

## Safer pest control

When it comes to controlling a pest that costs consumers money, agricultural scientists aren't a bit bashful about probing its personal quirks. They even know its preference for particular shapes and colours.

Willis Neilson, a specialist at Agriculture Canada's research station at Kentville, Nova Scotia, says that the apple maggot even has a changing preference for shapes as it matures. Early in its life, after it emerges from the soil in July, it likes anything rectangular in shape — similar to the leaves of an apple tree. Later, as it prepares to lay eggs, its preference changes to spherical objects — like apples. The apple maggot also is attracted to the colour yellow.

"It might seem to some to be a useless sort of observation," Mr. Neilson says. "In fact, combined with other knowledge, it is the key to reducing dramatically the damage caused by the insects and to reducing the amount of insecticide used by farmers."

The other knowledge to which the scientist refers involves adult nutrients — food substances which the female must have in order to develop eggs. These nutrients have been successfully synthesized in laboratories for various species of insects. The apple maggot prefers hydrolyzed proteins. These nutrients are placed in special sticky traps in farmers' fields to attract female apple maggot flies.

"The knowledge that the emerging flies prefer rectangles and yellow colours is essential to the design of the traps. They are made in a rectangular shape and are a bright yellow colour."

Mr. Neilson started a program last summer, using traps and synthetic attractants to try and combat the apple-maggot problem in eight test orchards covering 100 acres in the Annapolis Valley of Nova Scotia.

"We found that ten acres of the 100 under test didn't have to be sprayed at all because there were no flies trapped. It would normally have received three to five sprays automatically. That's costing the producer money that is passed along to the consumer in the end."

An equally important aspect of the work is that fewer chemicals are being applied to the environment.

"Based on our tests, I'd say we now have the upper hand on the apple maggot," the scientist says.

## Canadians stand up to be counted — post-war babies grow up

The most significant characteristic of the 1976 age distribution of Canada's population concerns the continuing process of "population aging". In 1976, the population count for persons aged 65 and over was 2,002,000 (8.7 per cent), compared with 1,744,000 (8.1 per cent) in the 1971 census. At the same time, the 1976 count for persons aged 14 or younger was 5,896,000 (25.6 per cent), compared with 6,381,000 (29.6 per cent) in the 1971 census. These findings are even more striking when one recalls that between 1971 and 1976 Canada's population as a whole increased by 6.6 per cent, while the older population (65 and over) increased by 14.8 per cent and children (up to 14) decreased by 7.6 per cent.

Of special interest in connection with employment and unemployment is the population in the "junior working ages" (20-34) and the "senior working ages" (35-64). In 1976, the count for the

"junior" group was 5,754,000, compared with 4,779,000 in 1971, representing a 20.4 percent increase. For the "senior" group the corresponding figures are: 1976 — 6,994,000 and 1971 — 6,550,000, representing a 6.8 percent increase. Clearly, whereas the "senior" group grew at a rate close to that of the total population, the "junior" group grew at a much faster rate (this phenomenon is, of course, a consequence of the post-war baby boom).

Also of interest is the composition of the population by sex. In 1976, for the first time in the history of Canadian censuses, the number of females actually exceeded that of males. The 1976 ratio of 992 males *per* 1,000 females is a far cry from the ratios observed in the past (e.g. 1961 — 1,022 males *per* 1,000 females). The predominance of females is particularly pronounced among those aged 65 and over, where the 1976 sex ratio reached 777 males *per* 1,000 females.

## Construction industry goes metric

Canada's largest industry — construction — was among the first to have its metric-conversion plan approved by Metric Commission Canada and is all set to "go metric".

A prime goal has been achieved — the metric conversion schedules for housing and on-site construction, designers, land surveyors, town planners, and the materials-supplying industries have all been co-ordinated. A key common denominator has been the choice of January 1, 1978 as "M-Day". This is defined as "the first day of Metric Construction Year in which the Canadian construction industry will work in SI (metric). Following M-Day, drawings and specifications, materials and components which are necessary in metric terms will become available."

In accordance with the construction industry's plan:

— Manufacturers of materials and components that are essential for metric construction have undertaken to make them available by M-Day; so have the suppliers of many other construction items.

— Federal and provincial construction agencies are on record at the ministerial level as supporting the industry's plan; this guarantees a large market for metric-

sized materials.

— Metric supplements to the 1977 National Building Code and to Residential Standards 1977 have been published and a steady stream of metric standards for construction materials has been produced by the Canadian Standards Association and other standards-writing organizations.

Close liaison is being maintained with counterpart groups in the United States actively working on construction metric-conversion programs.

Whereas relatively few construction workers will have to invest in metric tools, Metric Commission Canada's Assistance Program — Workers' Metric Tools, will provide them with financial help in this regard during the next five years.

A decade ago the construction industry advocated the metric system in the interests of greater efficiency and economy. Now Canada's \$33 billion-a-year construction program is on the metric threshold.

Pressure appears to be mounting on *Le Devoir* publisher Claude Ryan to reconsider an earlier decision not to seek the leadership of the Quebec Liberal party. Reports showed Ryan was a three-to-one favourite for party leader.