
Gold fever strikes again

It is being called the "1980 gold rush". More miles of creekbed were staked this summer in the Yukon than at the height of the Klondike gold rush, according to the reports by the area's mining record's office.

Soaring gold prices have sparked renewed interest in the gold-rich hills surrounding Dawson City and with the precious metal worth more than \$750 an ounce, even worked-over tailings left by turn of the century mining operators are being staked.

In the past decade alone the number of placer gold claims has jumped to 7,373 from 939. While the rush has failed to match the romantic stampede of 1898, when doctors and lawyers left their offices and workers dropped their tools to head for the Klondike, there has been no lack of interest from big corporations and large investors. Dawson City hotel rooms are hard to find and heavy equipment sales and truck rentals are booming.

Herbicide spreader saves energy

A Canadian company has developed an energy-saving way for ecology-conscious farmers to spread granular herbicides and insecticides.

Beline Manufacturing Company Ltd. of Kindersley, Saskatchewan has developed a spreader measuring from two to 30 or more metres in width, which is mounted on the soil preparation, planting and treatment machinery; this means one and even two fewer operations for the farmer. "Our secret lies in the electronic clutch and drive system installed on the tractor, controlled directly by the operator who can regulate the flow of granules from zero up to more than 40 pounds an acre," explained company president John Bourne.

Granular chemical products, which are no coarser than fine grains of salt, are part of the latest generation of chemical control formulas and are considered more acceptable from the energy and ecology standpoint. The Beline model has the advantage of eliminating at least one step in the soil preparation or planting procedure since the farmer no longer has to spread the granules first and then work them into the soil afterwards; these two operations are now done simultaneously.

Beline's first customers were Saskatchewan wheat growers and gradually the company managed to set up a distribution network in Saskatchewan and Alberta. "Today our spreader is sold by 46 dealers in North and South Dakota, Minnesota, Idaho, Montana and Washington," said Mr. Bourne.

The company has since turned to the countries of the European Economic Community. "We sent one of our spreaders to England on a trial basis. We'll have to modify it slightly to adapt it to European farming conditions," Mr. Bourne added.

Originally the spreader was designed for grain growers. Beline is now testing a new model for row crops grown in a number of regions of Ontario and Quebec.

Aid to Colombian food industry

A Canadian food scientist has helped Colombia move towards establishing a viable fruit and vegetable processing industry.

The South American country is a major exporter of fresh tropical fruits and vegetables. But John Kitson, head of the food processing section at Agriculture Canada's Summerland, British Columbia, Research Station, says despite the tremendous variety of produce available, the Colombians have little in the way of processing facilities.

"Without processing capabilities, much of the annual production of tropical fruits and vegetables is lost to spoilage," Mr. Kitson says.

To overcome this problem, a pilot plant for processing fruits and vegetables was planned for the campus of the National University of Colombia in Bogota.

The pilot plant was one of three built; the other two handle processing of meat and dairy products. The project was funded by the United Nations Food and Agriculture Organization with assistance provided by the Canadian International Development Agency (CIDA).

Through the pilot project, Colombian food technologists are being trained and new processed products are being developed. The project is providing over-all research and development facilities for the Colombian food industry.

Mr. Kitson became involved in the project two years ago. He helped decide what equipment should be shipped to Colombia and helped install it in the plant. In

several trips to Bogota, he saw that the equipment was functioning properly and taught the Colombian staff how to use it.

In addition, a Colombian engineer was brought to Canada to visit pilot plants and processing firms in British Columbia and to become familiar with food processing research and development at the Summerland station.

Under the assistance of CIDA's training awards, three Colombians will obtain their masters degrees in food sciences fields at Canadian universities.

Fungus kills mosquitos

A fungus native to the irrigated areas of western Canada could prove a valuable new tool for mosquito control.

Scientists at Agriculture Canada's Lethbridge, Alberta Research Station working with the University of Washington in Seattle have achieved about 60 per cent control of one mosquito species' population with this "water mold".

The fungus destroys mosquito larvae by attaching to the insect's outer skin and feeding on the internal fat and muscle tissues. The larvae first swells to an abnormal size, becomes sluggish, and finally dies.

This mold lives in the stagnant waters that are the natural environment of mosquito larvae. It was first identified in 1956, but its complex life cycle and its potential as a mosquito pathogen were not discovered until 1971.

Although it attacks only one of the 18 mosquito varieties found in southern Alberta, that one is the species that can infect humans and horses with sleeping sickness. Several tropical species, including the one that carries yellow fever, are also vulnerable to attack by the fungus.

"We are trying to find out why this fungus attacks only one local species," said Joe Shemanchuk, head of the mosquito research team at Lethbridge. "Also, we are examining pathogens from other parts of the world to see if they might be effective against other mosquitos that cause us problems."

Scientists now plan to try establishing this fungus outside its natural range — that is outside the irrigated areas of southern Alberta. They hope it will provide a continual biological control of mosquito populations, keeping them below the levels at which pesticide application becomes necessary.