

and shipped copper concentrates to Tacoma; its 1963 copper concentrates will go to Japan. Consolidated Woodgreen Mines Limited suspended operations in April. On Vancouver Island, Cowichan Copper Co. Ltd. brought the Sunro mine at Jordan River into production in March. Concentrates from the 1,500-ton-a-day underground concentrator were shipped to Japan. The Consolidated Mining and Smelting Company of Canada Limited started production in September at the Benson Lake property of Coast Copper Company Limited. The Benson Lake mill will treat 750 tons of ore a day and concentrates will be shipped to Japan. Exploration parties were active in many parts of British Columbia; the greatest activity was in the Buttle Lake and Duncan areas of Vancouver Island, the Highland Valley-Merritt-Princeton area of south-central British Columbia and the Unuk River section of the northwestern part of the province.

Copper production in the Northwest Territories and the Yukon Territory totalled 534 tons valued at \$330,961. Production ceased with the closure in October of North Rankin Nickel Mines Limited's nickel-copper mine at Rankin Inlet on Hudson Bay and the suspension of operations at the Johobo mine of Dominion Explorers Limited at Kathleen Lake in the Yukon.

Iron Ore.—The decreasing level of iron ore shipments, evident since 1959, was sharply reversed in 1962 when total shipments reached an all-time high of 27,898,713 tons, up 37 p.c. from 1961. Output of all producing provinces was higher. At the same time, some companies experienced a continuation of the former trend toward lower shipments and softer prices as a result of increased competition and a generally stagnant, increasingly captive, international market. Most companies intensified their ore-research programs during the year and the trend toward producing a beneficiated product for marketing rather than direct-shipping ore continued.

There are five main market areas for Canadian iron ore—the United States, Britain, Western Europe, Japan and Canada. The United States is the principal market and the level of ore consumption there rose slightly during 1962. The increase in exports from Canada exceeded considerably the increase in supply from other foreign sources and from domestic mines. The main reason for this was a high level of operation by Canada's three largest iron ore producers which are integrated with United States steel companies. On the other hand, non-captive ore sales by these and other Canadian producers, except those in British Columbia, tended to weaken.

In Western Europe, steel production in most countries levelled off or declined slightly after a decade of continuous growth. Exports from Canada in 1962 to customers in Europe decreased except for relatively small increases to Italy and France. A large portion of the net decrease in exports was experienced by one company whose ore is particularly subject to rigorous competition from new, higher-grade sources in Africa, Asia and South America.

In Japan, the rapidly increasing ore-consumption rate levelled off unexpectedly early in 1962. As a consequence, the planned imports for the year were reduced by about 20 p.c. and Canadian producers were accordingly affected. Despite the cutbacks, there was a substantial increase in exports from British Columbia, the sole Canadian supplier to Japan, because of previously negotiated contracts.

Developments in the Canadian iron and steel industry have increased the ratio of Canadian to foreign ore consumed in recent years, a trend that can be expected to continue, particularly after 1965, despite a decline in 1962. By 1965, a new project will come into production in Labrador that will provide nearly 2,000,000 tons of captive ore to the Canadian industry. However, domestic consumption of Canadian iron ore decreased slightly in 1962 although steel production reached a record level approximately 10 p.c. above that of 1961. Imports from the United States and other foreign sources increased. The reason for these opposing trends is that during the period before Canadian iron ore became abundantly available in the 1950's, Canadian steel producers obtained most of their ore requirements from United States iron ore mining firms in which they had a financial interest and/or traditional commercial links.