

to crops each year, an estimated 1,000,000 acres are irrigated -- less than two out of every 100 acres of crop-producing land. Practically all the irrigated land is in Alberta, British Columbia and Saskatchewan.

In Alberta, over 600,000 acres of the 15,600,000 acres of land devoted to crops each year are irrigated (4 per cent). British Columbia, with a much smaller area of land devoted to crops -- about 800,000 acres -- has over 200,000 irrigated acres (25 per cent).

Irrigation projects continue to be developed in the Canadian West. The South Saskatchewan River project, for example, will permit the irrigation of 500,000 acres in Saskatchewan, and the Southwest Saskatchewan Irrigation Projects take in another 25,000 acres; the Waterton River diversion, completed in 1964, has made irrigation water available to an additional 200,000 acres in Alberta. In addition, there are at least another 25,000 acres under individual farm irrigation schemes in Saskatchewan and Alberta.

In humid areas, where irrigation is not generally required, methods of agriculture can have a substantial effect on stream-flow. Careless farming methods can speed the runoff of rainfall and result in erosion of soil. Besides the loss of precious soil, this can have two effects on the streams that receive the runoff -- it can increase the danger of flooding downstream, and it can cause streams to become turbid because of the eroded material being carried. Farmers are recognizing more and more the value to themselves and others of agricultural practices that will conserve precipitation for crop use, prevent the loss of soil, and preserve the quality of the streams that drain the land.

Fisheries: In 1867, the year Canada became a nation, some 3,500,000 pounds of fish were taken from freshwater sources, primarily the Great Lakes/St. Lawrence River system. Since 1867, freshwater fisheries have continuously expanded, to the extent that, by 1971, the annual catch had increased to 89,000,000 pounds, worth \$18,400,000. Controls were imposed in some areas during 1971 where mercury was found to be high in certain species of fish.

Although this amount is less than one-tenth the value of Canada's coastal fisheries, it should be remembered that the value of rivers lies not only in their yield of freshwater fish but also in the fact that they provide the spawning grounds for commercially profitable anadromous ocean fish.



80025 75540