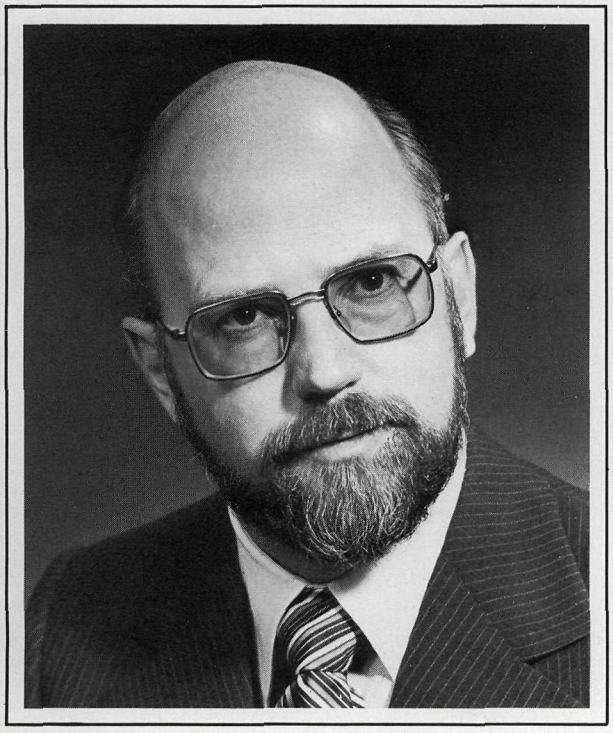
FIRST REPORT
BRITISH COLUMBIA
MINISTRY
OF
AGRICULTURE
1976

To Colonel the Honourable
WALTER STEWART OWEN, Q.C., LL.D.,
Lieutenant-Governor of the Province of British Columbia.

MAY IT PLEASE YOUR HONOUR:

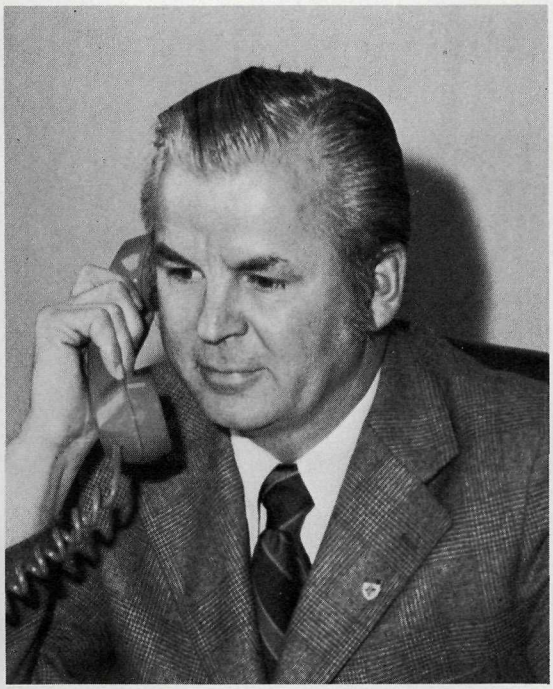
I have the honour to submit for your consideration the Annual Report of the Ministry of Agriculture for the year 1976.

JAMES J. HEWITT
Minister of Agriculture



Ministry of Agriculture,
Victoria, B.C.

Report of the Deputy Minister of Agriculture



S.B. Peterson

To the Honourable James Hewitt
Minister of Agriculture

Sir:

It is my pleasure to present the first Annual Report of the British Columbia Ministry of Agriculture for the twelve months ending December 31, 1976.

This report is subsequent to seventy annual reports prepared under the name of British Columbia Department of Agriculture. This document details branch functions and activities carried out during 1976. I commend the report to your attention and consideration.

The year was marked by severe low prices in some agricultural commodities, particularly beef and some horticultural crops, while other sectors such as dairy and poultry kept pace with current economic trends nationally and internationally. In general however, British Columbia farm input costs continued to rise significantly in the face of decreasing, relatively stable or modest increases in farm produce prices.

The Ministry's Executive Committee consisting of your Deputy Minister, Associate Deputy Minister, and the Directors, continued to meet weekly to plan the implementation and administration of Ministry' policies. Senior staff met once per month to discuss overall Ministry programs and current agricultural trends.

Your entire staff continued to work assiduously on numerous Ministry programs designed to assist the farmer in his fundamental role of producing foodstuffs in an efficient manner. Many existing programs continued while other new ones were implemented aimed not only at farmers but also at the consumers to increase their awareness of home grown B.C. quality agricultural products.

I trust that efforts of your staff in working with the farmers of this province through Ministry programs will continue to see British Columbia agriculture expand in a systematic and prosperous manner.

Respectfully submitted,

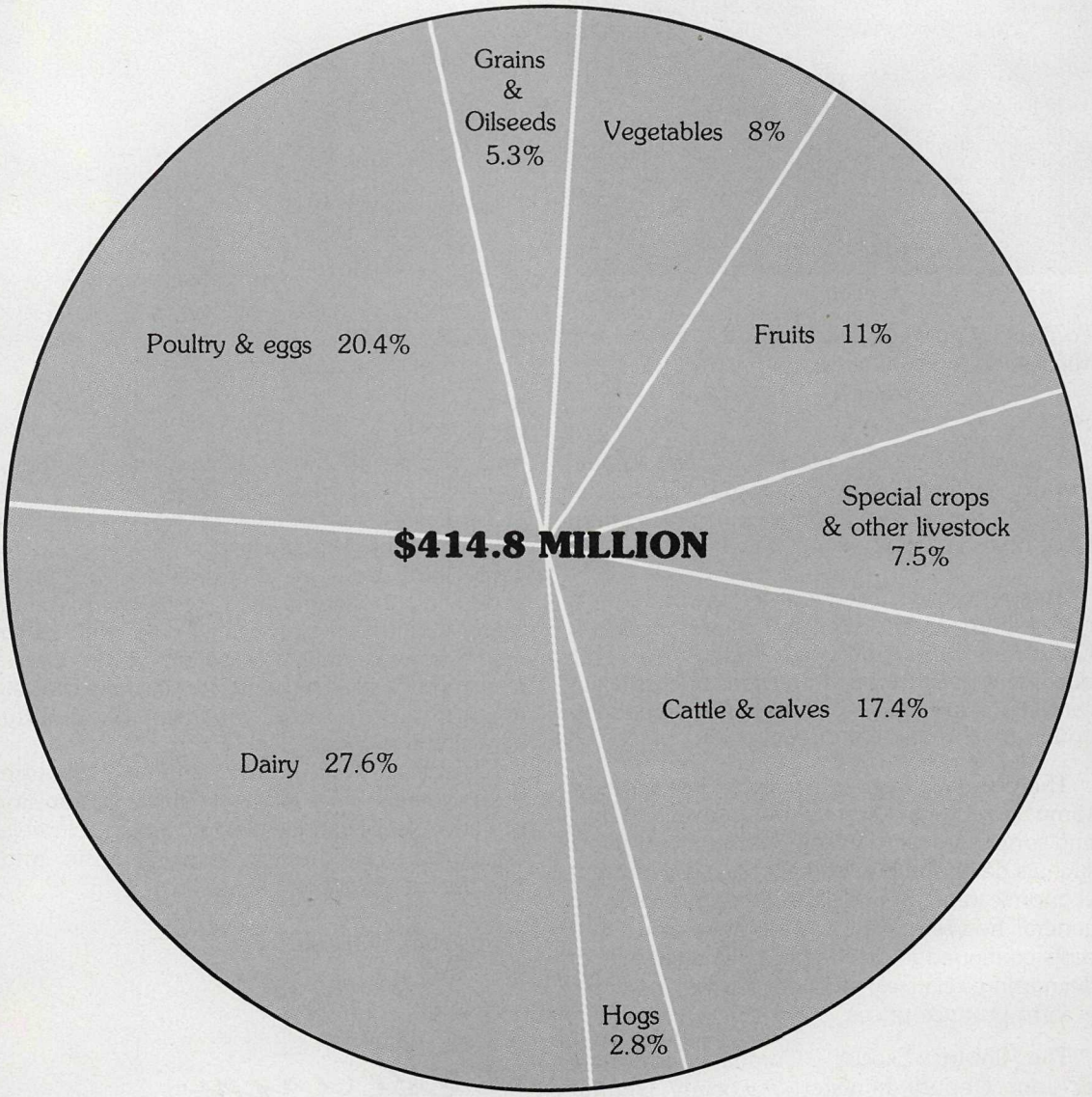
S.B. Peterson
Deputy Minister

1976 Agricultural Review

British Columbia farm cash receipts for 1976 totalled $414.8 million[1], an increase of approximately 6.6 per cent over 1975. The increase results from greater production and higher prices for some commodities which offset the significantly lower returns for others.

Chart I shows the distribution of farm cash receipts by major commodity areas.

CHART I
Distribution of Farm Cash Receipts, British Columbia - 1976



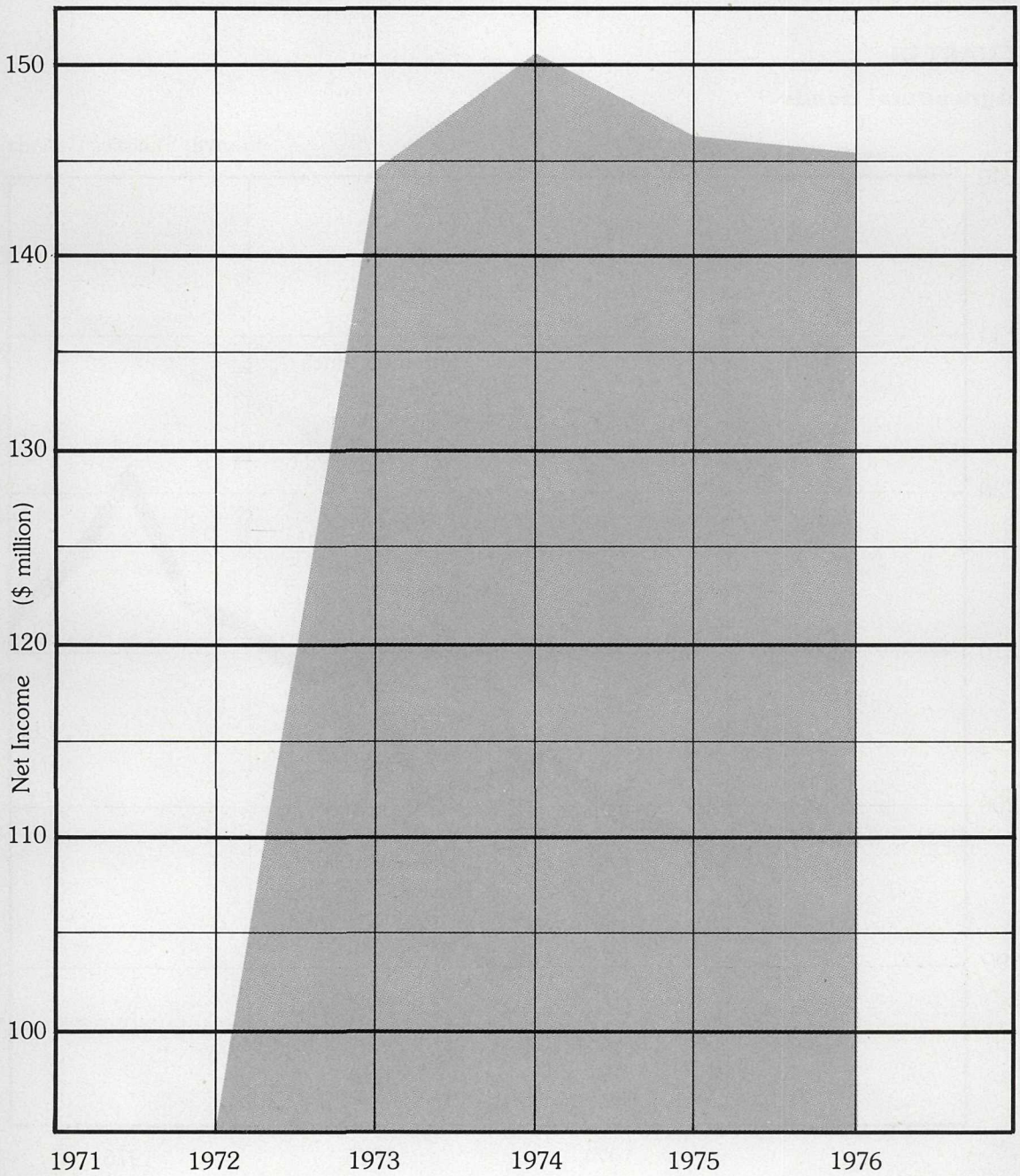
[1]Does not include income stabilization payments

Source: Statistics Canada

British Columbia farmers continued to be enveloped in a cost-price squeeze where total operating and depreciation charges rose during 1976 by about 11½ per cent from 1975, while farm cash receipts rose only 6.6 per cent over the same period. This marks the second successive year in British Columbia that total net income was lower than the year previous. Chart II illustrates the trend of net farm income in British Columbia during recent years.

CHART II
British Columbia Net Farm Income

Source: Statistics Canada



In spite of larger gross income, significantly increasing input costs resulted in a marked erosion of net farm income.

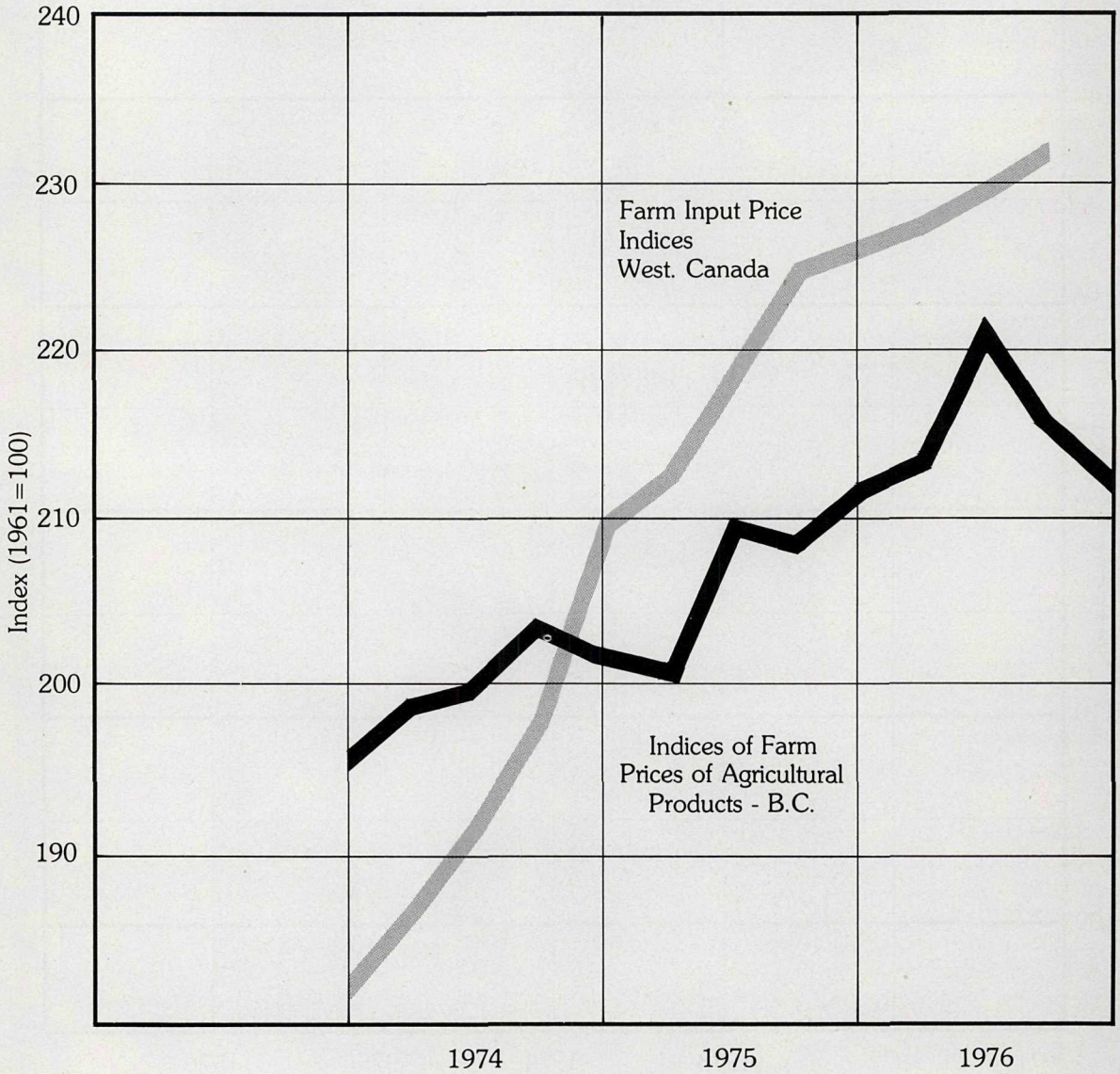
Statistics Canada reports that the 1976 farm input price index (Western Canada) rose to 229.4 (1961=100), indicating a sharp increase from the previous year. By comparison, the index of farm prices of agricultural products in British Columbia rose less rapidly to 216.3 (1961=100) which further exhibits the increasing cost-price squeeze in the farm sector.

Chart III illustrates agricultural economic trends occurring in British Columbia and Western Canada in recent years.

CHART III

Agricultural trends

Source: Statistics Canada



Recorded statistics indicate that 1976 receipts from cereal crops in British Columbia decreased slightly from 1975 levels. Despite excellent yields per acre and increased acreage in some crops, dramatically lower prices per unit resulted in a total reduction in receipts of about 5 per cent from 1975 levels.

Combined receipts for all horticulture crops showed an increase of approximately 15 per cent due significantly to the very large 1975 apple crop which was sold into 1976. However, the apple sector, representing the bulk of the British Columbia tree fruit industry, faced extremely low per unit prices for the 1975 crop in the face of a large world surplus. The 1976 apple crop once again was very large and at year end was being sold at more favourable prices.

British Columbia agricultural input costs, which are influenced by economic forces outside the sphere of this industry, continued to be higher than those of competing countries. Inflexible and obsolete import tariff policies, particularly for horticultural products, encouraged the importation of lower-priced commodities, to the detriment of British Columbia markets.

Prices for slaughter cattle and calves continued very low during 1976, resulting in a further decline in total receipts from the already depressed 1975 levels. This critical combination of beef surpluses and low prices is a world wide phenomenon in the beef industry. Prices for calves and yearlings which constitute a major portion of the B.C. livestock industry, continued to be at unacceptably low levels during 1976. Ranchers, forced to reduce their herd inventory during 1976 in the face of low prices and high feed costs, artificially escalated the total cash receipts to a higher level than normal at the expense of reduced inventory and investment.

Hog prices were satisfactory during the first half of the year but declined during the last half, resulting in a total reduction of cash receipts during 1976. The dairy, egg and poultry meat industries showed increases in returns since producer prices were more directly related to production cost indices.

Statistics Canada data indicates that the 1976 consumer price index for all items in Vancouver was 9.7 per cent higher than the 1975 index (1971=100). Individually, the food component contributed the lowest proportion of the increased index as shown in Table 1.

TABLE 1

Consumer Price Index - Vancouver 1976

(1971=100) Index	Component	Per Cent Change from 1975
151.0	All items	+ 9.7
149.0	Transportation	+ 17.7
145.1	Housing	+ 12.3
146.2	Health and Personal Care	+ 9.4
135.4	Tobacco and Alcohol	+ 7.4
131.8	Recreation, Education & Reading	+ 6.7
135.2	Clothing	+ 6.4
172.3	FOOD	+ 4.0

Legislation

There were no new Acts or amendments to legislation introduced in 1976. However, regulations were put forward under a number of Acts, thus introducing new aspects of certain programs. During 1976, the British Columbia Sheep and Wool Marketing Commission was established under the Natural Products Marketing Act. Under the Farm Income Assurance Act, new programs were established for sheep producers and blueberry growers. Metrication was also implemented in British Columbia's milk industry during the year.

Branch Reports

Activity continued high on all Ministry programs as described on the following pages. It is worthy of particular note that the Provincial Land Commission was transferred to the Ministry of Environment during 1976. The Ministry of Agriculture will continue to liaise closely with Provincial Land Commission activities by providing technical assistance related to the administration of the agricultural land reserves. The Ministry of Agriculture will continue to administer the farm land leasing policies of the Commission.

Executive Officer

The Executive Officer is responsible for the administration of Fairs and Exhibitions and Farmers' and Women's Institutes. The number of fairs/exhibitions totalled 54 and there were 87 Farmers' Institutes registered in 1976.

A total of 75 Orders-in-Council were processed. Legislation amendments were proposed and finalized for submission to the Legislature in 1977 regarding the following Acts: Soil Conservation Act, Milk Industry Act, Farm Income Assurance Act, Plant Protection Act, Veterinary Medical Act, and Agricultural Produce Grading Act. The Executive Officer sat on many committees, functioning as Secretary for the B.C. Fairs' Association, B.C. Farmers' Institute Advisory Board, Senior Staff meetings, B.C. Food Advisory Council and B.C.A.S.C.C.

Local agricultural fairs give city dwellers an opportunity to become more familiar with agriculture activities and businesses in their community.

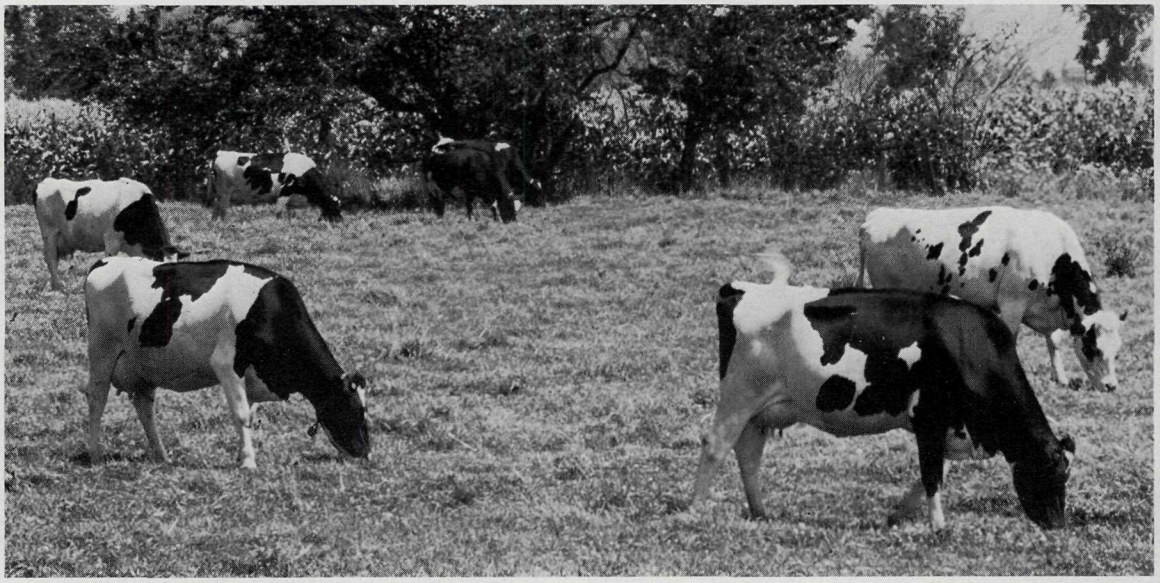
Special Services

Dairy

The record level of milk production achieved in 1975 was maintained during 1976. It is estimated that total production will again exceed one billion pounds. The levelling trend in production reflects the capability of the Canadian Dairy Commission to control production through the application of subsidies and levies. The number of approved B.C. dairy farms is 1,267, which is a decrease of 70 during the year, compared to decreases of 26 in 1975 and 44 in 1974.

Seven-Year Production/Fluid Utilization Summary for Milk Board Areas

Year	Approx. Millions of Pounds			Per Cent of Production	Per Cent of Quota
	Production (Qualifying Milk)	Quota Milk	Fluid Sales		
1970	752	563	489	65.0	86.8
1971	773	595	507	65.6	85.3
1972	789	605	528	66.9	87.4
1973	795	618	550	69.1	88.9
1974	824	656	575	69.7	87.6
1975	873	673	571	65.4	84.8
1976 (est.)	873	683	576	66.0	84.3



During 1976, British Columbia dairy cows produced about 445 million litres of milk. About two-thirds was consumed in B.C. as fluid milk while the remaining one-third was processed into dairy products such as butter, ice cream, cheese, powder, and other products.

Fluid milk sales increased by 0.8 per cent during the first half of the year. This is in contrast to the 0.8 per cent decline experienced during 1975. Butter production increased by 6.8 per cent to 6.4 million pounds. Cheddar cheese production remained the same as in 1975 at just under 3.5 million pounds, and ice cream sales were down 11,000 pounds or 2.8 per cent due to the inclement summer weather.

Farm cash receipts from dairying are estimated to be $107 million. Adjustment of federal subsidy payments on the Market Share Program scheduled for March 31, 1977 contribute to uncertainty of this figure.

The dairy policy implemented by the Canadian Dairy Commission on April 1, 1976 resulted in less market share quota (M.S.Q.) being available to milk producers. The former annual M.S.Q. was allocated monthly and the over-quota levy increased to $8.60 per cwt. from $4.00 per cwt. These policy changes depressed production unduly and on October 19, additional M.S.Q. was allotted in an attempt to assure an adequate supply of manufactured dairy products.

The milk quality program was continued through farm premise and plant inspections as well as product analysis performed by the Dairy Laboratory. All field staff are now equipped with portable temperature recorders to assist in checking the performance of cleaning and cooling equipment. A milk quality study to determine the amount of water contamination was undertaken and completed.

The branch continued the development of a Provincial Mastitis Control Program. By means of a screening test, the Dairy Laboratory identifies the problem herds. The field staff then advise on equipment and procedural adjustments required to remove stress and improve sanitation. The Veterinary Branch provide pathological identification and control recommendations.

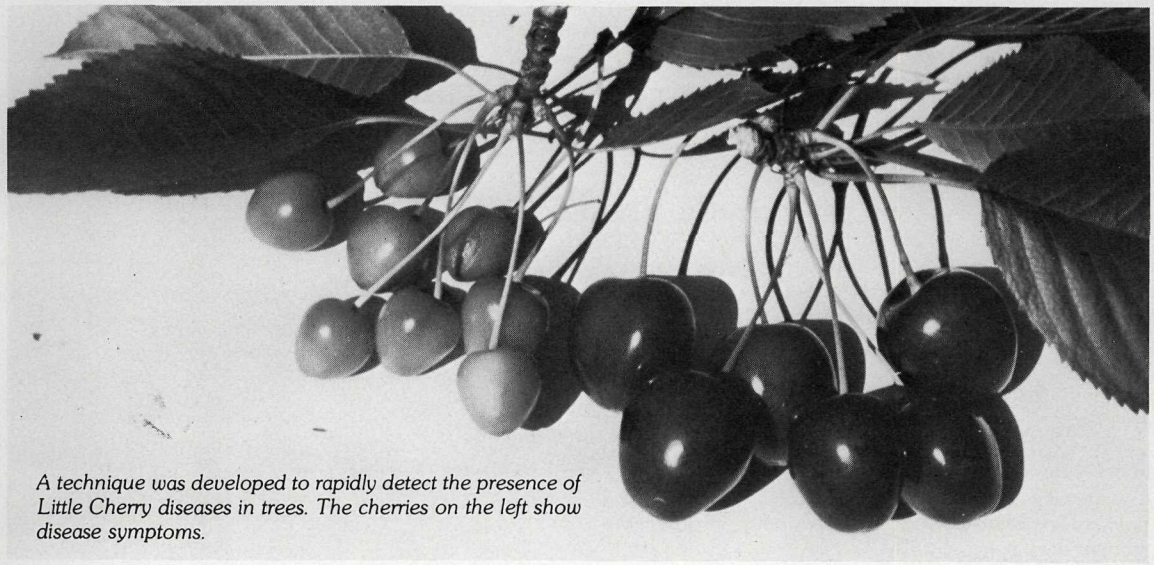
Metrication of the dairy industry is proceeding on schedule with some of the approved retail metric sized containers now available to the consumer. Branch personnel have been instrumental in organizing the advance preparation of metric charts for all farm-holding tanks. The metric system will be implemented early in 1977 to calculate farm milk sales.

Branch personnel, in consultation with the Engineering Branch, were responsible for the identification of a fabrication defect in two milk tank models produced by a major manufacturer. Corrections were made to a substantial number of tanks by the company under branch supervision.

The levy paid by producers into the Dairy Products Promotional Fund was increased at mid-year to five cents per cwt. to provide more intensive dairy product advertising.

DATE Program

The DATE (Demonstration of Agricultural Technology and Economics) program continued to provide an excellent means of supporting projects aimed at demonstrating advances in agricultural technology. Separate reports are available for the years 1974, 1975, and 1976 which give summary information on achievements of each project. To date, over 50



A technique was developed to rapidly detect the presence of Little Cherry diseases in trees. The cherries on the left show disease symptoms.

projects have been activated under this program, some of which have demonstrated such promising results that higher levels of activity are being funded through sources other than. the DATE program.

Projects that merit special note are:

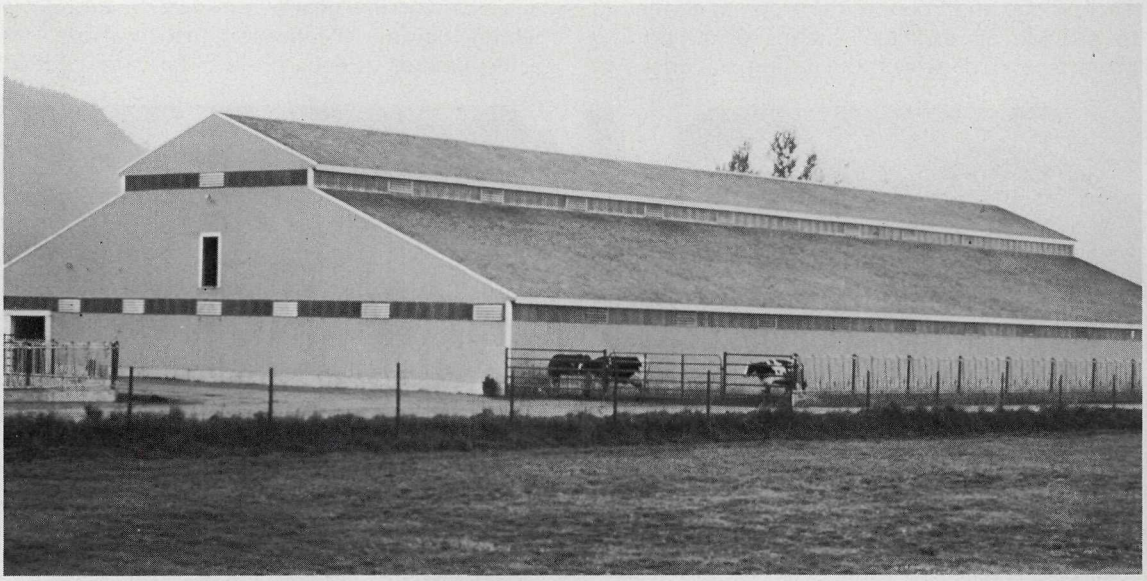
— The continuation of rangeland development projects to demonstrate higher forage production potential
— The development of a heavy-duty rangeland cultivator to commence on a program of rangeland rejuvenation
— Development of a technique for rapidly detecting the presence of Little Cherry virus which has the potential to wipe out the cherry industry in the Okanagan if infected trees are not removed
— The development and registration of a clover species, particularly adapted to the growing conditions in the Lower Fraser Valley
— The continuation of tax and estate planning information series for B.C. farmers
— Making equipment available for detecting mastitis in dairy herds
— The design of a commercial vending machine for B.C. apples to make the product more available to local consumers
— A study of virus disease occurrence within poultry flocks
— The activation of projects to determine benefits or irrigation and various irrigation techniques in the Central Interior
— The start-up of an insect biological control program on commercial orchards in the Okanagan to minimize the use of chemical pesticides
— The support of a program to make consumers, primarily at the school level, aware of sophisticated food production techniques used by B.C. farmers

Information on any of the above projects, plus the many others that have been funded, can be obtained by writing to the Ministry of Agriculture.

Engineering

The Engineering Branch continued to provide engineering advisory services to the agricultural industry in British Columbia during 1976. Programs were carried out in drainage, irrigation, farm buildings, waste management, farm mechanization, and land development from the branch's four office locations: Victoria, Abbotsford, Vernon, and Prince George.

A strong demand continued for planning assistance on land development work involving feasibility studies and topographic surveys to improve drainage on some 4,000 acres of land. Most of these improvements were financed through the Agricultural Land Development Act. A new drainage outlet program to provide engineering and partial funding of improved



The Engineering Branch provides farm building and planning advisory services to assist in constructing buildings such as this modern dairy barn.

drainage outlets for groups of farmers, is starting to be used on a wide scale. Funds from the Fraser River Protection Agreement and ARDA are used to finance these projects.

The number and size of irrigation schemes continues to increase to meet the demands for forage production in the Interior regions of the province. Engineering, consisting of individual farm design, feasibility studies and checking the adequacy of commercially designed plans was carried out for 207 farmers involving 7,910 acres. Irrigation of this acreage has the potential of increasing forage production in the province by some 20,000 tons.

Over 400 farmers and ranchers took advantage of the farm building planning advisory service. On-site farmstead planning and full use of complete blueprint drawings are main features of this program. With planning assistance now available in most regions of the province, the branch's advisory service plays a major leadership role in the $25 million per year farm building construction industry.

The Waste Management Advisory Service provided farmers and ranchers with up-to-date technical advice on waste management systems including collection, storage, handling and disposal of wastewaters, manure and dead animals. In addition, the service carried out co-ordination and technical support for the B.C. Agricultural Environmental Control Program. Through this unique program, the farmers in the province have been given the opportunity to police their own sanitation and pollution problems. The program is a complaint-oriented system, through which an attempt is first made to "educate" a solution to farm waste management problems, but by which a solution may be "regulated" if necessary. Guidelines prepared by the branch form the basis for evaluating the adequacy of a farmer's waste handling practices by other producers.

Mechanization continues to play a vital role in all aspects of agricultural production. The branch's mechanization advisory service covers a broad range of items including general farmstead mechanization, storing and feeding of forage, fruit and vegetable harvesting, grain harvesting and drying, equipment maintenance and spare parts supplies. In response to the need for increased production of high-quality forage to support an expanding livestock industry, projects have been initiated on range and pasture reseeding. Of notable interest is the equipment development project for reseeding Interior rangeland to re-establish stands of bunchgrass.

Several special assignments and projects were handled during 1976. Notable among these include apple vending machines, a silo safety program, aeration of swine manure for odour control, trickle irrigation trials, Coldstream Creek pollution problems, irrigation of municipal sewage, and community pasture development. Others include Serpentine-Nicomekl flood plain development, hosting of the Canada Plan Service annual meeting, and preparation of irrigation, drainage and building plans for all properties administered by the Property Management Branch.

Entomology

The branch continued to provide insect and pest control advice. Special programs designed to minimize the use of pesticides for control were actively supported.

Cool, wet growing conditions in the Interior favoured some pests, causing them to be more plentiful than normal, while other pest species emerged later or had more prolonged emergence patterns than normal. Delays in fruit and crop maturity also complicated pest control procedures. Aphid populations were high on all crops. Slugs and snails were also numerous, especially on vegetable and forage crops. A prolonged cherry fruit fly emergency and delay in fruit maturity caused problems in fruit production.

It appeared that the codling moths that emerged early produced most of the fruit damage; those emerging later were apparently unsuccessful in reproducing due to adverse weather. The ragged emergence of second brood moths complicated controls, but no increase in damage occurred due to the lower first brood survival. European red mite populations remained at high levels in orchards into August because of the lack of hot weather. Few complaints were received on grasshoppers, as weather conditions kept damage on forage crops and rangelands below economic levels.

San Jose scale, which had been plentiful during 1975, received extra attention by orchardists during the season resulting in significantly less damage to fruit crops. European fruit scale in some northern fruit-producing areas also received extra control measures which resulted in better fruit quality. The leafroller-complex of pests appear to have caused increased damage in all Okanagan districts. Resistance to diazinon sprays has been confirmed for leafrollers in East

Kelowna cherry orchards and alternate chemical controls will be recommended in 1977.

Monitoring of major pest insect species in five Okanagan apple orchards reduced spray applications to an average of 2.5, or approximately one-half the usual applications. Examinations of harvested fruit showed that fruit averaged 97 per cent free of all types of insect damage for all orchards. Most importantly, the methods used to monitor pest species showed accurately and dependably when chemical controls were required.

A monitoring program was continued on eight commercial pear orchards. Results showed satisfactory fruit quality was obtained with a minimum of sprays. However, savings in the spray program did not appear to compensate for the costs of monitoring the pests. Monitoring time for pears is more than twice that required for apples. The cost-benefit ratio may change in favour of the program if more of the presently recommended control chemicals have their federal registrations cancelled.

Insect sex pheromones and traps were evaluated for determining insect population levels and economic control levels of codling moth, peach tree borer, fruit tree leafroller, European leafroller, European pine shoot moth, cabbage and alfalfa looper, as well as for surveys and as a means of providing advanced warnings to growers.

Cherry fruit fly surveys were continued in the Oliver-Osoyoos and in the Keremeos-Cawston areas. New local infestations were found in both areas.

Cattle backrubbers on self-treatment devices for cattle paralysis tick control were also tested under range conditions. The co-operative project with Agriculture Canada on chemical trials for tick control was continued.

Facilities were completed and operating for the joint program of rearing and releasing sterile codling moth as a biological control method in the Cawston-Keremeos area. Due to late completion, less acreage than originally planned for was treated, but it is planned to treat the remainder of the area in 1977 and beyond. Control in 1976 was excellent and gives additional optimism to the whole project.

The survey for strawberry mites in the Fraser Valley continued. Few predaceous mites were present and control of two-spotted mites with miticides was erratic. Post-harvest defoliation of the strawberry plants may hold promise as a control measure of the mites.

Entomologists monitor pest insect species to determine correct spray applications by orchardists.

Inspection of nurseries was carried out in respect to regulations governing pine shoot moth and the sale of pinus. Data shows that nurseries have a much smaller incidence of shoot moth infestation than when the program started three years ago.

The biting fly research program was primarily concerned with the evaluation of new mosquito control chemicals and the development of biological methods of controlling mosquitoes. Extensive evaluative trials were conducted on insect growth regulating chemicals. They present little hazard to nontarget organisms.

A mermithidnematode was found that shows considerable potential as a biological agent. A nematode parasite that is being mass-produced in the United States is presently undergoing laboratory evaluation for suitability under British Columbia conditions. An insect that feeds on mosquito larvae is also being investigated.

Starling trapping in the Okanagan again demonstrated that local populations of these birds can be reduced when traps are properly located and maintained. These traps require constant attention and thus growers are hesitant to assume responsibility for the operation. Other methods of controlling starling damage are being evaluated, such as electronic systems for frightening birds and electrocution devices. Bird marking is being carried out to better understand the migration and flight patterns of the starlings.

Mouse populations were at peak levels during the fall-spring of 1975-76, but have returned to normal levels. Testing of new chemicals and new techniques against damaging mice species has been continued. Pocket gopher control plots have also been established to evaluate commercial baits. The results of all testing provides accurate local information on rodent control and forms the basis on which recommendations are made for B.C. farmers.

The direction of staff and legislation dealing with pesticide sale, pesticide application and pesticide residue analysis, was transferred from the branch to a separate Pesticide Control Branch in mid-year.

Pesticide Control

The Pesticide Control Branch was established in 1976 to administer the Provincial pesticide sale and use legislation. The principal objectives of the branch are to ensure that the sale and use of pesticides in British Columbia is carried out in a knowledgeable and responsible manner, and that where pesticides are used that adequate consideration is given to public health and environmental concerns.

The branch organizes and conducts training programs to assist individuals in preparing themselves for the pesticide applicator and

The Pesticide Control branch ensures that pesticides are sold and applied safely. The branch also conducts training programs for dispensers and applicators.

dispenser certification examinations. Over 50 training sessions were held during 1976 and over 2,500 individuals are currently certified as pesticide dispensers and 2,000 individuals possess pesticide applicator certificates. Staff members continually provide information on the safe and proper use of pesticides to these certificate holders as well as to agricultural and other users.

A total of 195 firms involved in applying pesticides on a fee for service basis and 675 retail vendors of pesticides were licenced in 1976. Firms licenced to sell or apply pesticides are inspected on a regular basis and large scale pesticide application projects are monitored to ensure the requirements of the legislation are being complied with. The branch endeavours to investigate and report on all complaints from the public pertaining to pesticide usage.

The branch also co-ordinates the activities of the British Columbia Interdepartmental Pesticide Committee. The committee is comprised of representatives from the Provincial ministries responsible for agriculture, environment, fish and wildlife, forests, and health, and has a responsibility to review all proposed large-scale pesticide application projects by public or private agencies within the province.

The Pesticide Analytical Laboratory carried out residue analyses on 1,325 samples submitted by the public and various governmental agencies during 1976.

Plant Pathology

The Plant Pathology Branch has the responsibility of providing plant disease control information for all crops grown in British Columbia. Staff and laboratories are located in Cloverdale, Kelowna, and Victoria. During 1976, over 1,500 plant disease specimens were examined and diagnosed at the three laboratory clinics. Demand for this service in the Fraser Valley is growing rapidly as the urban population continues to expand.

Surveys for plant diseases were continued to determine the severity of existing diseases and also to keep watch for diseases not known to occur in the province. For example, the spread of pear trellis rust in the Fraser Valley (a disease of pears and junipers) is being mapped carefully each year. Throughout the Okanagan and Similkameen Valleys, cherry orchards are inspected annually and trees infected with the little cherry virus disease are removed. In 1976, 304 infected trees were taken out, 290 of these being in one Penticton orchard. Other cherry species or cultivars which are also little cherry hosts, including Japanese flowering cherries and trees on the Glen Dale 6 interstock, are surveyed annually.

Onion white rot disease is continuing to spread in the Fraser Valley. It is now occurring on four additional bulb onion farms in Cloverdale and five green onion farms in Burnaby and Richmond. A total of 12 Fraser Valley farms are known to have the disease.

Applied research is an ongoing branch activity, often conducted in co-operation with Agriculture Canada or one of the provincial universities. Current projects include an apple scab trial in Creston, a fairy ring lawn disease fungicide trial in Kelowna, and a number of orchard soil

Red Stele infecting strawberry plants is one of many diseases examined by plant pathologists.

fumigation trials designed to overcome the apple replant problem. In the Fraser Valley, an extensive pea wilt control project is underway together with an onion smut and maggot control trials. A project undertaken with Agriculture Canada was successfully completed during the year in which a new laboratory method was developed for identification of little cherry disease.

The branch co-operates with other agencies in order to expand the expertise available to the British Columbia agricultural industry. Co-operating agencies include Agriculture Canada Research Stations in British Columbia, provincial universities, Canada Department of Forestry and Environment, and various agricultural commodity groups and associations.

Throughout the year, in excess of 100 training conferences, field days and subject matter meetings were attended and participated in. Twenty summer students were used to good advantage in projects concerned with disease surveys, virus indexing, and research.

Soils

Soils Branch activities were concentrated in five major areas: advisory services to farmers; soil, feed and tissue testing services; inter-ministerial resource related activities; administration of the Soil Conservation Act, and technical service to the B.C. Land Commission.

Specialist services were provided to a variety of individuals and agencies. Advisory services related to soil and agricultural capability mapping were provided for a soil survey of Southern Vancouver Island, landform mapping in the Morice Lake area, preparation of a Soils Resource Report for the North Thompson River Valley, and a detailed soil survey of the Pemberton Valley.

Advisory services to growers were provided in the Southern Interior, Lower Mainland, and Vancouver Island areas. Irrigation information

Soil specialists perform many advisory services related to soil and agricultural capability mapping and soils surveys.

was prepared for more than 1,000 soil samples from irrigation workshops and commercial designers. Drainage recommendations on tile spacing were provided on 20 farms covering over 1,000 acres (1,000 acres less than in 1975). Drainage construction was lowest since 1971. Other advisory services were related to a variety of soil problems including waste water management.

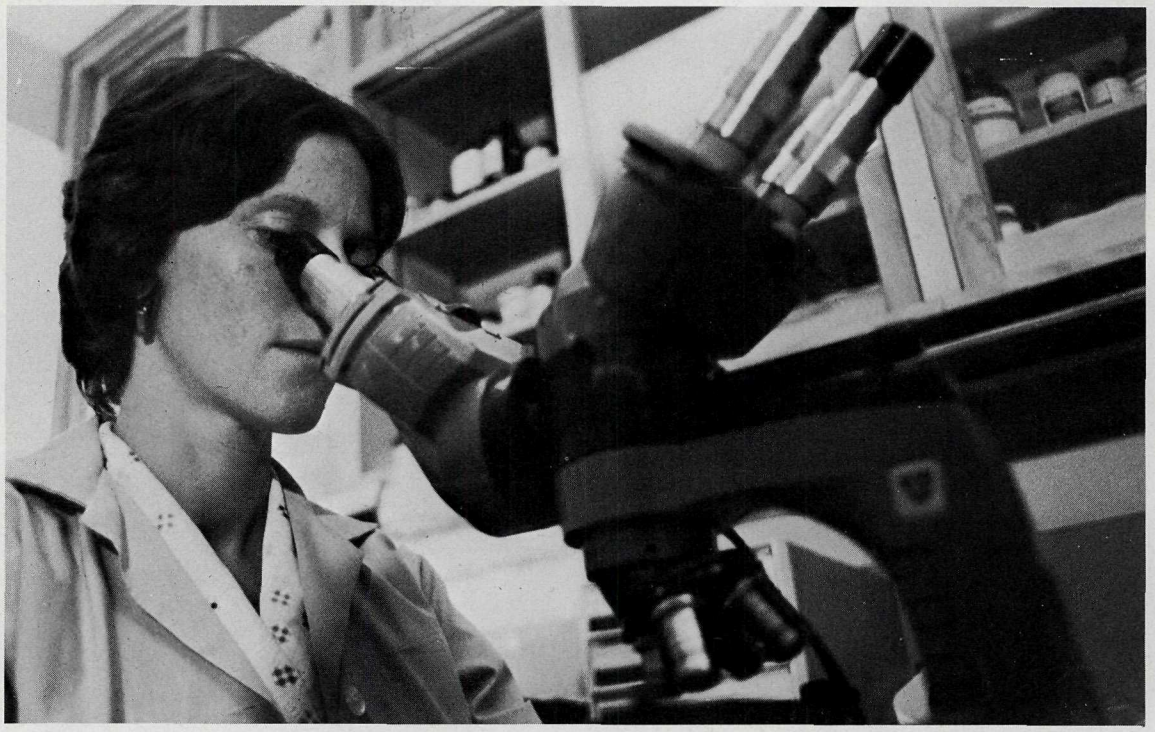
The Soil, Feed and Tissue Testing laboratory in Kelowna, which was transferred from the Field Crops Branch to the Soils Branch in 1976, received 12,000 soil samples involving more than 100,000 chemical analyses. This represents a 35 per cent increase over 1975. Feed and tissue samples increased from 3,700 in 1975 to over 5,300 in 1976, an increase of 43 per cent. Extension and research activities related to the laboratory are being maintained by participation in projects with other branches in the ministry, Agriculture Canada, and the University of British Columbia. Approximately 15 per cent of the soil samples and 35 per cent of the feed and tissue samples are processed in support of these projects. Fertilizer and nutrition recommendations based on the laboratory service continue to be of economic benefit to growers.

Specialists advised the Ministry of Agriculture relative to inter-ministerial resource problems. This involved reviewing a variety of environmental reports, referrals from other ministries and representing the ministry on appropriate committees to ensure that agriculture's concerns will be given adequate consideration.

Activities related to the Soil Conservation Act (SCA) were concerned primarily with illegal topsoil removal in Agricultural Land Reserves (ALR). Local authorities (Regional Districts and certain municipalities) were advised relative to the SCA. Numerous on-site inspections were made at the request of local government agencies regulating topsoil movement. To more adequately control illegal removal, revisions to the Act have been formulated and submitted for legislative action.

Technical services were provided to the B.C. Land Commission. More than 170 (20 more than in 1975) on-site inspections and reports were prepared for properties under appeal to the Commission.

Veterinary



The Veterinary Laboratory in Abbotsford provides diagnostic and disease analysis services to farmers who submit specimens for examination.

In 1976, branch specialists continued programs in animal disease control, meat inspection - to ensure the public of a wholesome supply of meat from provincial abattoirs, and brand inspection to minimize loss of livestock due to rustling.

The provincial Veterinary Laboratory strongly complemented animal health efforts by providing diagnostic and disease investigational services. An advanced virus diseases detection program was further developed. A definitive diagnosis of a viral disease (Reovirus) in young calves encouraged the use of a vaccine which proved very effective. The Aleutian disease eradication program for the mink industry was continued and expanded and will result eventually in an increased number of disease-free mink ranches.

People who submit specimens to the Laboratory eventually will be asked to pay 25 per cent of the costs of providing diagnostic services. Moving towards this goal, it was necessary to increase laboratory fees substantially this year. These increased charges have had little effect on the number of submissions in that the aggregate total submissions for 1976 was greater than that of 1975.

Meat inspection activities continued briskly at the seven provincially-inspected abattoirs in the Greater Victoria and Fraser Valley areas. A special low (4 per cent) interest incentive program was offered to these abattoirs to help upgrade the plants to full federal standards. It is hoped that some of the plants will make modifications and switch to federal inspection in 1977. Several abattoirs outside of the designated Meat Inspection Areas requested provincial inspection. Their needs could not be met within the resources available, therefore, alternate systems of providing inspection are being considered. Charges for meat inspection were increased substantially to ensure that a fair share of the costs are borne by the abattoir operators. The current charge represents less than one-third cents per pound of inspected meat.

The brand inspection service continued to monitor cattle movement in the province in order to minimize rustling losses. For the first time, a record was made of cattle imported into British Columbia from Alberta. For the first ten months of 1976, this figure reached just over 24,000 head. There was an 11 per cent increase in the number of cattle in the province processed through licenced slaughterhouses that are not under provincial or federal meat inspection.

Discussions continued with the British Columbia Cattlemen's Association to streamline the brand inspection system in order to reduce costs of individual brand inspections to be more in line with the revenue collected. Substantial increases have been made to brand inspection fees over the past three years. Further upward adjustments will be necessary to make this service 50 per cent self-supporting.

Provincial veterinarians at agricultural offices continued to inspect animals at saleyards to minimize disease spread. The animal volume moving through saleyards was similar to that of 1975.

There were three confirmed cases of Western Equine Encephalomyelitis (Sleeping Sickness). These took place in August and occurred in individual horses at Revelstoke, Vernon, and Winfield. The horse at Revelstoke died, while the other two recovered. Approximately 6,300 horses in the Okanagan-Similkameen area were vaccinated against the disease.

The staff of Health of Animals Branch, Agriculture Canada, was involved in the eradication of two "named" diseases in the Federal Animal Contagious Diseases Act. There was a serious outbreak of Brucellosis in the Vanderhoof area and two ranches had outbreaks in the Nicola area. In all, 28 ranches were quarantined for reactors. As of November 26, there were eight herds under quarantine with only one herd considered to have an active infection.

Bluetongue was found in cattle near Cawston in the spring. The number of reactors of this virus disease was found to be rather extensive and on June 20, the Federal Minister of Agriculture imposed a Bluetongue quarantine. This covers the territory from Hedley to Rock Creek along the International Border and north to the southern boundary of Penticton. The federal Health of Animals Branch reported that to November 19, 26,036 cattle were blood tested with 1,316 reactors found in 146 herds in the quarantine area. A total of 723 sheep were tested with 13 reactors and 314 goats with 7 reactors. A British Columbia survey of animals along the International Boundary was carried out and 4,618 cattle were tested with 67 reactors in eight herds. Twenty-eight deer were tested and all were negative, 93 sheep were also negative and of 30 goats tested only one imported animal was a reactor. The eradication program is nearly complete and the quarantine will likely end in early 1977. Ranchers in the quarantine area will be compensated by the federal government for losses incurred as a result of the quarantine. It is evident that there was no active infection occurring causing Bluetongue in 1976. Bluetongue is an extremely severe disease in sheep and has major implications for the export market. It will be necessary for the Health of Animals Branch to continue to monitor the cattle in the area after the quarantine is cancelled.

Youth Development

4-H is an informal, educational, and recreational program which has as its overall objective, the personal development of young people. Membership is open to young people from 9 to 19 years of age. Clubs are formed around a wide variety of projects with leadership provided by volunteer adults. The Youth Development Branch enrolled 4,305 members and 840 leaders in 271 clubs during 1976.

During 1976, 4-H members participated in a variety of travel and exchange programs in addition to their regular project and club work. Selected 4-H members participated in discussions on how Canadian laws are passed, Canada and her role as a food producer, and 4-H on a national and international level. British Columbia hosted the Western Provinces 4-H Seminar in 1976. Forty-eight senior 4-H members from the four Western provinces participated. The theme for the seminar related to space in the environment and how it is used.

4-H leaders are recognized and assisted in a variety of ways. In 1976, steps were taken to give the local 4-H organization more autonomy at every level of the organization. Through workshops and conferences, volunteer 4-H leaders were given the opportunity to improve their skills in all areas of youth work.

Through activities such as camps, conferences, activities at fairs, travel programs, and club and project work, the 4-H program is helping to develop young people with positive attitudes and definite goals.

A special project carried out in 1976 by 4-H members was the installation of silo gas warning signs on tower silos throughout the province. The signs and materials for the project were provided by the British Columbia Ministry of Agriculture, with the Dairy Committee of the B.C. Federation of Agriculture paying the 4-H program an installation fee on the basis of one dollar per sign installed. The money raised went to the British Columbia 4-H Youth Development Foundation. This project was developed in response to the deaths of three Fraser Valley farmers in tower silos in 1975.

Farm Vacation Program

The British Columbia Farm Vacation Program administered by the Youth Development Branch, makes available a listing of farm families that are prepared to host vacationers. The intent of this program is to provide host participants with an additional source of income while, at the same time, giving urban people an opportunity to learn about agriculture and food production.

In 1976, over 350 people took vacations on British Columbia farms and ranches. Vacations averaged five days for a total of 1,750 vacation days taken.

International Agriculture Exchange Program

In 1976, there were 41 I.A.E.A. trainees on British Columbia farms and ranches. They came from several European countries as well as Australia and New Zealand. The program in general was very well received and is expected to grow in the future. In the fall of 1976, six young people from British Columbia travelled to Australia and New Zealand on the I.A.E.A. program.

Young 4-H members exhibit their crafts and in this case, animals during 4-H Club achievement days.

Apiary

The year 1976 will long be remembered by beekeepers in British Columbia as one of the worst on record. Throughout the province, bees were confined for most of the summer as the result of cold, wet weather which resulted in a 50 per cent reduction in the honey crop. In the Peace River district, adversity was compounded by severe winter injury to nectar producing legumes. A 60 per cent reduction in rapeseed acreage also affected honey production in the Peace.

Active beekeepers in the province number 4,500, a gain of 535 new producers since 1975. The number of colonies increased to 51,035 in 1976 from 45,855 in 1975.

The total honey crop during 1976 was 2,750,000 pounds, a decrease of almost 1.3 million pounds from the 1975 crop. This is the lowest crop harvested in the province since 1967.

The wholesale market for honey was generally slow although retail sales were good. In recent years, honey producers from Alberta have been moving large volumes of honey into British Columbia and stocking fruit stands and retail outlets with honey in 30-pound containers. This honey is usually sold below the price of local honey.

The price of No. 1 white honey in bulk (660-pound barrels) to the packers ranged between 40-43 cents per pound. Only about 30 per cent of the honey produced in British Columbia is shipped in bulk to the packing plants. The remained of the crop is marketed locally by producers and producer graders through retail outlets or on-farm sales. The on-farm price for honey ranged between 65 and 90 cents per pound.

The cost of equipment and labour continued to escalate. A new hive with bees cost $127.39 in 1975 while the cost of the same hive and bees during 1976 was $152.69, a 20 per cent increase.

Honey producers in British Columbia were given some assistance against bear damage to hives and subsequent loss of crop. This assistance was provided under terms of the Beeyard-Bear Protection Incentive Program which made provision for financial assistance in the form of direct grants to honey producers for the construction of bear-proof electric fences.

Under the Bee-Yard Bear Protection Incentive program honey crop loss is reduced with the construction of bear-proof electric fences.

Bee diseases were lower during 1976 compared with 1975 and 1974, although the number of hives increased in 1976. Colonies inspected numbered 11,219 compared with 12,213 during 1975.

Chalkbrood, a fungus disease of honeybees, is causing some concern to honey producers throughout Canada. This disease has been endemic in Europe and the British Isles for many years. Its occurrence in North America has only been confirmed since the late 1960's.

Producer demand continues strong for honeybees to pollinate tree fruits, small fruits, cranberries, legume and vegetable seed crops.

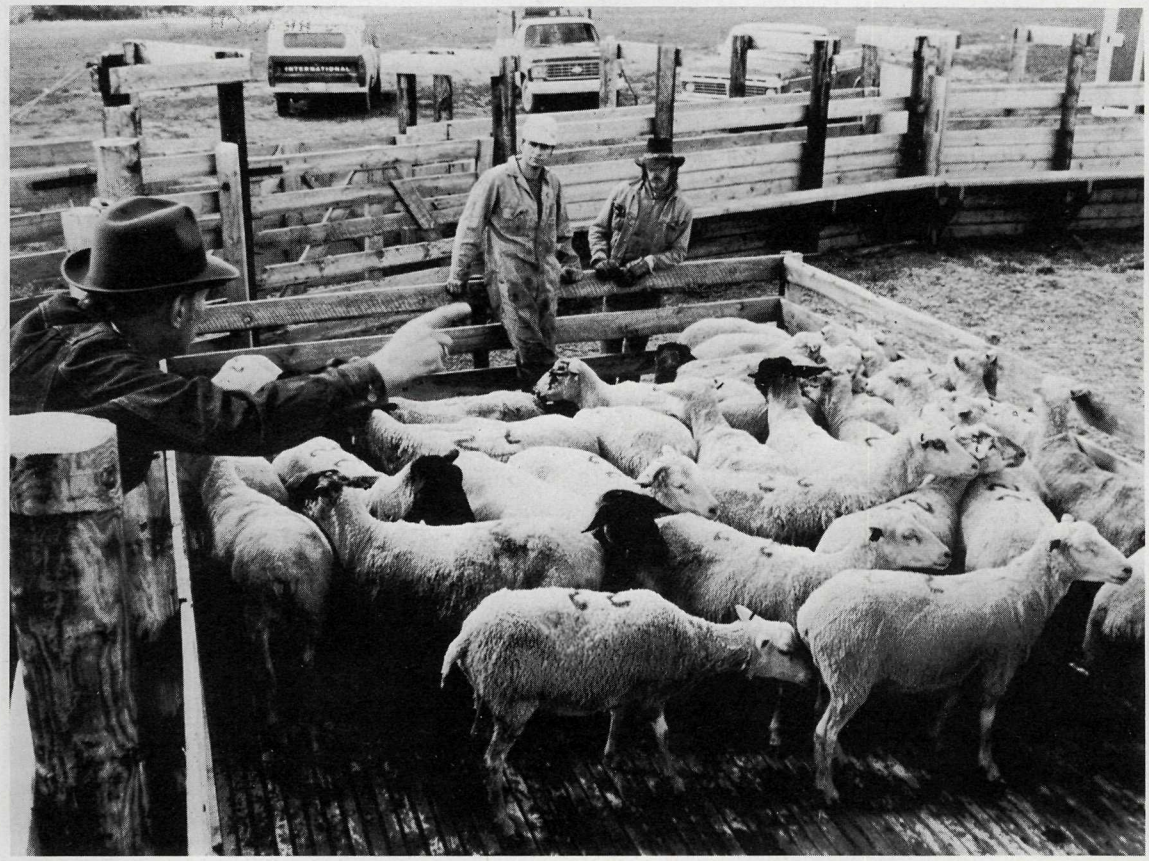
The D.A.T.E. project for wintering honeybee colonies in a controlled atmosphere building is in its second year. This work is being carried out in co-operation with two commercial beekeepers in the Peace River district.

Because of the possible introduction of the African-Brazilian hybrid bee into North America, a honeybee stock control area and bee breeding program is being established in the Sunshine Coast and Southern Interior areas. Honeybee strains which are especially adapted to British Columbia climatic conditions, will be selected from stock reared in British Columbia.

This program is particularly significant to the province's honey producers and holds a promise of substantial long range benefits to the honey industry.

Development and Extension

Although many Ministry branches deal directly with farmers, the Development and Extension Branch staff forms a large portion of government-to-farmer contact on a person-to-person basis. The Development and Extension Branch was engaged in a wide range of programs of assistance and service to the agricultural industry during 1976. District Agriculturists located in 18 district offices in agricultural regions of the province initiated numerous district and regional extension programs and responded to many inquiries from



Development and Extension field staff work directly with farmers in all aspects of farm activity.

their farm clientele. Inquiries dealt with Income Assurance programs, the Agricultural Credit Act, the Agricultural Land Development Act, the Crop Insurance program, livestock and crop improvement programs, and other forms of assistance to primary producers. There were numerous requests for information on all aspects of production, marketing and economics of many farm commodities.

The branch co-ordinated a number of special studies and projects related to the protection and development of agricultural resources. Foremost among these were:

(1) a study of proposals for drainage improvement in the Serpentine-Nicomekl flood plain
(2) a project to determine possible health hazards from direct spraying of treated effluent from the Vernon secondary treatment plant on farm land
(3) an ARDA pasture research study
(4) a program to determine demand for agricultural advisory services on the Gulf Islands.

District Agriculturists assisted in many problem situations such as flooding of the Nechako River in the Fort Fraser and Vanderhoof areas, surveys of crop losses due to inclement weather and outbreaks of livestock diseases.

Regional and district extension programs were conducted for livestock and crop producers. These programs included field days, seminars, short courses, workshops, radio and television releases, and distribution of newsletters and other literature providing producers with information on efficient production techniques. Regional co-ordinating meetings were conducted to involve other branches of the Ministry, Agriculture Canada, the University of British Columbia, and other agencies in discussion and planning with regional and district staff. An increasing number of the more formal training sessions were developed and conducted in co-operation with Regional Colleges. The colleges assisted in organization and provided facilities. Producers attended training sessions in forage production, range management, animal nutrition, animal health, animal breeding, farm business management, estate planning, tax management, general farm economics, and other subjects related to primary production. Demonstration work on perennial forage and corn varieties, soil fertility and livestock feeding projects using alfalfa cubes and pellets provided the focal point for many field days and farm tours.

The branch continued its heavy involvement in regional and local resource management planning. Field staff were assigned to various committees to represent the agricultural sector in co-ordinated planning with other government Ministries and agencies. These inter-agency committees concerned themselves with developing comprehensive local and regional resource plans, including range, predator management, land management, community pasture development, and technical planning for Regional District Boards.

The branch continued to provide field services for many ongoing Ministry programs. These include various livestock Record of Performance programs, forage and soil analysis and recommendation programs, Youth Development programs, weed control, bull control, farm business management programs and others. Farm Business Management advisory services received high priority resulting in increased farmer interest and participation in management programs. District Agriculturists were involved in counselling farmers and in interpreting data from both the CANFARM business analysis program and the Ministry's farm management program. During the year various other aspects of farm economics were emphasized including estate planning, business organization, tax management and the collection of producer consensus data on costs and returns of various farm commodities.

The branch also administered the Federal/Provincial Small Farm Development Program involving seven advisors suitably located throughout the province. These specially trained people worked closely with District Agriculturists on farm economics programs and provided intensive counselling to small and developing farmers. This program is especially important in British Columbia because of many small and part-time farmers with marginal farm income and some off farm earnings.

Farm Economics

The Farm Economics Branch provides assistance to farm managers and to farmer advisors in the Ministry who request guidance on farm business planning or analysis of economic data for use in business planning.

During 1976, the following information pieces were developed to provide business management resource materials in British Columbia.

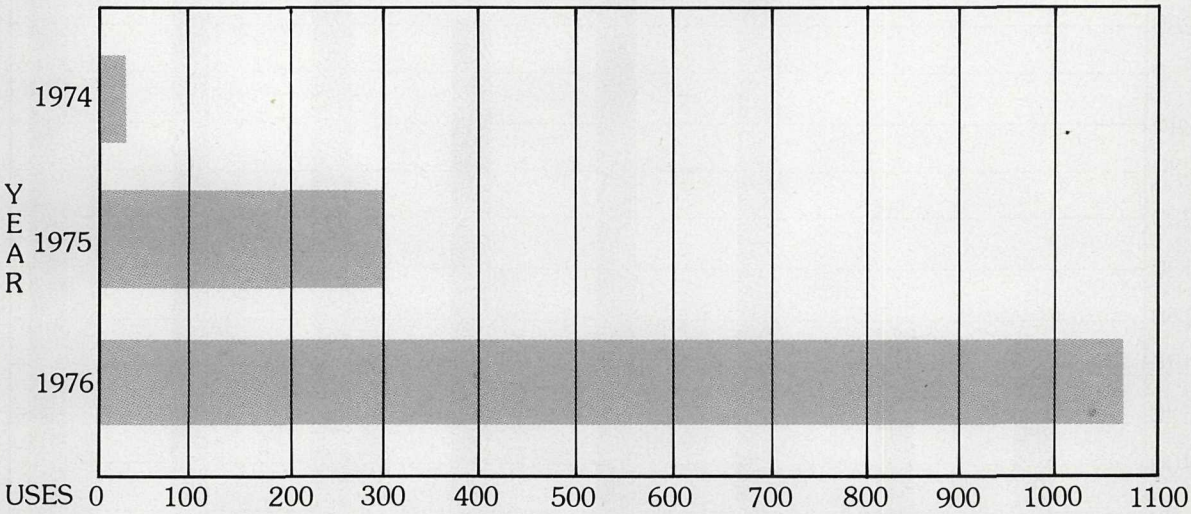
(1) A "Farm Business Management" factsheet

was initiated and seven issued completed
(2) The "Advisors Guide" to "Taxation and the B.C. Farmer" was finalized and released
(3) The publication "Sources of Farm Credit in B.C." was revised and updated
(4) The "British Columbia Farm Business Management Data Handbook" was finalized and released in 1976
(5) Information has been compiled for two television programs entitled "Planning your Credit Needs" and "How to Apply for Credit"

In 1975, the use of the portable computer terminal and computerized decision aids became a reality. Their volume of use increased substantially as shown in Figure 1.

FIGURE 1

Use of Computerized Decision Aids British Columbia - 1974 to 1976



Decision aids currently offered to clients include:
(1) Loan calculator program
(2) Feed formulation and dairy mix program
(3) Cash flow forecaster and cashplan
(4) Machinery replacement planning program
(5) Machinery buy versus custom hire program

The branch offers the B.C. Farm Account Book and the Canfarm record system to British Columbia farm managers. A comparison of enrolment for 1976 compared to 1975 is shown in Table 1. A long term comparison of enrolment is shown in Figure 2.

TABLE 1:

Comparison of 1975 and 1976 enrollment on British Columbia Farm Account Book and Canfarm

Record System	1975 Enrollment	1976 Enrollment	Change as a % of 1975
B.C. Farm Account Book	52	32	—38%
Canfarm (V2 and V3)	293	355	+21%
TOTAL	345	387	+12%

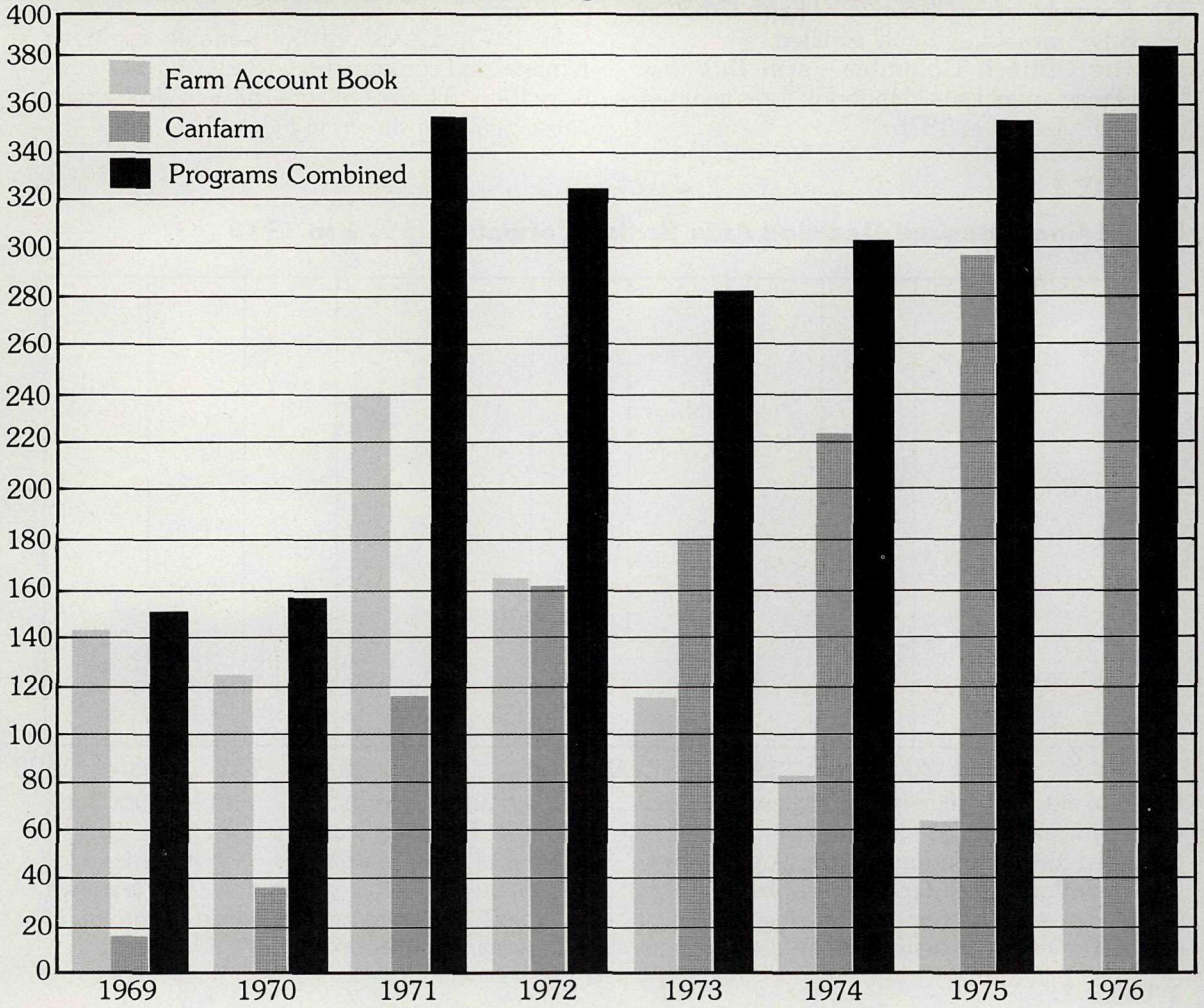
During 1976, three comparative analysis reports were published for use by farm managers. These were:
1975 B.C. Farm Business Analysis Report
1975 B.C. Dairy Farm Business Analysis Report
1975 B.C. Beef Farm Business Analysis Report

During the year, costs and returns were studied for several commodities with the following reports being published.

CDS 194 Barley, Rape, Alfalfa, Summerfallow - Dawson Creek-Rolla Area
CDS 195 Cabbage, Sweet Corn, Lettuce, Potato Production - Comox Valley
CDS 196 Pasture, Hay, Haylage - Cowichan Valley
CDS 197 Alfalfa, Hay Production - Kamloops
CDS 198 Pollination and Honey Production - Southern Interior

FIGURE 2:

Comparison of Enrollment on British Columbia Farm Account Book and Canfarm Program 1969 to 1976 inclusive



A special study of input costs in British Columbia compared to Washington State was carried out. Costs of various commodities were compiled for use by the Policy and Planning Service of the Ministry.

In 1976, new computer systems and programs were developed for:

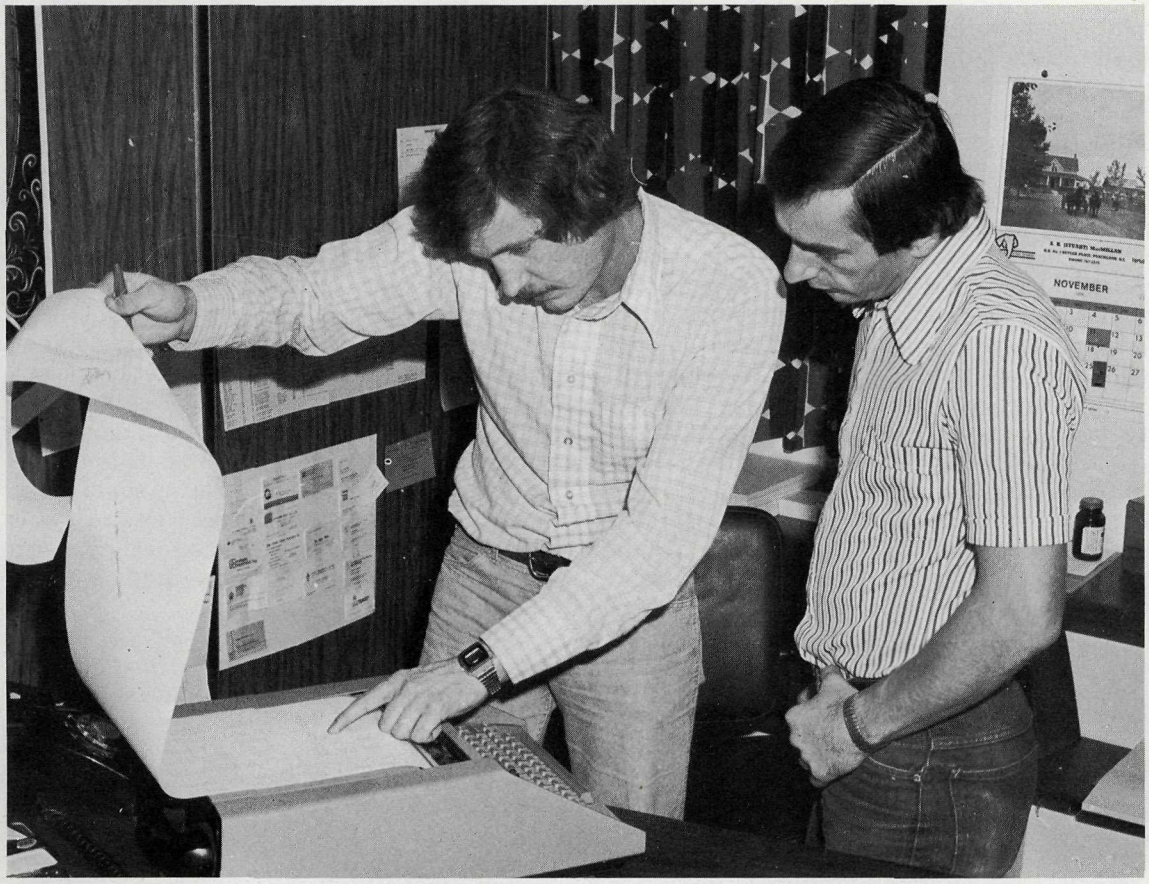
(1) Calculation of interest reimbursement claims under the Agricultural Credit Act
(2) Animal feed statistical analysis
(3) Silage analysis project
(4) Agricultural Directory
(5) Soil analysis project

Ongoing projects continued during 1976 included work on 4-H statistics, calf-loss study, grain quality study, and the B.C. Farm Account Book project.

Staff training sessions conducted by the Farm Economics Branch during 1976 included:

(1) two three-day sessions on computerized decision aids and Canfarm records
(2) a three-day session in October for Farm Business Management Technicians on the Canfarm Record System
(3) a one-week session (November) on business organization and estate planning for professional staff of the Ministry and officials of the Farm Credit Corporation

During 1976, the Farm Economics Branch represented the British Columbia Ministry of Agriculture on several provincial, regional, and national committees relating to the work area. During the year, the branch participated in meetings of the Canfarm Farm Management Committee, Canfarm Advisory Committee, Canada-B.C. Small Farm Development Program Co-ordinating Committee, ELUC Data Services Committee, and Western Farm Management Extension Committee.



Specially trained farm advisors examine computer printouts to assist a particular farmer in making his farm management decisions.

Field Crops

Field Crops Branch staff is located throughout the province to provide farmers with specialized knowledge in livestock feed and range production as well as other crops such as cereals, potatoes, oilseeds, forage seeds, and a number of minor crops. The branch is involved in weed control by assisting districts with control programs.

Numerous applied research and demonstration projects are conducted as part of general extension programs in the various regions. The branch works continuously with other branches of the Ministry and with other agencies such as Agriculture Canada and the University of British Columbia.

The 1976 growing season was a difficult one for farmers. Below normal temperatures and record summer precipitation delayed growth and maturity of most crops and caused heavy losses in many districts, especially to hay crops. Fortunately for all producers, the fall weather was sunny and dry providing a good opportunity to harvest crops.

Acreage devoted to cereal grains increased from 293,685 acres in 1975 to 400,000 in 1976. However, rapeseed acreage dropped from 82,800 acres in 1975 to 35,000 acres in 1976. Hay production from 625,000 acres was estimated at 1,700,000 tons. Although 1976 figures were not yet available, imports of alfalfa hay and straw from Washington State were reported at 167,823 tons in 1975, an increase of 100,000 tons since 1970. Silage corn acreage was estimated at 23,000 with an average of 20 tons of green weight per acre. Potato acreage was 11,412 in 1976 compared to slightly more than 10,000 in 1975.

Prices received by farmers were down considerably in 1976. Perhaps the hardest hit were the potato growers who had to compete

with large increases in production and low prices in the Pacific Northwestern States.

Since British Columbia is a forage deficient province, major emphasis was placed on forage production projects. An alfalfa seminar was held at Kamloops during the Spring to update Ministry, university, research staff and farmers on the latest research information as well as focus attention on research and extension needs. Alfalfa management demonstration plots were established at six locations and various forage variety and fertilizer trials were conducted on at least 20 other sites. At Pelican Lake (southwest of Prince George) for example, a soil-test recommendation for fertilizer produced an additional $79.80 worth of hay per acre at a cost of $16.47 for fertilizer. In the Fraser Valley, an extensive co-operative project was established to compare common forage mixtures with those recommended by the Ministry as well as to compare methods of establishment. With the co-operation of growers, corn variety demonstrations were conducted on 21 farms throughout the corn growing areas.

Range Specialists were heavily involved in co-ordinated resource management planning with a special Task Force Committee and other people concerned in the development and review of range management units. A number of those have already been completed and others are nearing completion. Support was given to the Engineering Branch in the development of range seeding equipment and to the Development and Extension Branch in conducting a number of educational meetings and tours.

Commercial forage seed production declined sharply due to unfavourable market conditions and winter kill of clover stands. Since there is a general shortage of certified seed of many forage varieties, a promotional campaign for more pedigreed seed production is having some effect. A new variety of Red Clover, "Pacific," was licenced in 1976. It was produced at U.B.C. with support from the Ministry and a farm organization.

Weed control also received increased attention. The policy of grants for approved programs undertaken by Regional Districts and

Since British Columbia is a forage deficient province, major emphasis was placed on forage production projects such as alfalfa seminars, demonstration plots, and other co-operative projects related to forage production.

Municipalities has resulted in active weed control programs in seven districts. Knapweed control work in the Southern Interior was directed at a containment effort to halt the spread to non-infested sites. Of prime importance is halting the spread along all corridors leading to the Cariboo region. Weed research and demonstration trials included 62 projects on a wide variety of field and horticultural crops.

In the Peace River area, the branch has conducted a grain quality study for the past four years. Some 600 samples have been collected each year along with production data. The samples are analyzed for protein and moisture content. The results will be published when data processing is completed in 1977.

Work also continued on the U.S.A.-Canada Large Area Crop Inventory Experiment, a remote sensing project near Dawson Creek. A project was also initiated in 1976 to determine the acreage of Creeping Red Fescue using remote sensing techniques. In co-operation with the Beaverlodge Research Station, a 1,000 plot cereal variety test was conducted near Dawson Creek.

Seed potatoes produced by growers in the Seed Potato Control areas of Pemberton and the Cariboo are in widespread demand. The very successful virus-free program controlled and administered by Agriculture Canada has resulted in increased sales of seed stocks to both the domestic and export markets. Regional variety trials were again conducted at four locations as well as several fertilizer trials. Two part-time inspectors continued to check imported potatoes for Bacterial Ring-Rot.

As in previous years, the staff was actively involved in many extension programs, field days, and inter-agency resource meetings. A number of new publications for growers were issued dealing with fertilizers, crop recommendations and management.

Horticulture

The Horticultural Branch activity during 1976 was largely responsive to the economic stress in many horticulture sectors and increased involvement with land use programs.

On the coast, the 1976 growing season was generally poor for crop development. Abnormally cool, cloudy and wet weather delayed planting and subsequent growth of most crops. However, excellent fall weather saved many crops from ruin and allowed for normal harvesting activities.

Weather also was the dominant factor affecting horticultural crops in the British Columbia interior during 1976. Following a mild winter, average

The largest crop of apples since 1946 was turned out in 1976, amounting to approximately 8.5 million boxes.

temperatures were lower than normal in all months from March to August. The fall was relatively warm and dry but this came too late to cause much improvement in heat-loving crops. It did save the grape crop but quality was marginal.

Tree Fruit Crops

The apple crop was slightly larger than the 1975 crop, out-turning 8.5 million boxes (shipped to the selling agency) and well over 9 million boxes total when non-agency sales were included. This is the largest crop since 1946. Higher prices than prevailed last year are being maintained.

The Bartlett pear crop suffered severely from the cool, wet August. Although the set was the heaviest in years, other growth problems developed causing heavy cullage and forcing the marketing agency to sell the crop in a short period at lowered prices. Anjou pears were smaller than usual but sales are good.

Despite adverse weather the main peach crop, estimated at 34 million pounds, was of good quality.

The sweet cherry crop was reduced by 10 to 15 per cent below the large 1975 crop by rain splitting which affected cherries north of Penticton.

The apricot crop was close to last season in volume. Quality problems developed as a result of cool, damp weather.

The prune crop was similarly affected. Prices were down.

The grapes were among the crops most seriously affected by the cool summer. A late bloom was followed by a good set and estimates as high as 14,500 tons were given. At the end of August, sugar levels were below 10 per cent in many vineyards and many blue grapes north of Penticton had not turned colour. The warm September weather greatly improved this situation but not in time to save the low-sugar, heavy-crop vineyards in the Kelowna-Vernon areas. In December, a special government purchase plan was set up to assist growers.

Berry Crops

The berry situation in British Columbia brightened considerably in 1976 as prices were much firmer than in 1975 due to adverse weather in Mexico.

Strawberry plants in all areas survived the winter in good condition. The 1976 price was set at 34.5 cents per pound for processing berries compared to 28.5 cents per pound in 1975. Fresh fruit prices averaged 40 - 50 cents per pound for picked berries and 30 - 50 cents per pound for U-Pick sales.

Raspberries did fairly well in 1976 with the crop responding to the cooler summer months. Botrytis was somewhat of a problem as a result of light showers during the harvest period. Raspberry acreage decreased by 200 acres in 1976. Farm sales of fresh raspberries increased significantly at firm prices in all areas of the province. This was directly attributable to the promotional program sponsored by the Horticulture Branch, the Marketing Branch, and the B.C. Raspberry Growers' Association.

Blueberries did poorly in 1976 as prolonged rainy weather during the harvest season encouraged the incidence of botrytis. Most blueberry growers have joined the B.C. Blueberry Co-operative and as members are entitled to participate in the provincial Blueberry Income Assurance Plan which came into existence in 1976.

Cranberries were only affected slightly by weather conditions and a near normal crop was harvested. Fruit set was good and the berries sized and coloured well. Marketing of the crop seldom presents any problems as production and marketing of the major portion of the cranberry crop is controlled by Ocean Spray Incorporated.

Loganberry production is confined to Vancouver Island. The acreage continues to decline and is now down to approximately 32 acres.

Vegetable Crops

Both production and quality of vegetable crops, with the exception of peas and mid-to-late potatoes, were impaired due to slow growth, disease problems and late maturity. Late starting sales caused growers to lose marketing advantage over vegetables from the Prairies, as well as the early local sales. Sales of fresh market vegetables were also reduced by extensive consumer shopping in Washington State.

Branch projects included: standard variety trials for cabbage, carrots, cauliflower, and onions; acreage surveys for transplanted lettuce, celery, cauliflower, and green onions; a comparison of a peat-like mix with a grower's soil for growing celery transplants; familiarization in the greenhouse with the fluid drilling of "chitted" seed of onions and lettuce; liaison with Simon Fraser University staff on a comparison of costs of shed packing celergy versus field packing.

The process vegetable industry began 1976 in distress. Low priced imports flooded our markets because of over-production and lower costs of production, particularly in the United States. A reduction in inventories brought about by poor crops in British Columbia and the United States, and substantial wage increases in several

American processing plants, caused some improvement in the processing industry by year-end. However, growers continued to be in serious trouble. Their gross incomes were down while their costs of production continued to climb. At year-end, growers were beginning to show an interest in the need for income assurance programs to keep them in business.

Cauliflower and broccoli variety trials provided information for potential expansion and for a more continuous supply of product to market.

A DATE project to find a pea variety resistant to the races of pea wilt found in the Fraser Valley was highly successful. Single plants from several commercial varieties were found to survive in severe wilt infested plots. Seed from these plants proved resistant in greenhouse trials this fall. Field testing must be done again in 1977 and seed should be commercially available in 1978 or 1979.

There were 2,670 acres of vegetables produced in the southern interior, excluding the Kootenays. Asparagus production increased but weather upset the fresh corn, slicing cucumber, onion, and pepper crops. Quality of fresh and processing tomatoes were not up to the usual high standard.

Mushroom production for the year was down because of fly damage. Sales of fresh mushrooms were good on both local and prairie markets. The outlook for 1977 is good and continued expansion is expected.

Nursery Stock

Supplies of tree fruit nursery stock are extremely short and the situation is aggravated by a short supply in the United States. The first Nursery Production Guide was printed in 1976 and distributed to nursery stock producers in British Columbia. The Plant Protection Advisory Council made some positive recommendations leading to a better European Pine Shoot Moth certification program and programs permitting the growing of the pine *Abies* sp. The nursery industry continued to expand during 1976, but at a slower rate than in recent years.

Greenhouse Crops

A number of major tomato greenhouses in British Columbia have changed from soil to soilless culture. In each case, yields and crop quality improved. Greenhouse cucumber growers continue to produce heavy crops of high quality produce. Two-spotted spider mites created havoc in this industry.

Control of spider mites through the use of predator mites (persimilis) was undertaken at the Agriculture Canada Research Station, Sidney. Previous work has been done using the incarcia wasp as a predator to control the greenhouse white fly. As a result of this work, the Horticulture Branch, in co-operation with the Entomology Branch, is planning to develop a program of raising both mite and white-fly predators in the spring of 1977.

A program of inoculating tomato plants using attenuated virus was undertaken. Tomato seedlings were sprayed with the inoculum about two weeks after emergence. The procedure worked very well and virus symptoms were reduced to a minimum.

The greenhouse ornamental industry is generally strong. Foliage plants have made great inroads into the total market for ornamentals.

The extension horticulturist, Mr. Ian Brice on exchange from New Zealand, contributed greatly to the British Columbia horticultural extension program.

Allotment Garden Program

The Allotment Garden Program, instituted in February 1974, has now reached a plateau with 1,433 plots on seven sites.

There has been some readjustment of plots as some areas on the sites were unsuitable for crop production and other very rough areas were brought into cultivation.

Comparison of Sites and Number of Plots

	1974	1975	1976
Kent Road (Victoria)	142	145	141
Kenneth-Agnes Streets (Victoria)	—	133	125
Gordon Head Road (Victoria)	—	218	210
Wilkinson Road (Victoria)	18	50	50
Meadow Avenue (Burnaby)	—	371	372
No. 5 Road & Steveston Hwy. (Richmond)	173	437	535
Gilley Road (Richmond)	35	—	—
Total Plots	368	1354	1433

Management was provided on the various plot sites by an agricultural officer in Victoria and one in the Vancouver area. In addition, five summer students were employed in each area from May 1 to August 31, 1976.

Livestock

While the sheep industry has experienced a year of increasing prices, prices to the beef and hog industries were lower in 1976 than in previous years. This was a continuation of the downtrend in the entire beef industry caused by a large inventory of cattle, high grain prices, and heavy importations of "off-shore" beef.

The Beef Income Assurance program has helped to stabilize the industry, although producers will have to provide for adequate feed supplies, culling of less productive animals, and improving reproductive performance.

The sheep industry made significant progress during the year following establishment of a B.C. Sheep and Wool Commission, and an Income Assurance Program. It is premature to make any projections on their long term value except to note that industry committees are actively working in connection with each agency and program respectively.

The Livestock Branch was represented at three national meetings concerned with livestock production testing programs.

Definite progress has been made with respect to the Dairy Herd Improvement Division meeting national standards for milk recording. The province has requested certification from the Board as of November 1, 1976 and this is pending.

The Dairy Herd Improvement enrolment decreased to 576 herds in 1976 from 622 in 1975. The decrease is attributed to farm consolidations, changing federal Market Share Quota (MSQ) policies, DHID fee increases, and herd transfers to the federal dairy ROP program.

The Pilot Canfarm Dairy Feeding Advisory Service was officially terminated on December 31, 1976 and is presently being evaluated by the Ministry. It is expected an improved Feed Advisory Service will be made available to dairymen during 1977.

Farmer use of the feed analysis laboratory at Kelowna increased by 82 per cent over the previous year. More farmers realize the need to assess the value of lower quality forage stored during the fall.

Statistics from the Hog Quality Program indicate that production patterns by B.C. hog producers for 1975 were very similar to 1974. Statistics for 1976 will not be available until 1977.

The beef industry continued to suffer very low prices during 1976.

This program has contributed to markedly improved grades of British Columbia hogs in recent years.

It is planned to begin a Swine Record of Performance Program during 1977. This is only possible because Agriculture Canada has agreed to provide partial staff requirements.

Enrolment in the Beef Record of Performance Program was 210 herds during 1976 involving a total of 8,246 cattle. This was down two herds and 935 cattle from 1975. Most of the reduction in numbers was caused by reduction of inventories.

Administrative policy under the Domestic Animal Protection Act was changed markedly during the year. As a result, it is expected that some Regional Districts will undertake their own dog control by-laws in 1977.

Marketing

The Marketing Branch was instrumental in the establishment of the Sheep and Wool Commission under the Natural Products Marketing Act. Although no additional marketing legislation was proposed in 1976, there were regulation changes under the Fruit, Vegetable and Honey Grades Act, to standardize grade regulations to the federal Agricultural Products Standards Act.

There were a number of commodity problems dealt with by the branch including discussions with the industry on the processing crops - peas, beans, and corn. As well, support was solicited for the various greenhouse crops, particularly greenhouse tomatoes in the face of lower-priced imports of field tomatoes from the United States. Assistance was provided to B.C. grape growers to market part of their crop through fresh market channels. Also, the branch was involved in a grape purchase assistance program to alleviate a critical crop problem caused by poor weather.

Considerable effort was made to convince the federal government to remove the threat of low-priced potato imports from the United States by imposing a surtax. This unfortunately was not accomplished, however a favourable response was received from the federal government under the stabilization program. A more permanent solution is looked for in 1977.

The Marketing Branch assisted in organizing a tour in British Columbia for a Japanese purchasing mission. Arrangements resulted in a large sale of British Columbia Holstein-Friesian cattle to Japan.

Work was carried on by the branch in conjunction with the Horticulture Branch and

Beautiful and delicious strawberries are grown primarily in the Lower Mainland area of British Columbia. Many top quality B.C. home grown food products are marketed nationally and internationally.

producers to promote U-Pick programs in the province. This was augmented through a market development program formulated for the British Columbia raspberry industry.

The branch became involved in a number of federal-provincial matters during the year. A position paper on "Agricultural Products in the Multi-Lateral Trade Negotiations" was developed in conjunction with the other three western provinces. As well, the branch participated in discussions with the Canadian government Tariff Board to discuss upcoming recommendations regarding tariffs on horticultural crops. The branch co-ordinated the annual Agricultural Pre-Outlook Conference workshop and made a presentation to the National Farm Products Marketing Council stating the British Columbia Ministry position with regard to the information of a national chicken marketing agency.

The Marketing Branch is presently serving as the co-ordinator for the development of agricultural statistics within the province and co-operating with federal agencies on an advisory council on development of agricultural markets.

Food Promotion Program

The Food Promotion Division of the Marketing Branch headquartered in Surrey has been carrying out a program designed to:

(1) make British Columbians more aware of the many food products produced and processed in this province
(2) make British Columbians more aware of the contribution of agriculture to the social and economic well-being of the province
(3) develop an appreciation of the industry and its participants by consumers and encourage their support when making purchasing decisions. This objective is met through a number of promotion mechanisms briefly described as follows.

The primary approach for 1976 was the development of the B.C. Foodstakes '76 Promotion. This campaign was carried out in July and August, promoting the purchase of Home Grown B.C. Quality foods. B.C. residents entered a lottery with $1,000 worth of B.C. foodstuffs as the first prize. The promotion was well received by both the industry and the consumers as indicated by the high volume of entries.

Further programs included a recipe sheet, featuring one or two B.C. commodity lines, sent out every two weeks through food retail outlets to consumers. In total, over three million recipe sheets were printed during the year.

Once again the two food demonstration trailers were operated from shopping centre locations and in conjunction with local fairs throughout the province during the period May to September.

All forms of media were used throughout the year with particular reference to the inclusion of a weekly food cooking demonstration by Mona Brun on the CTV Network Jean Cannem Show. As well, a large number of effective radio commercials were developed, one of which received an award of merit at the annual Canadian Farm Writers' competition.

The branch began a stepped up Food Information Service during the year with the hiring of a home economist. This staff operates a number of food demonstrations at various shopping malls in the Lower Mainland area.

The staff of the branch annual calls on a very high percentage of the retail food outlets in British Columbia soliciting their support for B.C. produce and encouraging the use of Home Grown B.C. Quality logos in the display of B.C. products.

The branch took part in the P.N.E., once again staging twice daily presentations of popular food-related shows. As well, displays and demonstrations were carried on throughout the year in numerous locations and for a variety of functions.

Poultry

The difficulties experienced with marketing of poultry products in 1975 due to the establishment of national marketing agencies were largely overcome in 1976. Since the commodity board or national agency involved sets the price the farmer receives for his product, the price paid is based on a cost of production formula, it is understandable that prices to producers were favourable in 1976. The weighted price paid for eggs for the year was 69.6 cents per dozen at grading stations, an increase of 6 cents from 1975 and about the same as 1974. Prices to producers for chicken remained constant throughout the year at 37½ cents per pound live weight, an increase of 1.4 cents per pound from 1975. Prices to producers for turkey averaged 47.0 cents per pound in 1976.

Since the egg industry and the turkey industry are each controlled by a national agency (CEMA and CTMA), both commodities are subject to

import restrictions. Quota allotments, import restrictions, and surplus removal program for eggs have brought supply close enough to market demand to allow approximately a 3 per cent increase in egg quotas in 1976. This was accomplished by allowing producers to market eggs from 71 laying hens per case of quota, which was increased from 69. The turkey quota also was increased to 1,425,000 pounds in British Columbia following the sharply reduced quota allowance in 1975 because of excess storage stocks.

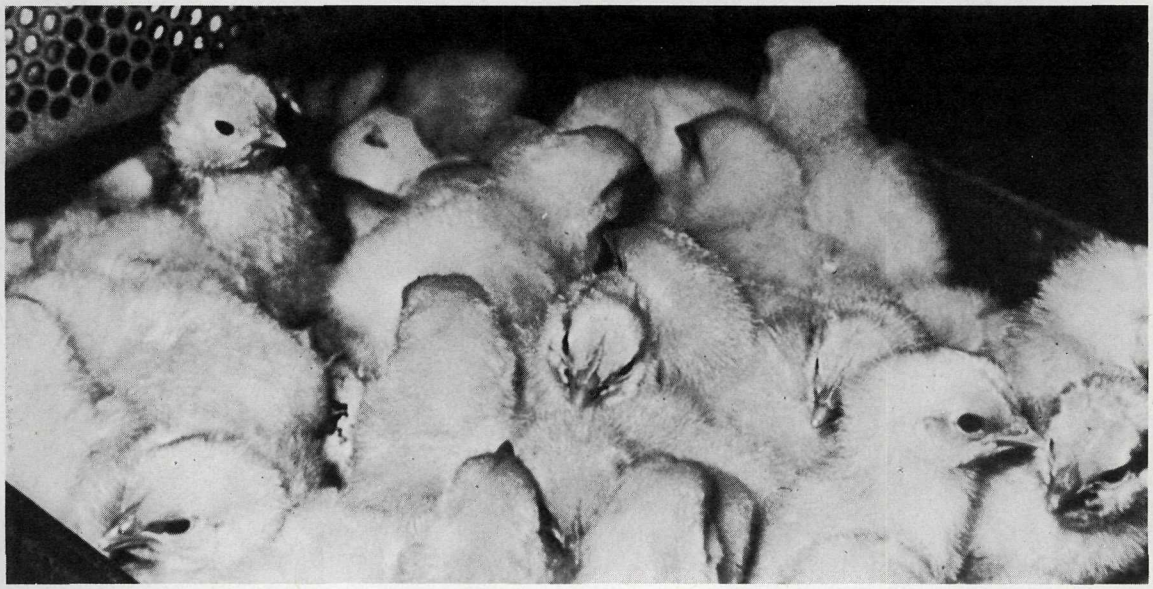
For some time, the chicken meat industry has discussed the formation of a national agency similar to those concerning eggs and turkey, under the National Farm Products Marketing Council. Greatly increased imports of United States chicken into Canada in 1976 added impetus to the discussions.

The Poultry Branch staff is composed of specialists in egg production, chicken meat production, turkey meat production, hatching egg production, and diseases of poultry. This staff plans and supervises a broad range of projects in all areas of poultry production at the Poultry Test Station. These projects are developed to demonstrate and obtain information pertinent to poultry production in British Columbia. The test station facilities provide a means of problem solving and demonstration to the industry. Projects were initiated to demonstrate the strains of chickens most suitable in this area for egg production, chicken meat and turkey production. Other projects included evaluating alternate materials for use as poultry litter, a pilot study to determine the feasibility of producing hatching eggs from cage layers, a study of the nutritive value of "purple wheat" when fed to laying chickens and many other projects.

This project work provides a great deal of information without excessive cost to government. In the period December 1, 1975 to December 1, 1976, the test station returned $86,746 to provincial revenues from the sale of poultry products. This income covered most of the costs of production.

Disease problems are a continuing major factor in poultry production. The problem is accentuated in British Columbia because of the high concentration of poultry in the Lower Mainland. The Poultry Branch staff, particularly the poultry veterinarian, works closely with the Veterinary Laboratory and practicing veterinarians in monitoring disease levels and establishing control programs where needed.

The Poultry Branch staff is closely associated with the Poultry production community through their association as well as with the individual producers. Dissemination of information derived from experimental projects and research is accomplished not only by direct farm contact but also by group meetings. The staff organizes and conducts an annual Poultry Conference where prominent specialists from many parts of North America are brought in as speakers. The staff in conjunction with local community colleges, presents short courses on various poultry subjects.



Projects were initiated at the Poultry Test Station in Abbotsford to demonstrate the strains of chickens most suitable to British Columbia for egg production, chicken meat, and turkey production.

Agricultural Credit

British Columbia farmers benefited from the Agricultural Credit Act through three provisions:

(a) provincial government guarantees to chartered banks and credit unions as support security on low equity loans thus making credit more accessible to otherwise ineligible farmers

(b) partial reimbursement of interest paid on farm loans to effectively reduce interest costs

(c) incentives to farmers through special interest and/or principal reimbursement provisions to encourage participation in special agricultural programs

Since the inception of the guaranteed loan program in July 1974, there have been 118 loans totalling $10,382,548 guaranteed by the province. In 1976, identified as Loan Period 3, 40 loans to farmers were guaranteed representing $4,333,631.

In 1976, $4,892,563 was paid to farmers representing partial reimbursement of interest paid by them in 1975 to approved lenders. Since the inception of this program in July 1974, $6,718,192 has been dispersed to alleviate high interest costs. The effect of this reimbursement was to reduce the farmers' net interest costs to approximately 8 per cent on those loans not guaranteed by the province and approximately 8½ per cent where a guarantee to the lender was in place.

There were two special programs implemented to assist farmers in specific circumstances. The Bulkley-Nechako Feed Purchase program was set up to help farmers buy livestock feed during a time of short feed supply. Forty-seven farmers bought almost 4,000 tons of feed and received a total of $28,954 in reimbursed interest. Under the agricultural credit program, the farmers were reimbursed interest paid on the loans such that their effective interest rate was reduced to 4 per cent.

A similar interest rate applied to Peace River area farmers who obtained loans to purchase or retain livestock as an additional enterprise to their grain operations. Under the Peace River Livestock Incentive program, 92 farmers purchased or retained 3,176 animals and received interest reimbursements totalling $26,191.

In 1976, Agricultural Land Development Act (ALDA) contracts totalling $2.9 million were issued to assist farmers in financing primary and secondary land development. The majority of funds were spent on land clearing, breaking and installation of irrigation systems.

Land clearing is carried on under the A.L.D.A. program to assist farmers in financing primary and secondary land development.

Agricultural and Rural Development Programs

General ARDA

Irrigation systems, drainage, community pastures, and range improvement through Co-ordinated Resource Management Planning projects were the main programs of General ARDA during 1976.

In each ARDA project there is a local contribution requirement which varies depending on the project. Community pastures and range improvement projects require 10 per cent local contribution, irrigation and drainage projects require 25 per cent and 33-1/3 per cent respectively, and rural development projects require 50 per cent local input.

Since the present ARDA agreement expires March 31, 1977, negotiations began in 1976 with the Federal government for a new Agricultural-Rural Development Sub Agreement under the General Development Agreement to cover a five to seven year period beginning April 1, 1977.

During 1976 under General ARDA, 26 projects were approved for a total cost of $5.921 million. The British Columbia and federal governments each will contribute $2.4 million of approved costs while local user groups provide the remainder.

A pilot project of major significance implemented during 1976 was a series of Co-ordinated Resource Management Plans for range improvement in the East Kootenay region. A cost benefit study showed a 13 per cent composite annual return on investment. The major beneficiaries are agriculture (cattle), wildlife, and forestry. ARDA provided $1,350,000 to improve cattle range, wildlife habitat, and to thin tree stands on 12 range units.

In 1976, there were ten inquiries for rural electrification in the Cariboo and Peace River area. Final cost estimates on a number of these have yet to be determined by B.C. Hydro. On single-phase power projects, provincial share comes from Rural Electrification Act funds within the Ministry of Finance and administered by B.C. Hydro.

Two rural electrification projects for agriculture have been approved and are 90 per cent complete. One project provided single-phase power to the Tatla Lake area in west central B.C. while the other provided three-phase power from Williams Lake west to the Redstone Indian Reserve.

Summary of General A.R.D.A. Approved Projects
January 1, 1976 to December 31, 1976

	No. of Projects	Total Cost[1]
Research	5	325,750
Land Use and Farm Adjustment	9	1,831,200
Rural Development Service and Training	2	195,000
Alternate Income & Employment Opportunities	4	1,711,000
Irrigation, Drainage and Water Supply	6	1,858,500
TOTAL	26	$ 5,921,450

[1]Amounts are approved values and not necessarily expenditures at time of writing.

Special ARDA

Special ARDA, a supplementary program for people of native origin, has approved 345 applications since its inception in 1973. This represents a potential 474 jobs with a total DREE commitment of $6.28 million. At year end, the program has paid out $4.071 million of that amount in assistance.

Co-ordinated resource management planning projects were the main A.R.D.A. programs during 1976 which involved improvements to cattle range, wildlife habitat, and to thin tree stands.

Crop Insurance

The Crop Insurance Branch administers five crop insurance programs covering alfalfa, berry, grain, grape, and tree fruits. 1976 was the first year in which the alfalfa program was available to farmers.

The weather in 1976 was highly variable which is reflected in an overall higher incidence of claim payments. This was in spite of unusually high summer rainfall which resulted in large yields but often poorer quality crops. Frosts in late spring and early fall also reduced crop quality, particularly of horticultural crops.

Only 20 B.C. farmers made use of the new pilot alfalfa program. With over 7,000 forage producers in British Columbia, the program has the potential to become one of the largest crop insurance programs offered by the branch. This first full year of operation allowed staff to study the operating mechanics of the program, consider improvements and investigate other types of forage crop coverage.

The 1977 berry crop insurance contract was changed to a continuous contract which attracted an increase in participation to 85 growers. Although 1976 indemnities paid were larger than in 1975, the premium income was sufficient to cover losses as well as reduce deficits from past years.

A record 186,000 acres of grain were insured in 1976. High summer rainfall caused large yields but hail loss in the Peace River area resulted in indemnities paid to farmers which were slightly above 1975 levels. However, premium income sufficiently covered the losses as well as reduced the deficit incurred from past years.

Cool summer weather caused below standard sugar levels in the 1976 grape crop. In an attempt to salvage more of the crop, some grapes were left on the vines which then were subjected to early fall frosts. Therefore, crop insurance claims were more numerous than anticipated. Premium income covered indemnities however.

Although 1976 fruit crops were generally similar to last year's production, the variable weather resulted in considerably heavier losses than in the very favourable growing season of 1975. Spring hailstorms in the North Okanagan caused widespread damage to all crops.

Frequent rain showers coupled with local hailstorms during cherry picking caused considerable rain split damage, which produced a large number of claims. The total indemnities paid on cherries will exceed the total of all tree fruit claims in 1975.

Crop insurance continues to be valuable protection for farmers against unavoidable natural hazards and total loss of crop income.

Raspberries in the Fraser Valley are one of many crops eligible for crop insurance protection. British Columbia provides most of Canada's raspberry production.

Farm Income Assurance

The Farm Income Assurance programs are designed to assist producers by minimizing the disrupting effects of extreme price fluctuations of farm commodities whenever they occur. The programs have strong incentives built into them to maximize farm efficiency and maintain aggressive marketing practices.

In 1976, the third full year of operation of the program, the number of farm income assurance programs increased to ten from eight, while the number of farmer participants increased to over 5,600. The cost to government from March 31, 1976 to December 31, 1976 was approximately $17.7 million, representing the government share of the slightly over $24 million in indemnities due under the program. By fiscal year end, the cost to government is likely to exceed $27.0 million.

The programs currently in operation are dairy, swine, tree fruits, field tomatoes, greenhouse vegetables, broiler hatching eggs, beef, commercial eggs, blueberries, and sheep. Programs for potatoes and raspberries are now approved following some delay in establishing yields for each model.

Federal programs under the Agricultural Stabilization Act for certain commodities having provincial farm income assurance programs reduced the overall cost to the province but introduced new complications in the administration of the farm income assurance programs. New program development will recognize the essential need for compatibility between provincial and federal programs.

During 1976, an income assurance program was established for the province's sheep producers.

Farm Products Finance

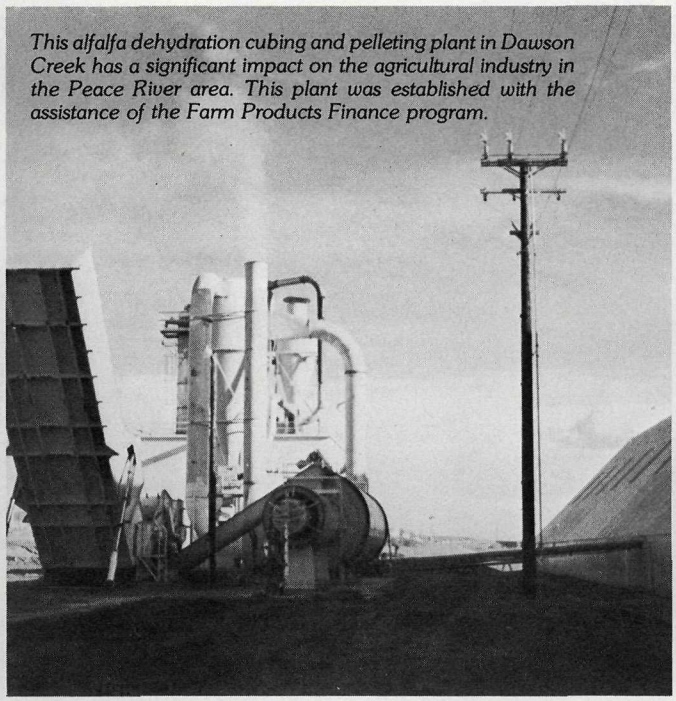
In the fall of 1973, the Farm Products Industry Improvement Act was passed to encourage and assist secondary agricultural industry in British Columbia. To date, about $36 million in assistance has been provided to 16 agricultural organizations.

During 1976, 26 proposals were evaluated, out of which five received approximately $4.6 million in the form of loan guarantees, direct loans, or share acquisitions. Types of projects assisted include fruit handling, food processing, poultry processing, and a fruit juice production firm. Other proposals were not supported due to a considered lack of financial viability or because of insufficient beneficial impact on the agricultural industry of the province.

A sum of $227,000 in purchase assistance was given to the B.C. Grape Marketing Board to purchase grapes which failed to meet minimum winery sugar standards because of poor summer growing conditions.

Assistance was provided for market promotion of dehydrated alfalfa products and for a similar promotion of raspberry products. Preliminary planning began on a program to expand alternate markets for certain types of grapes found less suitable for wine production than other new varieties.

Arrangements were completed toward the end of the year to utilize the B.C. Development Corporation's financial analysis capability for proposals with a potentially significant benefit to agriculture.



This alfalfa dehydration cubing and pelleting plant in Dawson Creek has a significant impact on the agricultural industry in the Peace River area. This plant was established with the assistance of the Farm Products Finance program.

Alfalfa cubes.

Information

The Information Branch acts as a communications resource centre for Ministry staff in relating agricultural programs or policies to various publics, who primarily are British Columbia farmers. Communications tools include news releases, technical publications, factsheets, advertisements, and audio-visual presentations. The main purpose is to inform farmers of new or accepted methods of efficient agricultural management and in turn, to produce top quality, fairly-priced foodstuffs at a reasonable profit. A second, lesser important function is to create an appreciation of B.C. agriculture among the non-farm sector of the province.

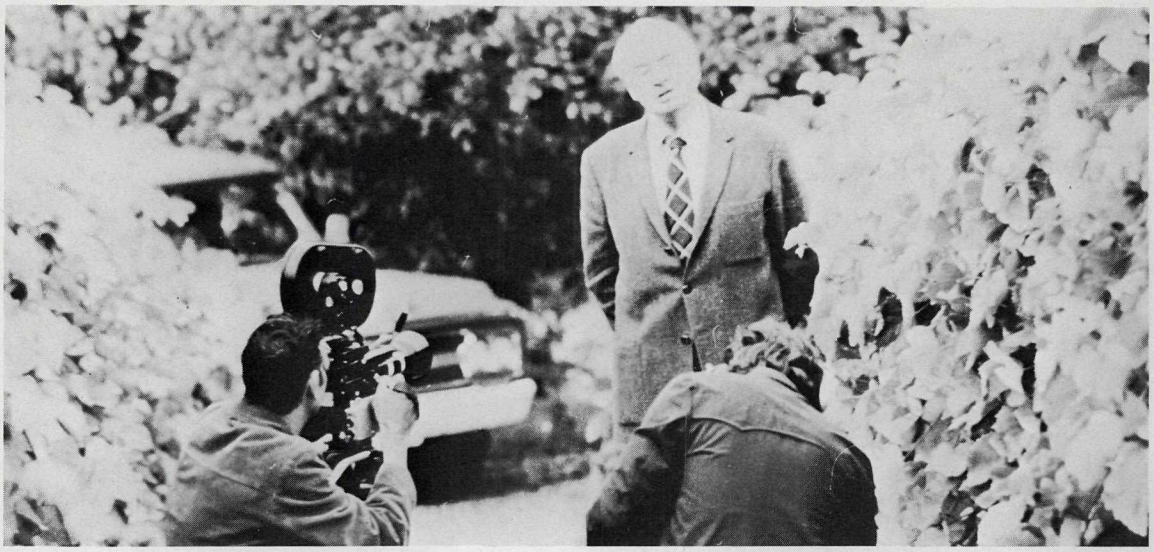
Information Branch staff worked with staff from all branches of the Ministry during 1976 in producing effective information programs related to their activities. General responsibilities of the Branch include serving as the agriculture representative within an organized group of inter-ministry information officers, and maintaining liaison with communications officials in the Premier's office.

During 1976 a total of 59 news releases were issued to approximately 1,500 media, government, industry, farm organization, and individual recipients across Canada. Topics were varied and dealt with staff appointments, new program announcements, management and research techniques of immediate significance, and Ministerial statements.

Thirty-eight publications or pamphlets were initiated and printed, reprinted or revised, although others were developed for completion in 1977. Among those researched but not printed at year-end are four booklets in a series of six booklets relating to agriculture in specific regions of British Columbia. This is a major project which hopefully will service inquiries from individuals, schools, libraries, other provinces, and foreign countries.

Factsheets are a popular system of relating technique and management information to farmers. Individual branches produce unique factsheets related to their discipline. The factsheets are co-ordinated through the Information Branch and distributed to commodity agencies or directly to farmers concerned with the subject matter. Twelve livestock, 12 animal health, 7 farm management, and miscellaneous engineering factsheets were produced to inform farmers. Poultry and field crops factsheets were designed in late 1976 and will appear in 1977.

Institutional advertisements were placed in rural weekly newspapers, dailies, farm monthlies, and special agriculture publications to promote Ministry programs or advise farmers of timely management procedures. Examples include



In addition to publication preparation and general information dissemination, audio-visual programs are prepared for use by field staff in their extension activities.

interest reimbursement deadlines under the Agricultural Credit Act, crop insurance deadlines, vaccination procedures, farm safety techniques, and seminar announcements.

The increased use and acceptance of audio-visual presentations by extension specialist staff in their advisory duties was dramatic in 1976 as compared to 1975. Slide-tape presentations dominated overall usage because of their versatility and relatively low cost compared to 16mm film. A total of 15 individual presentations were produced by Information Branch staff. Some topics included sheep on community pastures, corn production, potato growing, proper branding techniques, forage dehydration products, silo safety, veterinary laboratory operation, land clearing, range seeding, milk metering devices, and others. Numerous photographs were also taken individually for special projects.

Film presentations were produced but are designed for longer term projects. A series of three films on livestock management subjects was researched and partly filmed for eventual television broadcast during the most appropriate season in 1977. The annual tree-fruit television shortcourse was again produced for Okanagan fruit growers and is scheduled for airing January 31 to February 4, 1977. Other general films were produced dealing with British Columbia's wine industry, family farm vacation program, forage dehydration products, and short public service announcements covering a variety of subjects. Also, assistance was given to the Ministry of Environment in producing a film on aquatic weed control.

Property Management

With the B.C. Land Commission moving from the Ministry of Agriculture to the Ministry of Environment during 1976, 46 Crown-owned properties under the Commission's jurisdiction were designated for management by the Property Management Branch of the agriculture ministry. Also, 44 Ministry of Highways land parcels are now being managed and leased to private operators for agricultural use. Two other major holdings in the Kootenays, Steeples Ranch and Point Vee Bar Ranch, also are managed by the branch.

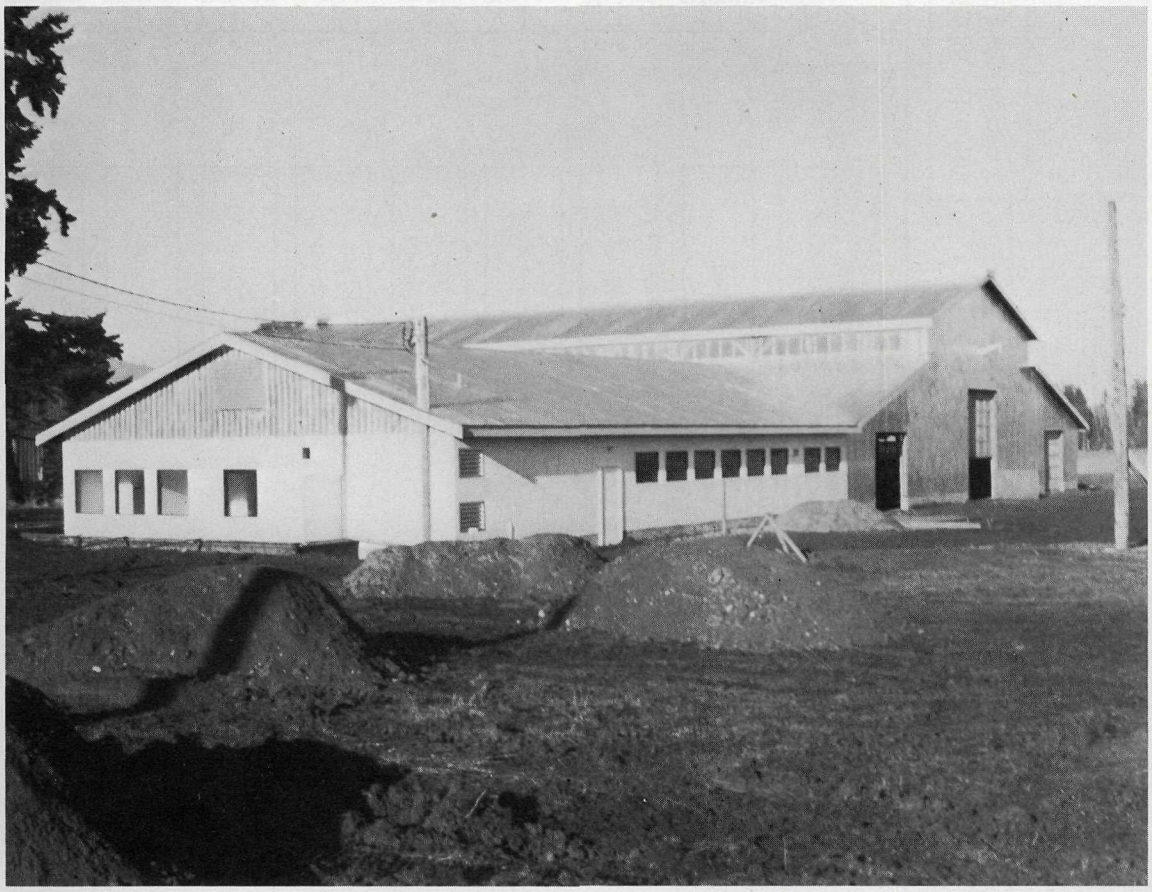
Changes in policy being initiated by the Land Commission will include lease provisions with an option to purchase thus enabling tenants to ultimately assume complete ownership of the land resource component of their production units.

In addition to these more recent activities, the branch continued to operate the two institutional farms, Colony Farm at Essondale and Tranquille Farm at Tranquille, British Columbia.

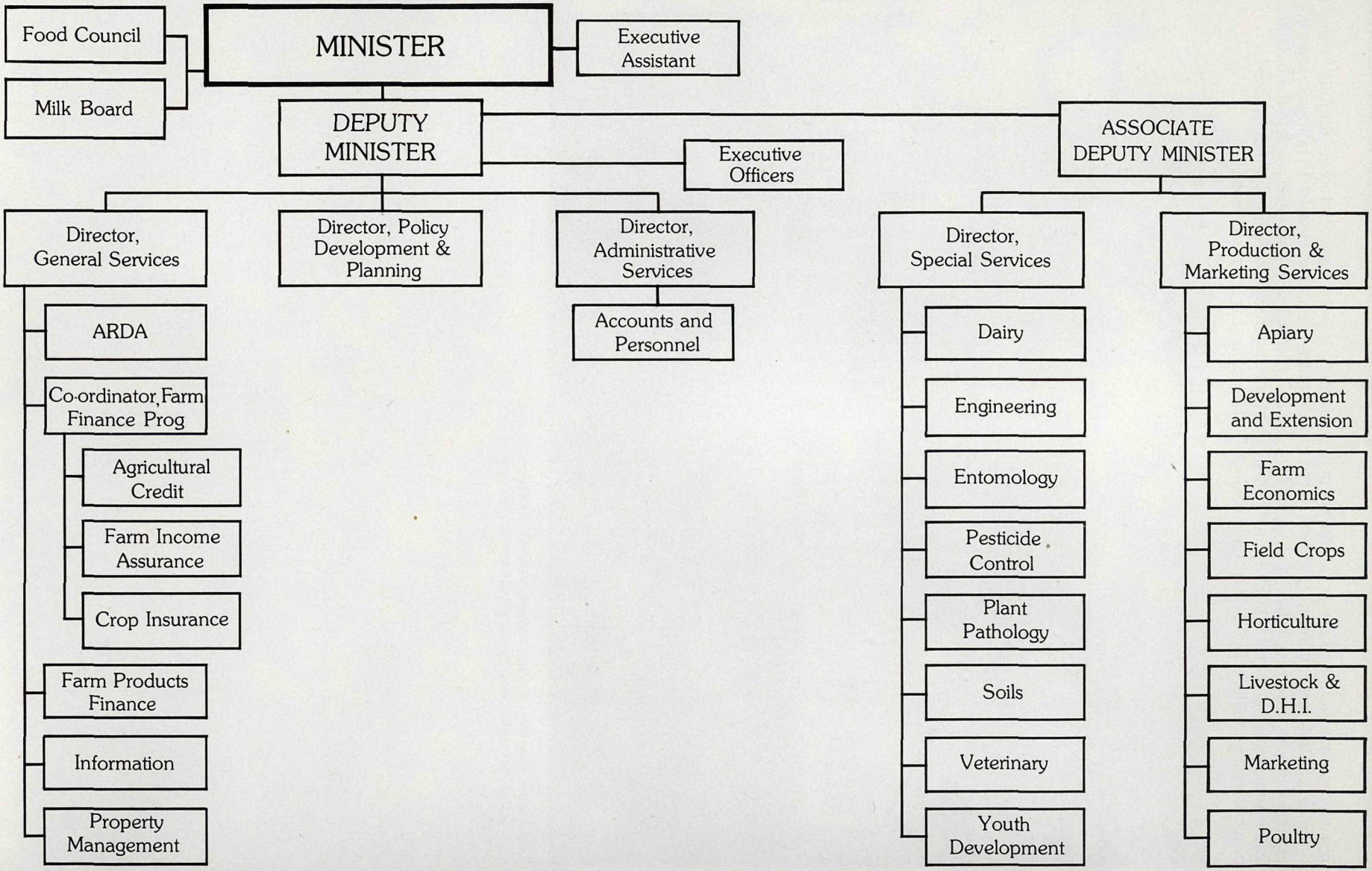
Special projects were initiated on four leased properties in the Vernon, Armstrong, Rossland, and Newgate areas. The types of projects include sewage effluent disposal, ecological studies,

juvenile rehabilitation, and range development.

Major capital improvement projects were carried out on four properties during 1976. Drainage systems were installed on some properties, hay shelters built, dairy and milking barns replaced, water storage dugouts were excavated, and land cleared. Pending changes in Land Commission policy will result in the tenants becoming increasingly involved in ownership of the respective improvements.



This modern dairy barn replaces a dilapidated dairy facility on one of the farms managed by the Property Management Branch.


MINISTER
Food Council
Milk Board
Executive Assistant
DEPUTY MINISTER
Executive Officers
ASSOCIATE DEPUTY MINISTER
Director, General Services
Director, Policy Development & Planning
Director, Administrative Services
Accounts and Personnel
Director, Special Services
Director, Production & Marketing Services
ARDA
Co-ordinator, Farm Finance Prog
Agricultural Credit
Farm Income Assurance
Crop Insurance
Farm Products Finance
Information
Property Management
Dairy
Engineering
Entomology
Pesticide Control
Plant Pathology
Soils
Veterinary
Youth Development
Apiary
Development and Extension
Farm Economics
Field Crops
Horticulture
Livestock & D.H.I.
Marketing
Poultry