

Peanuts a commercial crop in Canada thanks to harvester



Agriculture Canada

The new harvester digs up nuts while they are still moist.

The state of Georgia in the United States may soon have a rival for its reputation as a leading producer of peanuts thanks to a new harvesting method developed by Agriculture Canada and the Ontario Ministry of Agriculture and Food.

Peanuts have a long growing season and, consequently until a few years ago,

the crop could not be grown in Canada. Under Agriculture Canada's new crop development fund, however, a program was undertaken by the University of Guelph at Agriculture Canada's Delhi, Ontario Research Station in the mid-1970s to select and improve peanut varieties for growth in southern Ontario.

Women advance in the Canadian military

The number of women in the Canadian military has increased substantially since March of 1951 when the government authorized the enrolment of women in the Royal Canadian Air Force.

Today, women personnel comprise 8.2 per cent of the total effective strength of the forces, an increase of almost 5 per cent since 1975. In 1953, some 3 000 women personnel served in 28 various occupations in the Forces; now 6 749 women work in 89 trades and officer classifications, ranging from aerospace engineering and personnel administration to vehicle technicians and military police.

Women's role expanded

In 1971, recommendations made by the Royal Commission on the Status of Women in Canada led to the acceptance of no limitations on the employment of women in the Forces, other than within primary combat roles, employment at remote locations and seagoing service.

Since then continuing review and evaluation has led to increased involvement by women and during the past year the trial employment of service women in

non-traditional roles and environments has continued with the aim of assessing the effect on operational capability of employing women in near-combat roles.

During the air trials, three aircrew occupations were opened to women — pilot, navigator and flight engineer. Five women pilots graduated in 1981, and commenced duties with transport and search and rescue squadrons and flight training schools.

In the sea trials, another 11 women continue their 20-month tour of duty, including service at sea and ashore, with the fleet diving support ship HMCS *Cormorant*.

In the near-combat employment trials, women are deployed to the field with an army service battalion and a field ambulance in Germany.

In addition, a fourth rotation of women continues its six-month tour of duty, equal to that of men, at Canada's most remote Arctic military station.

Regular Force women are joined by some 4 153 women who serve in the Naval and Air Reserves and the Militia.

All that remained to make peanuts a truly Canadian commercial crop was to design a harvester adapted to Canada's climate and growing conditions. Work done by the University of Guelph and at the Delhi station led to the development of a prototype harvester and Agriculture Canada's Engineering and Statistical Research Institute helped build a commercial model.

Blades run underneath roots

The harvester's blades run beneath the roots of the plant to loosen the soil, while a pick-up belt grabs the plant stem. With the root and peanuts hanging under the pick-up belt, the plants pass through strippers that knock-off the pods which fall onto conveyor carrying them to a drying hopper.

"The key to our harvester is that it picks up the peanuts more gently and in less time than the conventional American harvesters. They dig up the plants completely, invert them, and spread them on the ground to dry," said Peter White, a researcher at the Delhi station. Since the Canadian machine can harvest the nuts when they are still moist and fragile, they do not have to be left to dry on the ground where they may be damaged by frost, added White. "With the new peanut varieties and harvester, it is possible that Canadian peanut butter manufacturers will soon have a steadier supply of peanuts," he said.

At present, Canada imports more than \$60-million worth annually and that's not peanuts.

New firm set up for marine exploration

German and Milne of Montreal, a leading naval architect and marine engineering firm and Seaforth Maritime, a Scottish offshore services and ocean contracting company, have formed a new company, Seagem Incorporated, to carry out work on marine projects in Canada.

Seagem has been set up in Calgary and the company is currently working on two contracts related to the study of offshore supply vessel design and operation for Canadian Arctic waters.

In addition, the company has already established a partnership with Federal Commerce and Navigation of Montreal for the operation of ships in Canadian waters and has four of its fleet of tug anchor handling supply vessels working offshore eastern Canada.