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Canada's forest — prime source of national wealth — can be saved

Forest products, and related services, have grown into Canada's largest industry. Shipments total about \$13 billion a year and the industry's contribution to the trade balance is approximately \$7 billion — nearly as much as that of mining, agriculture, fishing and fuels combined.

The forest, "the greatest source of national wealth" and the danger of it being harvested without adequate regeneration measures, is the subject of the Royal Bank of Canada's July Monthly Letter, passages from which follow:

...As the industry has grown, so the forest has been harvested faster...Mammoth new machines, weighing as much as 40 tons, now snip off trees at the trunk two or three at a time, strip them of their branches, cut them into lengths, stack them and haul them away — all, as it were, in one bite. Such methods enable woodsmen to clear-cut a stand of timber more thoroughly than ever. They have also brought about a significant expansion in the total cut.

In the past few years the cut has reached two million acres annually. In statistical terms this may seem rather small. Almost 800 million acres — an area roughly equivalent to the land mass of Ontario, Manitoba and Saskatchewan combined — is classified as "productive forest". These figures tend to bolster the comforting assumption that, with such a vast reserve on hand, the harvest will always be more than balanced by net growth.

Hence as late as last year, the Federal Government agency, Statistics Canada, reported in its annual year book: "A large surplus of timber exists in Canada although there are shortages in some regions and species which could be overcome by increased silvicultural and management techniques. In addition, greater utilization of individual trees and of certain species could further extend the resource."

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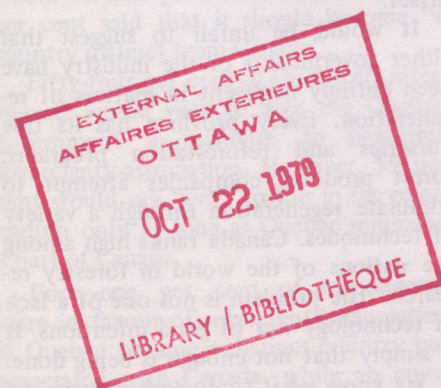
Abundance an illusion

It is therefore surprising to be told by experts that this picture of seemingly limitless wood is largely an illusion. The Na-

tional Forest Regeneration Conference held in Quebec City in October 1977, concluded that adequate forest renewal was nothing less than an urgent economic need. The conference was attended by 250 representatives of government, industry, the forestry profession, universities, and environmental protection organizations. They agreed unanimously that, as they put it in their *communiqué*, inadequate forest regeneration is "indeed a serious and fundamental forestry problem. This concern is not yet felt by the general public or by politicians, and there is a real need — as demonstrated by the



Thirty-five per cent of Canada is covered by forests.



Seventy-two years ago today...

Canada's transatlantic wireless, transmitting messages from Glace Bay, Nova Scotia via Poldu, Newfoundland to Cornwall, England and back, opened for limited commercial service.

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conference — to 'spread the bad news'."

What about those confident statistics? Studies released at the conference indicated that only about half of the statistical surplus is "economically accessible"....

Unproductive forest land

As for the casual impression that Canada has a superabundance of trees, so it does — but great numbers are too far north to grow to a usable size, and enormous stretches of forest farther south are in hopelessly sub-standard shape. "The new forests which are developing in areas which have been harvested or affected by natural disasters are frequently poorer than the forests they are replacing," said the conference *communiqué*. "They are often inadequate in terms of preferred species, quality, density of stocking, insect and disease resistance, or location suitable for economic wood supplies to existing mills."

The expert consensus was that up to 20 per cent of the land harvested every year does not and will not regenerate properly. When areas where regeneration has been blighted by insect infestations, fires and wind damage are added, a total of 647,000 acres is lost from the nation's potentially productive forest stock every year.

This is being added in turn to a back-

Forest imperatives for Canada

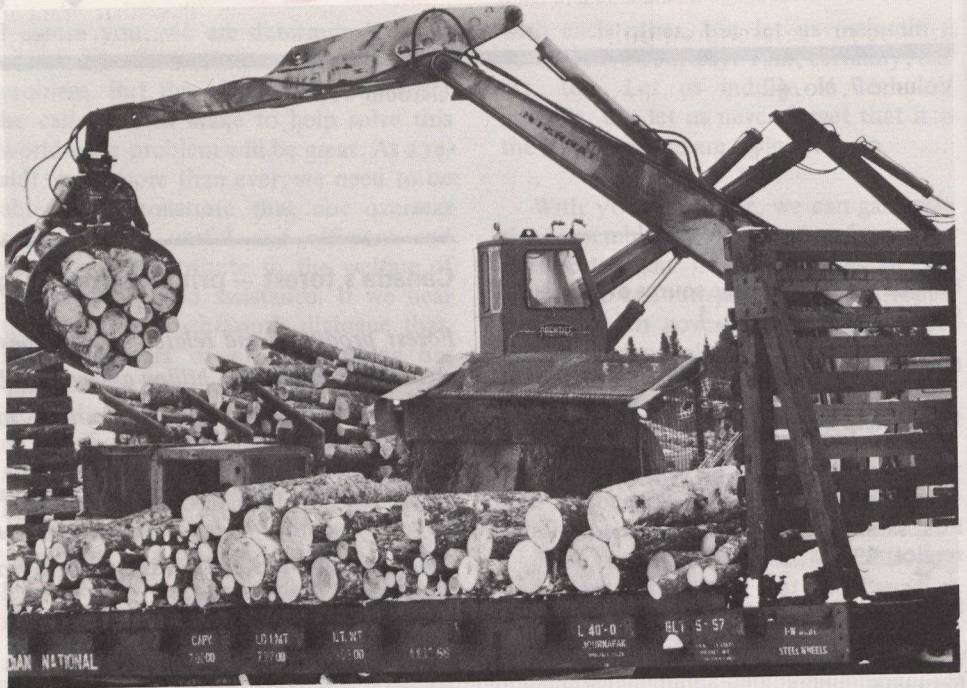
Action by the federal and provincial governments on the problems of the dwindling forest resources began with the First Minister's Conference in February 1978, when both levels of government agreed on the necessity for continued co-operation in forest management. The Canadian Council of Resource and Environment Ministers (CCREM) has been sponsoring a federal-provincial study on forest policies. On June 6, 1979, the CCREM endorsed in principle a task force report entitled "Forest Imperatives for Canada" which clearly requires government action.

Among the principles suggested in the proposed CCREM policy which will ensure proper management of Canada's forests are:

- pre-eminent provincial jurisdiction over its own forest land;
- the need for compatible federal and provincial policies affecting the resource;
- the stability of rural employment and communities;
- maintenance of forest productivity;
- endorsement of multiple-use forest management;
- production goals to ensure a viable Canadian forest industry; and
- environmental protection.

These goals are suggested as being attainable by:

- informing the public;
- increasing government funds for intensive forest management from \$220 million to \$400 million;
- shared federal-provincial funding of forest management and use of tax incentives to encourage private investment in forest management;
- developing better systems for provision of forest resource statistics, economic intelligence and analysis, and technology transfer; and
- greater priority for forestry research and development.



Grapple loader piles logs for shipment to mill. Modernization of lumbering industry has increased the importance of good forest management.

log of unproductive forest land accumulated over many years which the Canadian Forestry Association estimates at a staggering 60 million acres. Large parts of this wasteland are to be found in every province. In fact, no province can claim that regeneration within its boundaries

is even keeping pace with the yearly cut.

* * * *

Problems will have to be resolved

Can Canada catch up? F.L.C. Reed, one of the nation's leading forestry consultants, says the answer is yes.... As he stated in a recent report for the Canadian Pulp and Paper Association, "A more intensive program of forest management is imperative if market opportunities are to be realized and emerging timber deficits offset."

It would be unfair to suggest that either governments or the industry have been entirely negligent in matters of regeneration. Every province has its tree nurseries and reforestation programs; forest products companies attempt to stimulate regeneration through a variety of techniques. Canada ranks high among the nations of the world in forestry research. The problem is not one of a lack of technology nor of good intentions. It is simply that not enough is being done.

We know what to do and we have the means.... But it will take a deliberate commitment on the part of governments, industry, and indeed the public at large to ensure that our forests meet our future needs.... The task will call for common sense, compromise, and determination — but it must be accomplished if our greatest natural legacy is to continue to yield its tremendous rewards.

Quebec pre-referendum poll

One of the most comprehensive surveys taken on the constitutional views of Quebecers was made public September 27 by the province's Intergovernmental Affairs Minister Claude Morin.

The government-sponsored poll, conducted by the Centre de recherches sur l'opinion publique, provided for expressions of opinion on national allegiance, constitutional questions, the referendum and on the recent federal election. Slightly more than 1,000 people were interviewed in their homes for more than an hour and answered over 100 questions as part of the survey.

The survey found that 66 per cent of Quebecers interviewed believed it was advantageous to be part of Canada, while 17 per cent believed that it was a disadvantage.

Asked to list their preference for constitutional change, however, only 15 per cent said they preferred the *status quo*, while a majority of 39 per cent of respondents favoured a "renewed federalism". Another 19 per cent chose sovereignty-association, 11 per cent said they wanted independence and 7 per cent were undecided.

A total of 19 per cent said they would vote "yes" if the referendum question was simply, "Are you in favour of independence?"; 72 per cent said they would vote "no". In response to another question, 73 per cent said they hoped Quebec would remain part of Canada, while 22 per cent said that it should become "a country distinct from Canada".

Fifty-four per cent of Quebecers interviewed would vote to give the Quebec government a mandate to negotiate sovereignty-association. However, 59 per cent would say "yes" to this in the referendum only as long as Quebec remained a part of Canada.

Forty-one per cent of respondents were in favour of sovereignty-association if Quebec became a distinct country but associated with Canada, while an equal percentage said "no" and 18 per cent were undecided.

Thirty-two per cent of those questioned identified themselves first as "Québécois", while 38 per cent called themselves French-Canadian and 23 per cent Canadian; but 48 per cent of those aged 18-24 called themselves Québécois and 15 per cent called themselves Canadian.

"It emerges from this...that francophones are involved in an important process of change as to their socio-political labelling," Edouard Cloutier, political science professor at the University of Montreal and author of the survey, commented in his interpretative notes. "They prefer now being called Québécois rather than Canadians while not necessarily perceiving any incompatibility between the two," he said. In response to one question, 69 per cent said it was easy to be both a Canadian and a Québécois.

Funds help Pakistan farmers

Canada has given Pakistan a \$30-million grant for an agricultural and land improvement project that is expected to double production in much of the country's underdeveloped North West Frontier Province by 1995.

Additional crops valued at \$50 million yearly and farm employment equivalent to about 10,000 full-time permanent jobs, as well as related non-farm employment, should result from the project known as SCARP Mardan. Mardan is the region's main town and SCARP stands for Salinity Control and Reclamation Project.

The SCARP approach was developed by Pakistan in co-operation with the World Bank and the United Nations Development Program (UNDP) as an integrated system of drainage and irrigation applied to an area of up to a million acres where crop yields are low due to salty soil or waterlogging.

The SCARP Mardan project area contains more than a quarter of the good agricultural soil in the North West Frontier Province, which has 15 per cent of Pakistan's population but only 2 per cent of its irrigated land. The area's inadequate water supply and poor drainage have combined to cause low agricultural productivity.

Half the Canadian funds are "untied" and will help cover local costs. The other half will be used to purchase essential equipment and services in Canada, such as vehicles, motors, graders, a dragline and maintenance shop, as well as Canadian consultancy services in the field of evaluation.

The World Bank estimates that the average two-acre farm will more than triple its income over the next 15 years because of the project. The region's large group of landless, unskilled and unem-

ployed workers are also expected to benefit through employment and training generated by the project.

Crops grown in the area — maize, wheat and sugar-cane — are used locally for food, rather than being exported. The increased production of these crops will probably bring the region closer to self-sufficiency.

CIDA provided about \$62 million in bilateral development assistance in 1978-79 to Pakistan, historically the second-largest recipient of Canadian aid. Canada has been the major source of assistance, largely through dams and transmission lines, in the development of Pakistan's power supply, much of which is used for agriculture — chiefly irrigation.

Trade office to aid Third World

Canada will open an office in Montreal designed to help Third World nations overcome obstacles in marketing their products in Canada.

The office will provide information on problems exporters from developing nations may encounter in trying to penetrate the Canadian market and will develop specific projects and programs such as seminars, trade fairs and training to assist the poorer developing countries in their efforts to export goods to Canada.

The office has been established with an initial three-year mandate after which its activities will be reviewed. The Canadian International Development Agency (CIDA) will be responsible for its operation in co-operation with an interdepartmental advisory board with representatives from the departments of Finance, External Affairs, and Industry, Trade and Commerce.

Companies from Third World nations, particularly from the least developed countries, are often confronted by bewildering tariff, custom, tax and safety regulations. Marketing, sales, financing, insurance and transportation questions often add to their problems in marketing their goods to Canada.

The decision to open the office announced at the UNCTAD V forum in May, honours Canada's commitment to facilitate trade with the Third World made at the earlier UNCTAD IV meeting.

Canada joins several other nations such as Britain, the Netherlands, Germany and the U.S.S.R. which have already adopted similar policies.

First satellite-to-home rural television service



The King family of Macdiarmid, Ontario, 170 km northeast of Thunder Bay on the shores of Lake Nipigon, was the first family to receive colour TV directly from Anik B. Mike Nawrocki (right), of the Department of Communications, points out a feature of the 1.2-metre earth station.

Canada, it is believed, is the first country to install earth stations or dish-shaped antennas, in private homes, to test a direct-to-home satellite broadcasting service.

Anik B, Canada's latest domestic com-

munications satellite, recently began transmitting TV programming directly to houses, community centres and cable television systems, which are being loaned the small earth stations for receiving the

programs.

The Department of Communications, in co-operation with Ontario and British Columbia, plans to set up 100 earth stations in rural communities to test satellite broadcasting. The test will run until next spring.

Although there have been other direct broadcast satellite experiments in Canada and other countries, this is the first trial involving extended transmission of regular programming through a "substantial number of home receivers".

More than 12 hours a day of TV programming will be available over Anik B. The Federal Government is leasing up to four channels on the satellite for the life of its Anik B program, at a cost of \$34 million.

The frequency bands being used differ from those used to carry CBC programming on the Anik A series of satellites, the chief advantage being that smaller and lower cost earth stations can be used. The project is testing 1.2-metre and 1.8-metre dish antennas. The earth stations cost the Department of Communications \$3,600 each although, the Government hopes the price will drop eventually to less than \$500 through mass production.

If the project is successful and is expanded, Canadians in remote and rural areas would benefit, Federal Communications Minister David MacDonald said.

Study reveals brain abnormalities

A study in Alberta of juvenile offenders found that the majority had previously undiagnosed brain impairments.

The unpublished, provincially-funded study, the only such Canadian one the authors are aware of, challenges the belief that social and economic background are the sole determinants of delinquency.

The results "have significant implications for treatment", one of the authors, neuropsychologist Lorne Yeudall said.

First link

While similar studies have been done in the United States, Mr. Yeudall, who works at the department of neuropsychology and research at the Alberta Hospital in Edmonton, said this was the first to link the impairment to a specific part of the brain.

Along with a control group of Edmonton high school students, 101 teenagers between 13 and 17 from the youth

detention centre in Edmonton were given a battery of tests. The delinquents had committed previous offences, the majority of which were non-violent.

A series of neuropsychological tests — which measures sensory, motor and perceptual functions, memory and ability for abstract thinking — revealed that 86 per cent of the delinquents had abnormal profiles, compared to 14 per cent of the control group.

Different independent tests — including neuropsychological tests, EEGs (electroencephalograms), and spectral EEGs (done while the patient is working at problems) — revealed that abnormalities were typically found in the non-dominant hemisphere (the right side of the brain in a right-handed person) of the front brain or frontal temporal lobe.

Mr. Yeudall said the front brain controlled motivation, hindsight and foresight, impulsive behaviour and inhibitions.

The report stated that differences in intelligence quotients would not account

for the disparity, since for normal subjects few correlations have been found between intelligence scores and a battery of neuropsychological tests.

Mr. Yeudall said the most likely interpretation of the test results was brain dysfunction as a result of brain damage, biochemical abnormalities or genetic factors. The report also states that the results suggest that the teen-agers in the detention centres have long-standing brain dysfunctions.

Another, less popular, interpretation of the results could be that some people's "brain styles are related to life styles... that certain life experiences lead the brain to organize itself in a different way".

But Mr. Yeudall said other studies, such as ones he has done on prison populations, had shown a high incidence of medical complications such as head injuries in connection with such impairment. U.S. studies have revealed that juvenile delinquents have a recidivism (repeated incarceration) rate of about 85 per cent.

News of the arts

Waste used to grow vegetables in greenhouses

Turning waste into energy primarily for use in greenhouses has become a focus for some Canadian firms and federal researchers.

Waste heat from thermal or nuclear power plants, oil refineries, chemical plants and natural gas pipeline compressor stations may become important heat sources for greenhouses, says Agriculture Canada.



Tomatoes and cucumbers are the crops most likely to be grown in waste-heated greenhouses.

A recent study prepared by consultants for Agriculture Canada identified 82 potential waste-heat sites in Canada.

The best sites for greenhouse production offer a steady flow of 37 degrees Celsius heat, and have open land nearby for greenhouse sites.

Theoretically, the 82 sites could provide heat for 1,100 hectares of greenhouse production, assuming current technology was used, the study indicates.

Developing these heat sources for greenhouse production will, however, depend on economic factors such as competition from imports, availability of skilled labour and management, and new investment capital.

Ontario now has the greatest potential for waste-heat greenhouse production, followed by Alberta.

Crops most likely to be produced in waste-heat greenhouses are tomatoes and cucumbers. They could replace imports, and also enjoy strong market demand.

The study predicts that half of

Canada's greenhouse vegetable production of tomatoes and cucumbers might be grown in new waste-heat greenhouses in the next decade.

The study concludes that the existing industry should be able to retain its cost competitiveness and market share for at least 15 years, with growers reducing fossil fuel consumption through improved insulation and solar energy applications.

In Ontario, joint government-industry projects are examining how warm water from the Bruce and Pickering nuclear power stations could be used for greenhouse production and also fish farming.

The United States and some West European countries are also engaged in similar activities.

Ontario fuel project

A \$100,000 feasibility study conducted at a closed landfill site at St. Thomas, in Ontario has shown that methane, a gas by-product of decaying garbage, can be extracted and used as fuel.

In the project, a greenhouse was heated with methane over a period of several months, said Robert McCaig, co-owner of the landfill site.

He said methane gas was being extracted from landfill sites in California, purified and used for home heating.

Mr. McCaig said the study had shown it was commercially feasible to use unrefined methane as a source of fuel for high-energy users if they were located

adjacent to a landfill site.

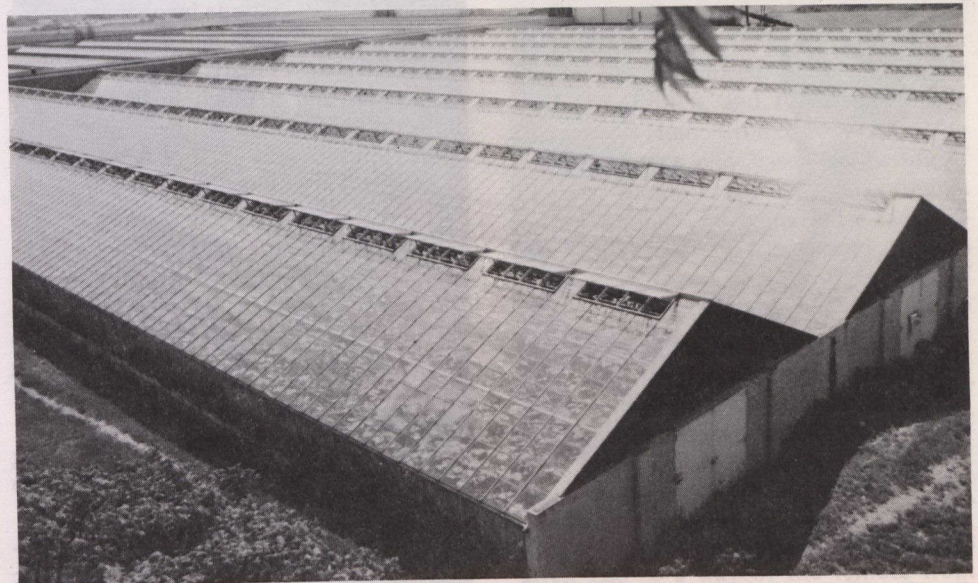
Gas probes to determine the methane concentration in the St. Thomas site were sunk in November and a greenhouse built in December. The research team began extracting methane gas, which was 40 to 50 percent pure, on a continuous basis in January and used it to heat the building. Tomatoes were planted as six-inch seedlings in February and have since grown to seven feet.

Landfill sites begin producing methane one to two years after being closed and may continue to produce the gas in sufficient quantities and concentrations to support a commercial operation for 15 to 20 years.

Using methane as a source of fuel would be feasible only for high-energy users, such as greenhouses, because of the capital cost involved in building an extraction and pumping system.

A system for a one-acre greenhouse would cost about \$60,000 whereas heating by conventional sources costs about \$25,000 annually, he said. However, the cost of installing a methane system would be recovered in less than three years, meaning the greenhouse operator would have an inexpensive source of fuel for 12 to 15 years.

Hans Mooij, a senior engineer with the waste management branch of the Environment Department, said using methane gas as fuel "appears to be very technically feasible. Whether it's economically feasible, that's something the consultants will have to show, but we're certainly excited about the possibilities."



Greenhouses may be heated in the future by waste heat from thermal or nuclear power plants, oil refineries and chemical plants.

Brainy 'Boris' helps blind read

The most significant development for the blind since Braille has come to the University of Ottawa in the form of Boris, the talking computer, reports Margaret Munro in *The Citizen*, September 20, 1979.

The machine can read everything from magazines to highly technical manuscripts and means "real freedom" for the blind, Dr. Gerald Neufeld of the university's linguistics department said.

The computer, which resembles a photocopy machine, scans the type after the book is placed face down. It requires manual attention when the scanner hits pictures or symbols such as graphics or handwriting.

Having struggled through his years at university as a blind student, Mr. Neufeld speaks from experience when he says "the reading computers represent the most significant development for the blind since Braille".

"They give you independence," said Mr. Neufeld, who has been listening to Boris continually since its installation last month. "I used to read when readers were available and if they had to go home at three in the afternoon, well that was too bad."

"With Boris I can read at three in the morning if I feel like it," he said, adding that the computers would probably prove most valuable for professionals and students swamped in paperwork.

The price of reading-freedom is steep, however: \$25,000 plus the ability to

understand machines like Boris, which has a nasal monotone voice.

The computer not only reads the pages served up for consumption, but also peppers a passage with beeps and lines like "can see no next line" which signals the need for push-button attention.

The machine is the first of its sort in Canada and will be made available to blind students and professionals by appointment. The Canadian National Institute for the Blind in Toronto is purchasing one of the devices from Kurzweil Computer Products, in Cambridge, Massachusetts.

Clothing designs for handicapped in new book

Handicapped people need attractive clothing, easy to put on and take off, that meets their functional needs, yet conforms in appearance to peer-group standards and fashion trends. Often, the only way they can replenish their wardrobes is to sew their own clothes, or have them made specially.

Patterns for such clothes were hard to come by until University of Alberta Press published Anne Kernaleguen's book, *Clothing Designs for the Handicapped*. Ms. Kernaleguen, chairman of the department of clothing and textiles at the University of Alberta, admits that the problem of commercial production of this clothing is understandable.

"Manufacturers of clothing for handicapped persons are depending on a limited market and one involving extreme individual variations and needs," she explains. "What results is a restricted range of choice, and a much higher cost per item than that of goods purchased for the mass market."

Her book offers solutions for the elderly, for persons using crutches, braces or wheelchairs, for mastectomy patients and for handicapped people who are also blind, obese or pregnant.

She suggests for example, front-wrap gaucho pants for the chair-bound person; tie-on garments, drop-seat jumpsuits and jumpsuits with scooped-out seats for the person who has to be dressed while sitting in a wheelchair and car slides (to help patients in and out of the car).

There are more than 350 easy-to-follow illustrations, showing how basic patterns can be altered to satisfy special needs. Sewing instructions are given.

United States pilot rescued after crash in North

Walter Yates says it was a miracle he wasn't killed when his helicopter crashed and exploded into flames on September 2 in a remote area of northeastern British Columbia.

The 55-year-old Texan also had to make it through 14 days in the wilderness with little food and only crude shelter to tell his tale of survival.

The helicopter pilot and gold prospector said a chocolate bar, cranberries and faith in God helped him through his ordeal. He was found 68 kilometres southeast of Fort Nelson, British Columbia, by a Canadian Armed Forces aircraft.

He was reported in good condition in hospital after suffering from exposure.

Mr. Yates said he was flying south 290 kilometres to Fort St. John from Fort Nelson after a prospecting expedition in Alaska when his helicopter crashed in the trees and he escaped just before it burst into flames and exploded. The helicopter's emergency radio locator was destroyed in the fire.

But the fire that almost cost him his life turned out to be his salvation. Searchers, flying over the area, noticed scorched trees, then spotted Mr. Yates frantically waving his arms.

He said he lived on the chocolate bar and ground water in the wet, muskeg-like forest for the first two days. After that, he collected and ate cranberries.

The prospector, who had lived in the Alaskan bush for a year, said he fashioned a shelter from branches and debris from the remains of his helicopter. The branches he cut for a signal fire the first day were too wet to light, so he slept on them to dry them out.

In addition to finding food, his biggest problems were the weather and mosquitoes.

Temperatures in the area recently have dipped to nine degrees Celsius at night and Mr. Yates had only a jacket and some light clothing.

One night he had to contend with a bear that circled his primitive camp. But he managed to frighten it off by making loud noises.

But not all was lost. The survivor said he found several gold nuggets he had picked up in Alaska around the burned-out helicopter.



Dr. Gerald Neufeld operates 'Boris' the book-reading computer.

The Citizen

News of the arts

Daniel Fowler exhibition

A major collection by one of Canada's early landscape painters, Daniel Fowler, is on view at the Art Gallery of Ontario until November 11.



Hollyhocks, by Daniel Fowler.

The circulating *Daniel Fowler of Amherst Island 1810-1894* exhibition is the first comprehensive survey of Fowler's art. It comprises 85 watercolours and drawings by this British-born artist, including six works from the National Gallery's permanent collection and others on loan from the Douglas Library, Queen's University, Kingston, the Art Gallery of Ontario, the Royal Ontario Museum, the Yale Centre for British Art and many private collectors.

Upon his arrival in Canada in 1843, Fowler settled on picturesque Amherst Island, near Kingston, Ontario. After farming for some years, he started painting again in 1857, having studied as a watercolour painter in England and sketched extensively during his travels in Europe.

Fowler's famous still-life paintings of dead game are represented by six works done between 1869 and 1889. His flower still-lives are equally famous for their richness of spirit and colour. The painting *Hollyhocks* 1876, from the National Gallery's permanent collection, won him a bronze medal and diploma at the International Centennial Exhibition in Philadelphia. This was the only medal awarded

to a Canadian and the first time a Canadian artist had been honoured with an international award.

However, Fowler's landscape paintings are considered to be his greatest contribution to nineteenth century Canadian painting. This exhibition includes landscape sketches and paintings executed in England and Europe as well as in Canada. The Canadian landscapes are primarily of Amherst Island, where he would paint *en plein air* in a manner wholly innovative for his time and place. While other Canadian landscape painters were still painting with Victorian restraint, Daniel Fowler was using free calligraphic brushstrokes.

Inuit art exhibited

An exhibition of contemporary Inuit art, organized in conjunction with the Department of Indian and Northern Affairs, was recently on display at the Agnes Etherington Art Centre, Queen's University in Kingston, Ontario.

Inuit Art of the 1970's is composed of 83 prints, drawings and sculptures from public and private collections across Canada, which have been selected to present the activities of Canadian Inuit artists during the last nine years.

The exhibition is travelling to Fredericton, Calgary, Victoria and Windsor.



Inuit sculpture Pangnirtung (*Drummer*) by Davie (Teevee) Atchealak.

Museums attendance up

Attendance at Canada's art museums and galleries increased last year by 1.2 million over 1977 attendance, when 9.8 million visited 28 public galleries, 13 public museums and 12 university art galleries surveyed by the Council of Business and the Arts in Canada.

The council said in its survey that total operating revenue for public art galleries this year was \$24.5 million, of which \$2.9 million was spent on acquisitions.

Museums, whose attendance accounted for more than half the total at 6.81 million persons, had a total operating revenue of \$31.5 million.

Provincial governments provided the greatest source of income for public museums at 55 per cent of the total. Federal sources appeared to provide the greatest amount of income to public art galleries at \$10.2 million.

Support for the public art galleries from the public almost equalled the income generated by the galleries themselves through entrance fees, memberships and other means.

Museums, however, generated four times as much as that donated by the private sector. In both cases, government grants made up more than 85 per cent of the total income.

World premières at Stratford

The Stratford Festival will present two world *première* productions as part of its 1980 season. Artistic Director Robin Phillips has announced. They are *Virginia* by Edna O'Brien, and *Foxfire* by Susan Cooper and Hume Cronyn.

Virginia is a play based on the life of English novelist and essayist Virginia Woolf, whose extraordinary life and writings have made her a legend in this century. A centrepiece of the group of writers, artists and intellectuals who flourished in the early years of the twentieth century and came to be known as the Bloomsbury Group, Virginia Woolf remained a major figure in the world of letters until her death by suicide in 1941.

Foxfire deals with life in Appalachia, the isolated mountainous region of the southern United States, which has given rise to a way of life remote from mainstream influences and sheltered from sudden change.

News briefs

Frank Lynch-Staunton, a 74-year-old cattle rancher, has been appointed Lieutenant-Governor of Alberta. He succeeds Ralph Steinhauer, 74, who is retiring after a five-year term to return to his farm on the Saddle Lake Indian Reserve, northeast of Edmonton. Mr. Steinhauer, a Cree, was the first Indian to be named lieutenant-governor.

Clearing U.S. customs and immigration before boarding flights at Vancouver International Airport has been further simplified by new pre-clearance procedures. U.S.-bound passengers now can check into one area on the airport's second level, rather than having to pass through various check-points at different locations on the third level. An estimated 680,000 persons fly from Vancouver to the U.S. each year.

A **plaque** honouring Col. John By — founder of Ottawa and builder of the Rideau canal system — was unveiled in Frant, England, recently on the two-hundredth anniversary of his birth. Col. By of the Royal Engineers served two hitches in Canada and during the second, beginning in 1826, he took charge of the design and construction of the canal system linking the Ottawa River with Lake Ontario and opening the interior of Ontario for settlement. The plaque, a slab of engraved Welsh slate, has been presented by the Historical Society of Ottawa. Col. By, born in London in 1779, died in Frant, an upland Sussex village in 1836. Canadian High Commissioner Paul Martin, who officiated at the ceremony, described him as "a modest hero".

Seagram Company Limited of Montreal, the world's largest distiller, has registered its biggest year-to-year increase in profit since 1948. The company showed profits of \$107.3 million, or

\$3.06 a share, for the year ended July 31, up 15.3 per cent from that of a year earlier, chief executive Edgar Bronfman said recently. Sales were \$2.6 billion, up 12.4 per cent from last year's \$2.3 billion.

McGill University's Faculty of Medicine in Montreal was recently re-accredited by the Liaison Committee on Medical Education. It is the first Canadian medical school to receive accreditation for a period of seven years. Accreditation is formal recognition of standards of instruction satisfactory to the medical profession in North America.

Year-round oil production from the Canadian Arctic may be achieved within four or five years. A report by Dome Petroleum Ltd. of Calgary to the World Petroleum Congress says vigorous action is necessary to exploit the Arctic's potential reserves before shortages hit the economies of the world. Describing advances in knowledge of ice characteristics and Arctic drilling methods, the report estimated there could be year-round marine traffic through the Northwest Passage within three years. Within that period there might be year-round exploratory drilling, with year-round production and transport of petroleum in another two years, it added.

Air Canada has announced that its winter schedule between Montreal and New York City would include two flights a day to LaGuardia Airport as well as flights to Kennedy International Airport. A spokesman said LaGuardia was not only closer to down-town Manhattan than Kennedy, but offered connecting flights to other destinations, particularly on the eastern seaboard.

Jake Warren, former ambassador to the United States who spent the last two years co-ordinating Canada's participation in the world trade talks in Geneva, has been appointed vice-chairman of the Bank of Montreal. Mr. Warren will assume his position at the country's second-largest bank November 1. He will be responsible primarily for the bank's growing international network.

The National Library of Canada has announced a new price schedule for the sale of *Canadiana*. The subscription price for the printed monthlies will increase immediately to \$62 a year in Canada, and to \$75 a year in other countries. The new price of single copies is \$5.75 in Canada and \$6.90 in other countries. For further information on the price schedule of *Canadiana* services contact: Cana-

diana Editorial Division, Cataloguing Branch, National Library of Canada, 395 Wellington Street, Ottawa, Ontario K1A 0N4.

United States' hospitals will not be invited to recruit nurses at seven Metropolitan Toronto community colleges this year because there are more jobs available in Canada. For the past three years, college placement officials in Toronto have organized a job fair, with 40 U.S. hospitals conducting interviews on campus. About 90 per cent of last year's 2,200 college nursing graduates in Ontario were employed within six months of graduation, with 32 per cent of them finding work out of the province.

Quebec Appeal Court Justice Julien Chouinard has been appointed to the Supreme Court of Canada. He replaces former Justice Yves Pratte, 54, who resigned for health reasons in June. Mr. Chouinard was appointed deputy minister of Quebec in 1965 and became general secretary of the provincial cabinet three years later. He was appointed to the Quebec Court of Appeal in 1975.

Teleglobe Canada, a federal Crown corporation, has opened its \$14-million Laurentides earth station about 60 miles north of Montreal. The station makes it possible to use new satellite links for telephone and television transmission across the Atlantic.

The black canvas running-shoe worn by a generation of youngsters during the 1950s and 1960s has been replaced by rainbow-coloured, specialized, lightweight athletic footwear. Running shoes have become a lifestyle fad, says Thom Gravelle, executive president of Pony, Canada's only worldwide sports-shoe company. Companies such as Pony, Adidas, Puma, New Balance, Nike, Brooks, Etonic and Sonic are fighting for a piece of the estimated \$8-million Canadian running-shoe market.

Twice a month on the average, an anonymous money order or a crisp bank-note arrives for the Receiver-General of Canada, in amounts ranging from \$1 to several hundred dollars. Most of this "conscience money", as it is identified on Government accounts, is accompanied by a holy picture or a prayer. "Each year we get \$9,000 to \$10,000 worth of conscience money," said R.R. Moore, chief of financial systems and accounting for the federal Ministry of Supply and Services, which is responsible for all money received by the Government.

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Algunos números de esta publicación aparecen también en español bajo el título Noticario de Canadá.