought in from British Columbia, Alberta and Quebec to share with Yukon producers their expertise in green house production, abattoir design, meat inspection and egg grading.

The Branch also maintains a collection of agricultural resource materials for the use of area producers. The collection includes pamphlets, videos and books on a wide range of agricultural subjects as well as a herbarium and a display of Whitehorse garden insects.

InFARMation is a quarterly bulletin produced since 1987 in an effort to keep producers up-to-date on industry happenings. It contains crop news and articles on sustainable agriculture, extension services, livestock, industry trends and research and demonstration updates. It has a circulation of about 300 copies.

The Canada Plans Service, located at the Agriculture Branch, has over 100 plans available for the construction of agricultural facilities. Plans are available on most farm buildings, root cellars, livestock shelters, animal chutes and grain storage structures. Up to 30 of these plans are used by Yukon producers each year.

The feed, soil and forage testing service is one of the Branch's most popular programs. More than five years of test results were summarized and analyzed in 1990. Results were published in the Yukon Agriculture Research and Demonstration report.

The Agriculture Branch holds an annual Agriculture Symposium in Whitehorse in March of each year. This event provides local producers with an opportunity to share their experience and learn about new trends in the industry.

The 1992 symposium featured a master mechanic from B.C. who dealt with trouble shooting farm equipment, a potato specialist from Alberta, a nursery owner from Alaska and a local fruit researcher. The symposium was attended by nearly 50 people who enjoyed both the exchange of information and the social evening hosted by Yukon

Agricultural Association.

The 1993 symposium featured speakers from Alaska, B.C. and Yukon covering topics such as animal health and nutrition, agriculture buildings and storage, greenhousing and Yukon gardening.

Table 4 summarizes Agriculture Branch public contacts in 1992 and 1993.

Table 4. Summary of Branch Contacts 1992-1993

Activity	Number of contacts	
	1992	1993
Telephone calls	2058	2306
Office visits	467	503
Farm visits	272	319

Agriculture Policy

Agriculture for the 90s: A Yukon Policy, was released in the fall of 1991. The policy aims to:

- encourage agricultural development,
- ensure that development is sustainable and in accordance with sound conservation practices,
- release agricultural land, and
- ensure that competing land uses are fully considered.

According to the policy, the limited land suitable for cultivation in the Yukon will be protected by:

- designating agricultural lands under the Land Use Planning process,
- allowing only farming activities to occur on designated agricultural lands,
- encouraging all farm operators to practice sound soil conservation measures, and
- not allowing subdivision of farm land.

The tax incentive or rebate identified in the agriculture policy has yet to be provided to producers. The Yukon government is currently examining options for implementing the tax incentive.

The designation of agricultural lands under the land use planning process was preempted by the suspension of the Yukon-wide Land Use Planning Program in 1992. However, suitable agricultural lands are being identified through smaller scale planning exercises now underway in the Hootalinqua, Mount Lorne and Golden Horn areas.

Game Farming Policy and Regulations

In 1991 the Minister of Renewable Resources suspended the issuing of new game farming licences until a new game farming policy with accompanying regulations could be developed. The interim policy of 1989 was considered inadequate for the growing industry.

In April, 1992 the Yukon government released a public discussion paper as part of the process of revising the interim policy. Revisions were made through 1993 and the new policy was approved by Cabinet shortly afterwards. Regulations required to implement the policy are now being drafted. In the meantime, the moratorium on issuing new game farming licences has been lifted.

The new policy and regulations address concerns related to transfer of disease, genetic contamination, sale of products and operating requirements for game farms. Elk, muskoxen and wood bison are classified as game farm animals. Game farming of other species may be allowed at the discretion of the Minister of Renewable Resources.

Alberta-Yukon Elk Importation Protocol

In 1993 the Alberta and Yukon governments signed an agreement which allows Yukon game growers to export elk calves to Alberta. The Alberta border remains closed to all other jurisdictions for the importation of elk.

Under the protocol, calves less than six months of age testing negative for tuberculosis, brucellosis and red deer genes may be registered for export. The calves must receive monthly ivermectin treatments until the date of shipment.

Seventy-three animals were exported to Alberta under this agreement in 1993.

The protocol may be amended and improved in 1994.

Animal Protection Legislation

Public concerns about the care and protection of livestock and other animals led to the release of a public discussion paper followed by a series of workshops on the issue in 1991 and 1992. As a result of the workshops a decision was made to deal with animal health and animal protection as separate issues.

The need for improved animal protection legislation is now being reviewed along with other options which might achieve the same goals at a lower cost. It has been suggested that the current Animal Protection Act is outdated.

Animal Health Legislation

The need for animal health legislation has been increasing as exotic domestic species such as llamas have been imported into the Yukon. Regulations are needed to ensure that imported animals are disease free and to protect existing livestock from the introduction of contagious diseases. The Yukon government is currently reviewing legislative options for addressing these concerns. Options will be laid out in a discussion paper to be released for public review and comment.

Environment Act

Parts of the Yukon Environment Act which was proclaimed in the fall of 1992 apply to agricultural activities. Existing rules under the Act require permits for pesticide applications near or over water, from aircraft or for hire. The Yukon has adopted British Columbia's certification system for pesticide applicators.

New rules governing the use, handling and storage of pesticides will be put into place with the passage of Pesticide Regulations anticipated in the summer of 1994. Most agricultural uses of pesticides will not require permits or certificates. Permits may be required, however, when highly toxic pesticides are used.

Rules for the handling of special wastes will also come into effect under the Environment Act in 1994. Special Waste Regulations will help prevent the contamination of food, water and soil by controlling the disposal of waste oil, solvent, antifreeze, batteries and other special wastes.

A special waste data base has been set up to coordinate the disposal of special wastes. Efforts will also include an education campaign to encourage proper handling of household wastes such as cleaners, detergents and solvents.

JOINT FEDERAL-TERRITORIAL PROGRAMS

Economic Development Agreement

The Canada/ Yukon Economic Development Agreement (EDA) provides financial assistance for economic development projects in all sectors of the Yukon economy. The current agreement involves nine million dollars over a five-year period ending in 1996.

Agricultural projects are eligible for assistance under the Renewable Resources sub-agreement of the EDA. In 1992 and 1993 twelve projects were approved with an average value of \$14,325. In 1990 and 1991 the average value was \$23,448 while in 1988 and 1989 the average was \$34,678. EDA appears to be continuing its trend of funding projects with lower financial values.

In 1992 and 1993 the following agricultural projects received EDA funding:

1. Morel Mushrooms (Shawn Ryan) \$6,500

EDA assistance was used to help organize the first commercial harvest of morel mushrooms in Yukon. Dryers were built to prepare the 27,000 kg harvest for market. The mushrooms were sold in British Columbia, Washington, California and Europe. The project was successful and the proponent intends to continue harvesting morels in accessible forest fire burn areas.



Figure 4.

Harvesting Morel Mushrooms

2. Northern Teas/Jams/ Gifts (Hann Natural Products Ltd.) \$8,100
Hann Natural Products Ltd. was set up to help market morel mushrooms. The company used EDA funds to carry out marketing studies to determine the best methods of selling its products: morel mushrooms, tea, jams and gifts made from locally grown plants.
3. Cattle Proposal (Circle D Ranch) \$16,700
This successful hay ranch used EDA assistance to expand into cattle raising. One Black Angus bull and five cows/calves were purchased and transported to Yukon. New fencing, feeders and a loading shed were built to accommodate the new herd.
4. Farm Improvements (Fred and Debbie Last) \$4,000
A mower conditioner and tractor were purchased by these hay producers to improve the efficiency of their operation. The equipment will also be used to do contract cutting.
5. Njootli Gardens (Grafton Njootli) \$6,000
Njootli Gardens, the first market garden in Old Crow, is located 27 km downstream from the village on the Porcupine River. Work began at the site in April, 1993 and by mid-summer the garden was flourishing. It has attracted both residents and visitors interested in seeing a garden north of the Arctic Circle and purchasing some of the fresh produce. Tomatoes, radish, lettuce, peas, spinach, broccoli and carrots were planted in the greenhouses and the garden.
6. Lewes River Farms Expansion (Lewes River Farms) \$50,000
Assistance from the EDA was used to put up three new buildings and expand the egg production operation at Lewes River Farms. An egg processing facility was built to accommodate 2,300 birds. A special flock rotation building and a new coal fired boiler were also erected.
7. Increased Egg Production (Partridge Creek Farm) \$20,000
EDA funds are being used to build an extension on an existing chicken house. The new building can house up to 3,200 birds. The operators are switching from brown-egg-layers to white-egg-layers which they expect to be more profitable.
8. Root Cellar (Al Hodgson) \$2,800
Built in late 1993 this 4 x 3 metre root cellar is currently housing late season vegetables. It was built to plans obtained from the Canada Plan Service. The root cellar will be used to keep produce cool in the summer and extend the marketing season in the fall.
9. Irrigation System (Arthur Hutchison) \$15,200
This operator is using EDA funds to build a gravity fed irrigation system featuring nearly two miles of main and side line pipe fed by a near-by creek. Designed to alleviate problems with the existing irrigation method, the new sprinkler/side roll system will allow this hay producer to improve his yields.

10. Soil Survey Evaluation (Agriculture Canada) \$17,000

EDA funds were used to upgrade and check the reliability of a set of detailed soil maps produced for the Carcross and Klondike valleys by the Yukon Land Resources office. A contractor was hired to do this work and prepare the maps for printing. This project will ensure Yukon soil maps are accurate and meet national standards.

11. G.I.S. Digital Map Transfer (Agriculture & Agri-Food Canada) \$13,000

This project used EDA assistance to convert existing soil maps from paper to computer programs compatible with the Geographic Information System which is now widely used by government and industry around the world. The digitized maps can now be updated with ease and can be printed in a variety of formats.

12. Soil Survey Upgrade (Agriculture & Agri-Food Canada) \$11,900

Parts of the Carcross Valley soil maps were re-surveyed and re-drawn to improve their accuracy. The original maps were based old information that proved to be unreliable in some cases. The new maps are now at the same standard as other soil maps in the Whitehorse area.

Soil Conservation Project

The Canada-Yukon Soil Conservation Agreement expired in 1992. The agreement was aimed at improving the condition of marginal agricultural lands and preventing further degradation of productive lands.

It had three components: research, farmer incentive and education. The research examined growth and production of agronomic species on different levels of soil salinity. The incentives component provided financial help to encourage producers to plough under green manure crops. The education component focused on seminars and a newsletter explaining different methods of conserving agricultural soils.

Under this agreement, 300 acres of farmland was seeded by 20 producers who received grants totalling \$12,500.

Green Plan

The agri-food component of the Green Plan promotes sustainable development in the Yukon agriculture industry. Project proposals related to water quality, soil and land conservation, wildlife habitat, pollution and water management, public awareness and on-farm demonstrations are eligible for funding which is shared 50/50 by the federal and Yukon governments.

In 1993 the Green Plan provided a total of \$37,200 to support the following study projects:

1. Yukon Agriculture Association (\$9,000): The association collected data on the presence of pollutants such as fertilizers, pesticides and fuel in the Takhini River.

2. Diane Simpson (\$6,000): Green Plan funds were used to develop a course curriculum on sustainable agriculture at the secondary school level. Radio ads promoting sustainable agriculture were also produced under this project.
3. Bisset and Associates (\$3,500): This project researched soil moisture in the Takhini Valley.
4. Yukon Land Resources Unit (\$5,000): The Yukon Land Resources Unit used Green Plan funds to study the impact of soil salinity on Yukon forage crops.
5. Country Road Farms (\$2,700): This project carried out a field evaluation of rye as weed control.
6. Yukon Agricultural Association (\$5,000): The association produced an ad campaign using print and radio to promote public awareness of sustainable agriculture in the Yukon.
7. Yukon Agricultural Association (\$6,000): Green Plan funds were used to carry out an environmental assessment of the abattoir project.

Agriculture Planning and Advisory Committee (APAC)

The Agriculture Planning and Advisory Committee (APAC) was created in 1984. It has a mandate to make recommendations to the Minister on agricultural matters. The committee is chaired by the Yukon Agriculture Association president (or appointee) and vice-chaired by a senior government official.

APAC met five times through 1992 and 1993 in Dawson City, Whitehorse, Watson Lake and Mayo. The committee made recommendations on the Green Plan, abattoir project, farmer's market, land issues, contagious diseases and pesticide regulations.

Circumpolar Agricultural Conference

The first Circumpolar Agricultural Conference was held in Whitehorse in September, 1992. The conference was initiated by members of the Yukon Agriculture Association. It focused on information sharing between circumpolar countries and drew speakers from Canada, United States, Russia, Norway, Greenland, Sweden, Denmark, Finland and Iceland. About 150 people participated in the week-long conference and its field trips.

Fifty papers were presented under the four broad categories of:

- policy and research
- demonstration and communication
- production and marketing
- circumpolar cooperation

The proceedings are scheduled for distribution early in 1994. Norway is planning on hosting the next Circumpolar Agricultural Conference in 1995.



Figure 5. Opening Ceremonies at the Circumpolar Agricultural Conference

APPENDIX

Yukon Agricultural Publications: 1992-1993

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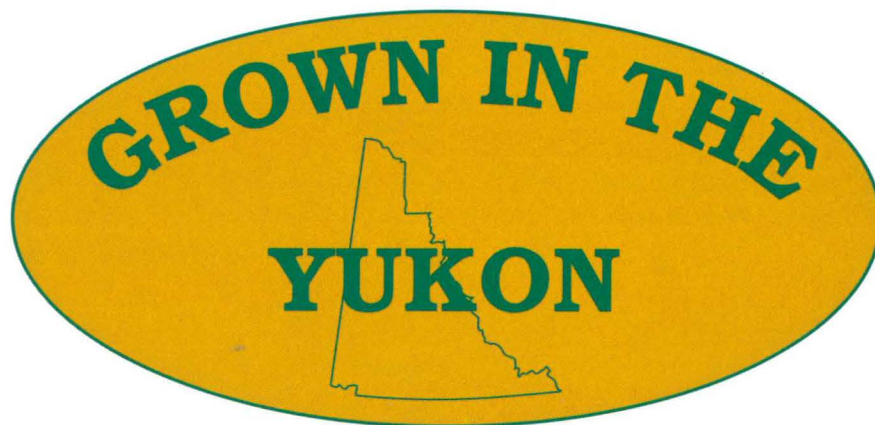
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