PUBLIC HEALTH

Plan to Solve Milk Problem

National subsidies, freezing of key personnel in dairy industry, education and zoning distribution involved in proposal before health authorities.

➤ A PLAN for solving the milk supply problem, involving national subsidies, freezing of key personnel in the dairy industry, instruction of farmers' assistants and zoning distribution, was presented by Dr. J. T. Phair, chief medical officer of health for Ontario, at the Conference of the State and Provincial Health Authorities of North America in Washington, D. C.

Results in control of milk-borne diseases, he pointed out incidentally, have been remarkably good in spite of constantly presenting difficulties. No outbreak of illness traceable to contaminated milk has yet been reported in Ontario, a province which provides training facilities for all branches of the armed forces to a greater extent than any other in Canada.

For solving the milk production problem, Dr. Phair proposed: 1. a national subsidy to encourage greater production of fluid milk of acceptable quality; 2. short courses of instruction in the essentials of milk production in all secondary schools serving small urban and rural areas; 3. comparable standards for all milk sold whether for human consumption as fluid milk or dairy products; 4. an emergency declaration of what is fundamental to insure a reasonably good quality of pre-processed milk and adherence to this both in equipment and method.

Remedies suggested for the difficulties in processing: 1. freezing of key personnel plus national subsidy to permit more adequate payment to experienced help; 2. establishment of energetic research by manufacturers to insure availability of equipment in which wood, glass and plastics substitute for metals no longer available.

For distribution, the field in which public concern has been most evident, Dr. Phair proposed zoning of distribution, under which circumstances horse-drawn vehicles could be more generously used, or municipal ownership of milk-processing and distribution.

"Consideration may have to be given," he said, "to the feasibility of the more generous provision of powdered or condensed milk as a substitute for fluid milk."

Alternate day deliveries as a solution presents the problem of the "known inadequacy of domestic refrigeration," he said. An estimated 30% to 40% of the urban population would be forced by alternate day deliveries to try to keep milk for 48 hours "under impossible conditions, which milk is often three or four days old at the time of delivery, or to purchase their supply daily from the local grocery or provision store with accompanying difficulties of returning bottles and so on."

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BOTANY

Weeds Go To Work

➤ EVEN WEEDS have gone to work to help win the war.

The Ninth Annual Chemurgic Conference meeting heard from two Chicago pioneers in getting uses out of plants generally considered useless—milkweed and cattail.

Milkweed floss, used in lifebelts and floats to replace kapok from lost overseas sources, is being separated from its seeds in a factory by Dr. Boris Berkman, who was a military surgeon in the Russian army during the first World War. Last year's crop amounts to 50,000 pounds of the silky, white stuff—a veritable mountain of floss. The U. S. Government has taken every pound that could be supplied, and has contracted with Dr. Berkman for a great deal more.

Practically all of the milkweed pods thus far used in Dr. Berkman's factory come from a large tract of cutover timber land in northern Michigan, where the sandy soil is so poor that it cannot be cultivated. Farmers in the neighborhood last summer found picking milkweed pods a good source of cash income—between four and seven dollars a day.

Dr. Berkman has found a ready market for the milkweed seed from which a high quality oil can be extracted. It resembles soybean oil in its properties and possible uses. He also expects to get other byproducts from pod shells and stalks.

Cattails are the other weeds that have gone to work. Their story was presented by Dr. C. F. Burgess, who is president of a large storage battery concern. Cattail floss, though different in appearance from milkweed floss, has much the same uses: lifebelts and floats, heat and sound insulation, filling for cushions and so on. Cattails grow in swamps and on pond margins all over the country, and their heads or spikes are hand-harvested as a part-time occupation by country lads, Boy Scouts and anybody else who wants to make a little extra cash. Dr. Burgess stated that on a cost per pound basis the material can compete with cotton.

One valuable feature about the cattail harvest is that it can be continued through almost the entire year. In the north, the heads are ripe in August, and stay on the plants through most of the winter. Then southern cattails come in, permitting an almost continuous flow of material to the processing plant.

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ASTRONOMY

Sunspot Activity Should Hit Low Point in 1944

➤ THE MINIMUM of the present cycle of sunspot activity should occur early in 1944 if it is as short as the last two, Mrs. Elizabeth Sternberg Mulders of the Mount Wilson Observatory states in a report to the Astronomical Society of the Pacific. Her prediction is based upon the numbers and positions of over 3000 spot-groups recorded at Mount Wilson since the last minimum in 1933.

Although the average length of the solar cycle from one minimum to the next since 1800 is 11.3 years, the last two cycles were only 10.0 and 10.2 years in length, respectively. The present cycle was much more active than the former, but the trend of activity is remarkably similar between the two, indicating that minimum may occur again about a year earlier than the average. If it does, it will be the first time that three successive cycles have ever had so short an interval.

During 1942, the sun was under observation at Mount Wilson on 341 days, the best record since magnetic observation of spot-groups began in 1917, Mrs. Mulders stated.

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