EXAMINE FORAGE CORN

Leo P. McIsaac, Mermaid, RIGHT grew this corn last year. Both Mr. McIsaac and Agriculture Minister Andrew MacRae who is with him, are well over six feet tall. But the corn towers over the heads of both these gentlemen. Mr. McIsaac, who operates a farm machinery business —it includes silos—in Charlottetown intends to plant 100 acres of corn this year.

Milk production almost unchanged

OTTAWA — Total milk production in Canada has remained virtually unchanged since 1961. In that year production was 18,339,200,000 pounds and in 1965 it was 18,321,891,000.

During this period only Ontario raised its milk output, going from 6,271,347,000 pounds in 1961 to 6,896,717,000 in 1965. Quebec dropped from 6,191,166,000 pounds to 6,101,064,000; the Prairie Provinces from 3,980,445,000 to 3,549,497,000; the Maritimes from 1,020,248,000 to 929,897,000 and British Columbia from 875,494,000 to 844,734,000 pounds.

Meanwhile the population of Canada has risen and demand for dairy products has increased accordingly. The situation today is one of production and consumption being barely in balance.

Butter production for the year ending March 31, 1966 is estimated at 333 million pounds; consumption during this period is estimated at 356 million pounds.

Stocks of butter, built up during years of surplus production, have thus far staved off any sharp rise in the consumer price. But stocks on hand are only sufficient to carry through to the season of heavy production in spring and early summer.

If production is not increased in 1966 and if consumption is maintained at present levels, there will definitely be a shortage of butter by this time next year.

In an attempt to beat the cost-price squeeze many dairy farmers have enlarged their units by increasing cow numbers and investment in equipment. Others have switched to enterprises such as beef farming or have taken off-farm jobs.

DAIRY FARM GROUPINGS

In the 10 years between 1954 and 1964 the number of milk cows dropped from 3,121,000 head to 2,906,000 but milk production during the same period actually rose from 16.5 billion pounds to 18.5 billion pounds, reflecting a dramatic increase in production per cow.

In the short period between 1961 and 1965, production per cow in Canada increased from 6,140 pounds per year to 6,350 pounds. This represents an increase of 84 quarts of milk, nine pounds of butter or about 19 pounds of cheese for each cow.

Increased output per cow is the result of widespread use of artificial insemination which makes the very best herd sires available at reasonable cost, of better feeding and management practices, and of year-round production of milk.

During the 1954-64 period, the number of farms with milk cows dropped 35 per cent from 416,000 in 1954 to 270,000 in 1964. The number of milk cows per farm rose from 7.5 to 10.8 and milk production per farm rose from 40,000 to 68,000 pounds.

Dairy farmers can be grouped under three main headings — fluid milk producers, manufacturing milk producers, and cream producers.

There are about 35,000 fluid milk producers. These dairymen supply the fresh milk trade.

There are about 70,000 manufacturing milk producers who supply the processors who manufacture casein, milk powder, butter and cheese.

And there are about 165,000 cream shippers whose product is made into butter.

Considerable numbers of cream producers are switching to shipping whole milk. This is happening for a number of reasons which includes availability of cheaper commercial feeds to substitute for feeding skim milk to livestock, increased demand by processors for the non-fat portion of the milk, higher prices paid for whole milk as compared with cream, improved transportation, and introduction of bulk tanks.

JURISDICTION

The Federal and provincial governments share the responsibility of administrating legislation for the dairy industry.

The provinces have exclusive jurisdiction over the fluid milk trade. Provincial fluid milk legislation varies amont the provinces but common features are:

1. Licensing and inspection of processing facilities.
2. Regulation of the fluid milk trade by quality standards.
3. Supervision of marketing quotas and powers to administer producer and wholesale prices and in some instances retail prices. It is this power which sets this segment of the dairy industry apart from the manufacturing milk sector.

The Federal Government has jurisdiction over the marketing of manufactured dairy products where the products move interprovincially and into export markets.

The Canada Department of Agriculture and the Department of National Health and Welfare enforce standards for grading, composition and packaging. Inspection and licensing of manufacturing establishments is handled by provincial authorities and the Federal Government registers these factories after they have complied with provincial requirements.

Provincial authorities are able to set producer prices for fluid milk at levels considerably above those obtainable for manufacturing the mechanism by which supply is controlled is quite complex but usually involves establishing marketing quotas for each producer. Any milk which is marketed by "fluid producers" in excess of fluid requirements is diverted into the market for manufacturing milk.

INCOME FROM MILK

Taking 1963 as a typical example, fluid milk producers were estimated to have earned $263,000,000, or 51 per cent of total cash income, from the sale of milk and cream. This meant that 12 per cent of the farmers who keep milk cows earned about half the farm cash income from dairying. The fluid milk shippers produced about 39 per cent of the total milk suppl.

The other half of farm cash income from the sale of milk and cream was earned by about 88 per cent of the farmers with dairy cows who, as a group, sell the remaining 61 per cent of the milk.

On farms shipping to the fluid milk market, dairying is usually the main or only enterprise. Cream shippers and manufacturing milk producers frequently regard dairying as a sideline to other operations such as grain, cash crop, or beef farming.

Average milk sales were about 183,000 pounds per fluid milk farm in 1963 while manufacturing milk shippers and cream shippers together averaged 40,000 pounds.

HONOR WOMAN PREMIER

The IODE has sent $2,000 to India for relief work as a tribute to Prime Minister Indira Gandhi as "one of the most outstanding women of our age."

Produce oats with lodging resistance

OTTAWA — Encouraging gains are being made by scientists in their efforts to produce oat varieties that are resistant to lodging, says Dr. F.J. Zillinsky, an oat breeding specialist with CDA's Ottawa Research Station.

Lodging is a major cause of reduced oat yields and it occurs frequently in crops grown on soils of high fertility. Resistance to it has been an objective in oat breeding programs for many years.

"If oats are to compete with corn and other crops grown under high fertility management, varieties suited to these conditions are needed," the researcher says.

As a example of what has been done with wheat under similar conditions, Dr. Zillinsky points to the northwestern United States where a lodging-resistant variety has provided outstanding results. It features a combination of stronger straw and semi-dwarf plant height and, under high fertility management has yielded in excess of 100 bushels an acre.

DIFFICULT PROBLEM

The problem is more difficult with oats, however. Although the dwarf characteristic can be used to improve resistance to lodging, two factors discourage a drastic reduction in straw length of oats:

—Greatly reduced length would mean oat straw that would be uneconomic for use in acres like those in eastern Canada where the straw is in great demand for livestock and bedding.

—Yield trials have shown repeatedly that resistance to lodging achieved by substantially shortening straw length is obtained at the expense of grain yield.

The best combination of straw strength and grain yield obtained so far is with the variety Stormont which was released in Ontario last spring. The variety, developed at the Ottawa Research Station and recommended for growing under high fertility conditions, consistently has proved superior to other varieties in resistance to lodging, Dr. Zillinsky says.

It is slightly shorter than Russell and Garr and is two to three days earlier in maturing. Seed weight and quality are good.

CUT WAITING

Meanwhile, research scientists at the Ottawa station are working on techniques that will enable the straw strength of a new oat strain to be estimated reliably at the seedling stage. It could be made at any time with seedlings in greenhouse and growth chambers, eliminating the wait for field trials to determine strength of straw.

The techniques would speed research work on new varieties by eliminating the prolonged period required to obtain the amount of seed needed for field trials. This problem, complicated by the fact that short, strong-strawed varieties have lower seed yields, has seriously hampered breeding programs, Dr. Zillinsky points out.

Results from the project so far are very encouraging, reports the researcher who is confident that the research work will pay future dividends in the form of new oat varieties with bigger yields and greater resistance to lodging.