

Cornfields of Belize

A three-year study aimed at increasing the crop yield of an ancient method of agriculture will begin shortly.

The study, which is financed by the Canadian International Development Agency and the government of Belize (formerly British Honduras), will be conducted by associate professor of biology John Lambert and his post-doctoral fellow Thor Arnason.

"The Indians of Belize farm their cornfields (milpas) with a system dating back to the Mayan civilization of 300 B.C.," said Dr. Arnason. "They use an agricultural technique called slash-and-burn."



Dr. Thor Arnason (left) and associate professor of biology John Lambert examine a specimen of a weed which they collected during a recent trip to Belize. Dr. Arnason and Professor Lambert have received a \$144,000-grant to study the soil nutrient loss in the cornfields of Belize.

In this system, a ten-acre portion of forest about 12 years old is cut down in January. The field, left to dry until May, is then set afire so that the first grains of corn can be sown just before the rainy season begins later that month. After the corn is harvested in August, a crop of beans is sown. This is followed by a second planting of corn in November.

The following year, the overgrowth of

weeds is burnt away and the same planting and harvesting process is repeated. The Indians then move to a new station of the forest, allowing growth to resume in the abandoned milpas.

Professor Lambert indicated that three problems were inherent in this system of agriculture. First, the weeds which provide a necessary ground cover to protect the crops from the intensity of the tropic sun, take away soil nutrients needed for the crops. Secondly, the Indians do not use fertilizers, so there is no replenishment of the nutrients in the soil. Thirdly, the milpas are not plowed and the soil becomes hard and unable to retain the necessary moisture.

CIDA has funded the project for \$122,000, Professor Lambert noted, in order to help Belize become more self-sufficient. In turn, he said, the Department of Agriculture in Belize had contributed \$20,000 and is hoping that the study will result in recommendations which will not alter the Indians' system of agriculture but will help them to cultivate the land more productively.

Volunteer home teachers

"Teachers-on-Wheels" (TOW) was founded about two years ago as an attempt to tackle an adult illiteracy problem in the province of Newfoundland. The idea was to have teachers available to go to people's homes to help them improve their reading and writing. For the past six months TOW has been sponsored by the Newfoundland and Labrador Association for Adult Education and funded by Canada Manpower under a local initiative project grant. Fourteen teachers were on call to adults anywhere in the St. John's area.

The funding from Canada Manpower, however, expired at the end of June and, to ensure that the service could continue and possibly expand, efforts were made to reorganize and a call for volunteers was issued. By June 6, more than 90 people had indicated their interest in volunteering their services to help adults to learn to read and write and a new group of volunteer teachers-on-wheels has been formed. Training is being conducted during the summer so that by September the services of "Teachers-on-Wheels" will again be available, but this time on a volunteer basis.

Solar heating a necessity

Michael Berkowitz, an assistant professor of political economy and an associate of the University of Toronto's Institute for Policy Analysis, advocates immediate implementation of solar space heating in Canada, and recommends that government subsidies be provided to users to reduce consumer resistance to the large capital outlay required (estimated at \$7,000).

Berkowitz, who has just completed what he believes to be the first comprehensive economic study in Canada of solar heating technology, has also concluded that obstacles presented by insurance companies, mortgage companies, utilities and land developers must be removed by government intervention.

Berkowitz suggests that the public has mistakenly sought the "perfect solar home" and overlooked the obvious advantages of a system that is simply "reliable, competitive and available to the consumer". He has calculated that equipping only 5 per cent of all new housing with a 70 per cent solar system between 1980 and 2005 would save the country \$563 million in oil, \$375 million in gas, and \$46 million in pollution costs.

The study was funded by the Department of Energy, Mines and Resources.

Penitentiary system (Cont'd. from P. 2)

incarceration for young people who come into conflict with the law. In addition, provision will be made in the proposal for the transfer of convicted young people who have been raised to adult court back to the provincial system to serve all or part of their sentence." However, the response went on, fully 40 per cent of inmates were between 18 and 25 and the fact that they had been sentenced to prison terms "was indicative of the fact that they have been found guilty of serious crimes" and, therefore they would not be suitable for the kind of special treatment that the sub-committee had in mind.

Hostages

Hostage-takers will be subject to immediate transfer to special handling units, where further appropriate action will be determined. Charges will also be laid in all cases of hostage-taking.

A "three-pronged" approach to the