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DEPARTMENT OF RADE AND COMMERCE



A FACT A DAY ABOUT CANADA

FROM THE

DOMINION BUREAU OF STATISTICS

TENTH SERIES

1943 - 1944

Published by Authority of the Hon. James A. MacKINNON.
Minister of Trade and Commerce.

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No. 275. Fri. Sept. 1, 1944 -- Canada Year Book

The 1943-44 edition of the Canada Year Book, published by authorization of the Hon. James A. Mackinnon, M.P., Minister of Trade and Commerce, is announced by the Dominion Bureau of Statistics. On grounds of war-time economy, the 1943 edition of the Year Book was not published and the present volume has, therefore, been planned to cover developments over a two-year period, perhaps more important from the standpoint of the changes in our internal economy than any other like period in the Dominion's history. The problem of including all necessary new material and at the same time keeping the volume down to convenient limits has not been an easy one to solve and, whenever possible, space has had to be saved by reference to earlier editions for standard material.

The Canada Year Book is the official statistical annual of the country and contains a thoroughly up-to-date account of the natural resources of the Dominion and their development, the history of the country, its institutions, its demography, the different branches of production, trade, transportation, finance, education, etc. — in brief a comprehensive study within the limits of a single volume of the social and economic conditions of the Dominion.

The War has now cut deeply into the national economic structure and the statistics of almost every chapter of the present edition of the Year Book reflect the extent to which war production and war-time controls have played their parts in maintaining output and supporting the price structure against growing pressures from all sides. The following are typical of the special war articles included: The War and Canadian Agriculture; The Influence of the War on the Pulp and Paper Industry; the Effects of the War on the Canadian Fisheries; The Influence of the Present War on Manufacturing; Wartime Controls Affecting Distribution and Trade; The Wartime Control of Transportation; and the Activities of the Wartime Prices and Trade Board in Controlling Prices, Rents and Supplies.

Attention is called to some of the more important features of the present volume that do not relate specifically to the War. These include the following feature articles: The Canadian Government's Reindeer Experiment; Meteorology Related to the Science of Aviation; Canada's Present Status in the British Commonwealth of Nations; Development of Marshlands in Relation to Fur Production and the Rehabilitation of Fur Bearers. The chapter dealing with population presents as complete a picture of the 1941 Census as will appear in any one edition of the Year Book and includes a very complete analysis of the occupations of the Canadian people.

Recent studies have stimulated the public discussion of questions concerning social welfare and the post-war rehabilitation of personnel from the armed forces to a point where it has been thought desirable to introduce two new chapters. These deal with welfare services and post-war reconstruction and the rehabilitation of ex-service personnel. These chapters bring together the work Canada is already doing in these fields under new chapter headings wherein it is related to the investigations that have been carried on and that point the way to future developments.

The need for war-time economy expresses itself in the smaller number of inserts and charts in this volume as compared with recent editions, and also in the accomplishment in having kept the edition down to within 1,200 pages although it covers a two-year period crowded with events of great significance.

By a special concession, a limited number of paper-bound copies have been set aside for ministers of religion, bona fide students and school teachers, who may obtain such copies at the nominal price of \$1.00 each. Application with remittance

for these special copies must be forwarded to the Dominion Statistician, Dominion Eurean of Statistics.

The cloth-bound edition of the Canada Year Book is held for sale by the King's Printer, Ottawa, at \$2.00 a copy. Remittance should be made by money order, postal note or accepted cheque payable to the Receiver General of Canada.

No. 276. Sat. Sept. 2, 1944 -- Christmas Mail for the Armed Forces

For most of us, Christmes is yet far off, but to all intents and purposes it is almost at hand for every Canadian who has relatives serving in the armed forces in distant lands. Canadian airmen, sailors, soldiers, and merchant marine are fighting in almost every part of the globe, and Christmes parcels to the men in remote theatres of war must naturally be sent first. September 15 is the latest date that parcels may be sent to men in the Far East with any hope of arrival by Christmes.

There is no more disconnolate figure in this world than the soldier or sailor without a message from home amidst the rejoicings of his more fortunate comrades at Christmastide, and there is nothing more bitter than the feeling of desolation and frustration descending on the lonely victim of circumstance, singled out for misery simply because of the want of appreciation on the part of some one of the fact that parcels may take a long time to travel under the vicissitudes of war. So the Post Office urges the packing of parcels early.

The Postmaster General of Canada has issued the latest dates on which Christmas parcels may be sent with any certainty of arriving at Christmas, but it should be remembered that these are "deadline" dates and that untoward circumstances at the front may cause delays, despite the efficiency and whole-hearted efforts of the Canadian Postal Service. The war is still on and what ships that are not needed against the Nazis will be required against Japan. If everyone waits until the last moment, there is a possibility that there may be no available space left in the last ships leaving in time to ensure Christmas delivery.

The "deadline" dates for mailing Christmas parcels to the parts of the world named are as follows: September 15 -- The Far East (India, Burma, Ceylon, and other parts). October 5 -- The middle east Area (Egypt, Iran, Iraq, Syria, and other parts). October 10 -- Central Mediterranean Forces. October 25 -- The United Kingdom and France.

No. 277. Sun. Sept. 3, 1944 -- Winter Green Feed

Farmer poultry flock owners who utilize home grown feeds to the fullest possible extent sometimes find it difficult to supply enough green feed to the birds. Succulents in the form of turnips may not always be available and alfalfa leaf meal, in small lots, is now practically off the market.

To meet this emergency the Dominion Experimental Station at Charlottetown, P.E.I., has been gathering green food from two sources, lawn clippings, and aftermath, or second-cut clover. While it is appreciated that lawn-clippings are not commonly available in large quantities on the average farm, this short-grass material does form an excellent source of green feed for hens.

As gathered at the Charlottetown Station, lawn clippings are from one-half to one and one-half inches long. They may be collected in a grass catcher attached to the lawn mower, cured by spreading several inches thick in a current of air and

turned once or twice so that they will dry quickly. During the drying process they are not exposed to rain or dew. When thoroughly dried they may be stored like any other hay crop.

Second-cut clover was harvested when coming nicely into bloom and cured and stored in the same way as grass clippings.

Two methods of feeding were tried. The first, the material was fed dry, in chicken wire racks attached to the wall. Birds seemed to relish either one and ate every particle except the clover stems.

In the second method the material was placed in a tub or cask and a relatively small quantity of scalding hot water was poured over it, the container being covered immediately with sacking. Sufficient water was used so that in a matter of fifteen to twenty minutes the feed would be well softened by the steam retained within the container. The commonly accepted practice, however, is to soak the lawn clippings or clover over night in cold water.

This feed was then placed in wire racks or on a clean platform and was eagerly enten by the birds.

Production was maintained at a high level without any other source of green material, and observation disclosed that pens receiving this material were of better appearance and gave less evidence of feather pulling.

No. 278. Mon. Sept. 4, 1944 -- Going Back to School

Vacation time ends officially tomorrow for some 2,100,000 young Canadians who will heed the toll of the school bell which will call them back to their studies for another term. Many will attend school for the first time, while others will proceed to secondary school. Later in the month the colleges and universities will re-open and many Canadians will begin or continue studies which will prepare them for a chosen profession.

Within the elementary school rooms the familiar routine of training, teaching and guidance will be altered in some provinces to conform to certain additions or revisions to the course of studies. Ontario schools will begin the newly prescribed course of Religious Insturction; Manitoba and Saskatchewan jointly will follow the recently issued course in Citizenship. Patriotic exercises are compulsory under this course and lesson outlines on "Our Democracy" are designed with the aim of developing "the qualities of character and methods of action which are of special significance in a democracy."

The teachers' problems multiply. Less home supervision and increased juvenile delinquency; crowded class-rooms with new pupils from other provinces; health and nutrition problems; registration of sixteen-year-olds; cadet training; war work; — these are but a few of the auxiliary responsibilities and involvements the teacher must assume in addition to the basic job of formal education.

On the other hand, never have teachers had available better aids for teaching or more stimulating subject matter. Films, and school radio broadcasts bring to life the subjects of geography, history and music. Photographs, pamphlets, reading-guides and postage-free library service bring current information, professional advice and new methods of instruction within reach of every Canadian teacher at nominal rates or as a free service.

No. 279. Tues. Sept. 5, 1944 -- Canadian Production of Copper

Copper is an important mineral product. In 1940 a production of 643,317,000 pounds established a new all-time record. Since that year, however, all provinces have shown a reduction in output with the exception of Saskatchewan, which has shown a steady rise. The Saskatchewan-Manitoba production is unique in mining history in that the ore body lies across the boundary of the two provinces, and while the output for Manitoba is decreasing, that for Saskatchewan is increasing.

The most important Canadian copper-bearing ore deposits are those of the Noranda and Waite-Amulet, in Quebec, the nickel-copper mines of Ontario, the Sherritt-Gordon in Manitoba, the Flin-Flon on the Manitoba-Saskatchewan boundary, and the Britannia and Granby in British Columbia. The Mandy mine, a producer in Manitoba during the first world war, was reopened and made a considerable contribution to the output in that province during 1943.

Canada has two copper refineries, one at Copper Cliff, Ontario, owned by the International Nickel Company, and one at Montreal East, owned by the Canadian Copper Refiners, Ltd. At the beginning of the first world war Canada had no copper refinery, whereas now she possesses excellent copper refinery facilities and large well-developed copper ore bodies and smelters.

Curtailment in brass and copper was instituted by the Metals Controller through the surveillance of export licences and through informal understanding with principal producers and fabricators. More formal methods were adopted so that consumption of brass and copper for non-essential purposes would be reduced. Control was affected through primary fabricators.

Perhaps the most interesting development during the year was the uncovering, by the Aldermac Copper Corporation, of a complex ore body containing gold, silver, copper, lead and zinc, which was not exposed at the surface but which had been discovered by a combination of geological and geophysical methods in one of the oldest mining sections of Canada, on the south side of the St. Lawrence River in Quebec. This discovery points to the possibilities in those areas of Canada where favourable geological conditions are known but where prospecting is difficult because of the overhurden.

No. 280. Wed. Sept. 6, 1944 - History of Apple Industry

Mention of fruit growing in Canada is to be found among the earliest records of what was then known as New France. De Monts is reported to have sent the first trees to Quebec City in 1608-9, while at a somewhat later date — about 1632 — d'Auenay de Charnesay brought either trees or seeds from Normandie to Acadia. The trees thrived in their new surroundings, for the census of Acadia in 1698 showed that at Port Royal alone 1,584 apple trees were growing in orchards ranging from 75 to 100 trees in size.

As settlement moved westward through the new country the trappers and farmers took their fruit trees with them. The French settlers along the Detroit River, in what is now known as Ontario, grew their own fruit as early as the 1790's and apples, cherries, peaches and grapes were among the kinds mentioned in the early records. It was not until the 1850's, however, that fruit growing had its beginning in British Columbia. The early pioneers made the first plantings in the coastal area and some time in the 1860's orchards were planted in the southern interior of the province.

Repeal of the Reciprocity Treaty in 1854 gave a stimulus to the apple growing industry by directing the growers' attention to the British market. From very limited beginnings in 1845, when 379 barrels of apples were shipped from Quebec and 336 barrels from Montreal, exports increased at such a rate that by the year 1893 the quantity exported reached 1,187,665 barrels.

In the census of 1860 only Nova Scotia was reported to have produced apples. Why there was no record of the crops in the other sections of the country is not clear. That year the Nova Scotia crop amounted to 186,484 bushels. Ten years later, when the census included Nova Scotia, New Brunswick, Quebec and Ontario, the crop amounted to 5,486,504 bushels. In the next thirty years there was a very rapid expansion and by 1900 the total apple crop in Canada, which now included Manitoba, the Northwest Territories and British Columbia as well as the five eastern provinces, amounted to 17,389,784 bushels. There was a corresponding increase in all other fruits such as peaches, pears, plums, cherries and grapes during this period.

No. 281. Thurs. Sept. 7, 1944 - United Kingdom Chief Apple Market

From the beginning the British market has been the chief expert outlet for Canadian apples. The general trend of shipments to the British Isles from 1885 to the cutbreak of war in 1914 was upward, although there were wide fluctuations from year to year. During World War I, as has been the case during the present conflict, exports dropped sharply to reach a low point of 34,589 barrels in 1918. Following the Armistice the trend was again upward and an all-time high was reached in 1934, when 3,057,897 barrels moved to the United Kingdom. For the year ending March 31, 1943, total exports had dropped to 264 barrels and for the first time since 1885 no fresh apples were shipped to Great Britain.

In early years Nova Scotia and Ontario were the chief exporting provinces with Quebec and British Columbia making small contributions. With the steady increase in acreage in British Columbia, shipments from Ontario gradually declined and at present most of the fruit exported is from British Columbia and Nova Scotia. The bulk of the fruit shipped from eastern Canada is packed in barrels, while the British Columbia apples are put up entirely in boxes.

Competition for the United Kingdom market especially from the United States, has greatly influenced the volume of fruit being shipped from year to year. An additional factor contributing to the fluctuations in the annual Canadian exports, certainly in latter years, has been the British apple crop. Competition from English apples has been more seriously felt in the areas shipping culinary varieties, which make up the bulk of the United Kingdom crop. The Nova Scotia crop is largely made up of culinary varieties while the British Columbia crop is chiefly of dessert varieties. In a year of heavy production in the United Kingdom, Nova Scotia shipments are seriously affected, particularly in the early part of the season when the bulk of the English crop moves to market.

The average experts from Canada to the United Kingdom for the years 1926-32 amounted to 32 per cent of the average crop during those years, while total exports for the same period were 37 per cent of the average production. The average total export from the United States for the same years, on the other hand, was only 9.6 per cent of the total United States crop. Thus the Canadian industry was in a particularly vulnerable position.

Increased selling pressure brought about by large crops in both countries had a more widespread effect on the Canadian industry than on that of the United States.

Exports from the United States were in the nature of a surplus over and above domestic requirements and fluctuations in the export market had little or no effect on the average return to the grower. In Canada, on the other hand, the rapid expansion in the industry during the latter part of the 19th century was brought about by the enterprise of growers who had the export market in view. Competition in the British market was, therefore, keenly felt by Canadian growers.

No. 282. Pri Sept. 8, 1944 - Wartime Marketing of Canadian Apples

With the outbreak of war in 1939 the whole apple export picture changed completely. During the first year of the war exports to Great Britain were reduced to 50 per cent of the normal shipments. This brought drastic changes in the method of marketing the Canadian crop. Every effort was made to dispose of as much fruit as possible in Canada and large quantities were processed as dry apples, canned apples and apple juice.

In order to do this, however, the Dominion Government provided guarantees involving substantial expenditure to ensure reasonable returns to the growers. A large quantity of both canned and dehydrated apples was shipped to the United Kingdom but much of these products and most of the juice had to be sold in the Canadian market.

For the five years prior to 1939 about 40 per cent of the crop was used in Canada as fresh apples. In 1940 the proportion remained the same; but for the succeeding years the percentage has ranged from 50 per cent to 61 per cent, with an average of 57per cent. Considerable effort has been made to find export markets for fresh apples in the Western Hemisphere, but with the exception of some sizeable shipments of British Columbia apples to the United States, there has been little progress along these lines.

As the war progressed and tin-plate became more difficult to obtain, it became necessary to make drastic reductions in the quantities of canned apples and canned apple juice. As a consequence the greater proportion of the crop was dehydrated. During the 1943-44 season shipments of fresh fruit to Great Britain again became possible but the movement of fruit was limited. The British market was prepared to take much larger quantities of fruit but lack of funds and limited shipping space were the restricting factors.

At present there appears to be a likelihood that, in addition to the United Kingdom, good markets will develop in some European countries for some time after the war at least. Many of the orchards in Europe may have been destroyed during the fighting or have been so badly run-down because of lack of fertilizer and labour as to be unprofitable for some years. Many of the European countries were themselves large exporters of apples. For example, during the 1938-39 season the following shipments were made from the chief European exporting countries: Bulgaria, 381,000 bushels; France, 1,025,000 bushels; Italy, 2,064,000; Netherlands, 494,000; Rumania, 493,000; Yugoslavia, 1,833,000. It seems possible that Canadian fruit would find a ready market in the countries to which these nations shipped in the past and that these countries will themselves require considerable quantities to replace their own crops while their orchards are being rebuilt.

No. 283. Sat. Sept. 9, 1944 - Origin of the Fisheries

The voyage of John Cabot to North America in 1497, and his glowing account of the richness of the coast, led to the outfitting, under English-Portuguese auspices, of his second voyage in 1498. Apparently the venture was more in the nature of a trading than a fishing voyage.

Owing to the lack of historical records, the degree of exploitation of the new fishing grounds by English fishermen during the next two decades is not clear, but by 1522 the fishery had become sufficiently important to cause Vice-Admiral Fitz-william, on the outbreak of war with France, to advise King Henry VIII and Cardinal Wolsey to dispatch an armed vessel to escort the returning Newfoundland fleet.

Other European nations were not slow to take advantage of the opportunities to be found in the virgin fisheries of the New World, as an English vessel fishing in Newfoundland waters in 1527 found twelve French and two Portuguese barques there, and there is evidence that Portuguese vessels were engaged in the North Atlantic fisheries prior to 1506. French vessels probably arrived on the fishing grounds about 1504 and they and the Portuguese prosecuted the fishery much more actively than did the English, who found the triangular trade between Iceland, Portugal and the home country much more profitable.

By the time Jacques Cartier made his first voyage in 1534 there were several well-known fishing stations along the Canadian Labrador and it is fairly evident that Cartier himself and other members of his crew had been engaged in the North American fisheries before they undertook their voyage into the Gulf. Prior to this time cod had been the great objective of the fishermen but Cartier's voyage disclosed such other resources as the salmon of the North Shore, the mackerel of Gaspé Harbour and the walrus of the Magdalen Islands. In the next year he reported whales near Anticosti, walrus in the Moisie River, white whales at the mouth of the Saguenay and a great wealth of fish of various kinds in the St. Lawrence.

In the next decade mention is made of the excellent fishing of Caspé and Anticosti, where the fish were reported to be much better than those of Newfoundland. By this time also Cape Breton had received its name from the hardy Breton fishermen who frequented that portion of the shore nearest to Cabot Strait.

Passing over the rise of the English fisheries between 1550 and 1600, inasmuch as it applied to Newfoundland rather than to what is now Canada, we find that the first English vessels went to the Magdalen Islands in 1593 to hunt for walrus but found none of these animals; they returned, however, with an excellent cargo of cod. Two years earlier, the French ship Bonaventure had killed 1,500 walrus at the islands. In 1597 two London vessels sailed to the islands for cod and in the same year Spanish vessels were seen at the same place and at Cape Breton, while the French sent an expedition to Sable Island to engage in the fisheries and take prizes and the next year a more permanent settlement was established, which lasted for five years.

No. 284. Sun. Sept. 10, 1944 - Early Exploitation of Fisheries

While the fisheries of the Grand Banks were taking on the aspect of an international fishing convention, no less than 1,500 sail (of which 400 were Portuguese) having been counted on the fishing grounds, the inshore fisheries were not neglected. The first permanent European settlement was by De Monts at Port Royal (Annapolis) in 1605 and for the next 100 years this was the base of the French fishing operations and for the harassing of the fishing fleets of the other nations which frequented the Banks. It was during this period that the colonists of New England made their presence felt on the Grand Banks, catching and drying cod which they took to the West Indies, whence they returned with cargoes of rum, sigar and molasses.

From 1663 on, Colbert pursued a policy of improvement in the fisheries of New France, cargoes of Canadian fish being transported to the French West Indies in

much the same manner as that followed by the New England colonists, but the trade was not a success. In 1669 the inhabitants of Canada were permitted to export cod to France and in 1686 regulations were passed covering the allocation of curing beaches, landings and drying forms.

At this time Canadian-caught cod was being sold in Marseilles and the Levent, in Paris and the western parts of France, as well as in Spain and Portugal. The greater part of the fishing was still being done by fishermen from France, the development of a native industry being greatly hampered by the lure of the fur trade.

The close of the War of the Spanish Succession in 1713 saw France forced to cede Acadia and Newfoundland to England, although she retained certain rights to dry fish along the shores of Newfoundland. Louisburg was fortified between 1720 and 1734. In 1719 England attempted to encourage migration from Newfoundland to Nova Scotia and the New England colonies not only regained the position they had lost as a result of the wars from 1698 to 1713 but extended it, while the increasing demands for the poorer grades of fish for feeding slaves in the West Indies helped the growth of the off-shore fishery in Nova Scotia.

In 1760 Liverpool was founded and Cape Sable Harbour was granted to 200 immigrants from Cape Cod, Plymouth and Nantucket. About 1764, the first successful attempt to establish a permanent fishery was made by fishermen from the Channel Islands at Cheticamp, on the west coast of Cape Breton, and at Arichat. In 1764 Nova Scotia exported 66,400 quintals of dried cod valued at £39,840 and 7,220 barrels of pickled fish valued at £7,700.

The years between 1745 and 1762 saw the taking of Louisbourg by Pepperell, its restoration to France, the founding of Halifax, the final capture of Louisbourg, the first meeting of the Legislature of Nova Scotia and the taking of Quebec. These events all had a depressing effect on the French fisheries and also led to the development of the Nova Scotia, as distinct from the New England, fisheries.

No. 285. Mon. Sept. 11, 1944 - Development of Canada's Fisheries

By the end of the Eighteenth Century the American Revolution had occurred and the Maritime Provinces had become separate British Colonies. A fleet of fishing schooners was maintained at Halifax and an annual production of about 60,000 quintals was maintained until about 1900. The city developed more as a trading than a fishing centre and drew its fish supplies from the outports, Gaspé and Newfoundland.

The increase of the population of Nova Scotia led to the imposition of restrictions upon the fishermen of New England. After the Civil War and the opening of the West, markets for fresh fish displaced those for the dried article, with the result that New England withdrew from the more distant waters and imposed tariffs against Nova Scotia fish.

The American invasion of the mackerel grounds of the Gulf of St. Lawrence lasted from the 1830's to the 1870's. In this fishery as in the cod, the share system and the higher prices in the United States market led many young men from the Maritime Provinces to seek employment on the American vessels.

While the advent of Reciprocity in 1854 opened a market for the Canadian product, the American fishery continued to expand until the Civil War of 1861-65, which caused, together with the abrogation of the Reciprocity Treaty in 1866, the disappearance of American vessels from Canadian waters in the '60's.

New Brunswick, Quebec and Prince Edward Island had, like Nova Scotia, encountered numerous difficulties from the competition of the New England fisheries. In an endeavour to compete with the New Englanders, a free port was established in 1860 at Gaspé, where vessels could buy their supplies free of duty, but after a three-year triel the system was abandoned as it was not found to be a success on account of the monopoly control of the local merchants.

All these difficulties were a factor in inducing the various provinces to enter Confederation, the change in the Quebec Resolutions in 1866 to give the Federal Government control over the fisheries reflecting the importance attached to Confederation as a means of resisting the competition of New England. With Confederation the picture becomes clearer and we have the beginning of a statistical record which enables us to trace the growth of the Dominion's fisheries production and trade.

No. 286. Tues. Sept. 12, 1944 - Trend in Fisheries Production

Prior to Confederation the story of Canada's fisheries is practically confined to the Atlantic coast, although the Hudson's Bay Company had exported British Columbia salt-cured salmon to the Hawaiian Islands and Asia from 1835 to 1858; but by 1880 a production of \$713,335 was recorded for the Pacific province. The first cannery was apparently in operation in 1870 and the industry centred around the canning of salmon.

A tendency towards amalgamation became evident about the turn of the Twentieth Century when the British Columbia Packers' Association acquired 41 plants. The value of the catch in British Columbia jumped from \$4,878,820 in 1900 to \$7,942,771 in 1901, reached \$27,282,223 in 1918 and fell to \$13,953,670 in 1921.

As early as 1905 British Columbia exceeded Nova Scotia in the value of the output of the fisheries. The introduction of improved Diesel engines and the falling-off of the sockeye run on the Fraser River hastened the trend towards large control and the development of the northern regions and in the prosperous period of the 'twenties large capital organizations were formed,

In 1893 the halibut fishery was developed on Porcher Island in Hecate Strait, the fish being shipped in a frozen state to New York. The third fish in value, herring, was first fished for by a New Westminster firm in 1877, but the process of packing was not successful. However, herring oil was extracted about the same time in Burrard Inlet.

The value of Canada's fisheries production in 1870 was \$6,577,000; in 1900, \$21,550,000; 1920, \$49,241,000; 1930, \$47,804,000; 1940, \$45,119,000; 1941, \$62,259,000; and in 1942, \$75,117,000.

No. 287. Wed. Sept. 13, 1944 - Export Trade in Fish Production

The trade return for the fiscal year 1868, the first year of the new Dominion, showed a total value of \$3,357,510 in exports of the products of the fisheries, of which Nova Scotia catches accounted for 71 per cent. At that time the principal exports for the old Province of Canada (Ontario and Quebec — mainly the latter) were dry-salted fish to the value of \$444,449, of which 38 per cent went to Italy, 18 per cent to Spain and Portugal, 8 per cent to the British West Indies and 25 per cent to Brazil and other South American countries. In Nova Scotia also the dry-salted product constituted the major portion of the exports, or 60 per cent, followed by wet-salted with 33 per cent.

The leading market for Nova Scotia was the British West Indies, which took over half of the dry-salted and 46 per cent of the total exports, while over half of the wet-salted product went to the United States. Other foreign countries took 26 per cent, largely dry- and wet-salted. In the case of New Brunswick, the main markets were the United States, which took 49 per cent, and the United Kingdom 35 per cent. Wet-salted fish was the main New Brunswick product, but the balance between products was more even than in the other provinces.

By 1880 the value of the fisheries exports had risen to \$6,579,656 and figures are available by kinds of fish. Ground fish (cod, haddock, ling and pollock) in the dry-salted state accounted for 54 per cent of the total, preserved lobster was in second place, mackerel was exported to the value of \$686,414, and herring and salmon were also well up among the exports. The United States was the principal market, taking 26 per cent of the total fish exports, unless the British and Spanish West Indies are taken together, their joint share amounting to 38 per cent; while the United Kingdom took 17 per cent. As regards shellfish, the United Kingdom took 6,124,889 pounds of preserved lobster valued at \$640,760, and the United States 2,586,596 pounds valued at \$267,792.

In 1890 British Columbia made its influence felt in the export trade, the value of canned salmon being \$2,069,736 out of a total of \$8,461,906 for all fish. Drysalted cod still maintained the leading position with a value of \$3,014,275, the British and Spanish West Indies being still the main markets for this products, while the wet-salted form had almost disappeared from the returns. The United Kingdom was the largest market for canned salmon and the exports of canned lobster were almost equally divided between the United Kingdom and the United States. The fresh fish trade with the United States was becoming an appreciable item and each of the seven provinces contributed its quota, the exports of inland fish from Ontario amounting in value to \$350,962.

No. 288. Thurs. Sept. 14, 1944 -- Expansion in Fish Exports

By the turn of the century the fisheries exports had increased by 234 per cent since Confederation, the total value for 1900 being \$11,224,866. Dry-salted cod and canned salmon still led in value; but canned lobster, with a value of \$2,372,859, now accounted for 21 per cent of the total value of fish exported as against 12 per cent ten years earlier. France was coming into the picture as the third greatest consumer of this commodity.

In the fiscal year 1910 exports had increased to \$15,663,162, or by nearly 40 per cent in the decade, and canned salmon accounted for 31 per cent of the total. Dried fish was now in second place, and canned lobster in third, with an increase in value of 10 per cent but a decrease in quantity of 7 per cent. The dried-fish trade still centred upon South American and Caribbean markets but the United States took 12 per cent of the product and Italy 7 per cent. France was the main market for canned lobster.

By the end of the next decade fish exports had increased in value to \$42,227,—996, or by 169.6 per cent in the ten years. The trade in fresh and frozen products amounted to \$8,263,388 but, by species, the first three places were held by the same products as in 1910; canned salmon being valued at \$12,067,319, dried cod at \$8,002,673, and canned lobster at \$4,083,678. Other commodities valued at \$1,000,—000 or over were: "Other fish, fresh and frozen"; salmon, fresh and frozen; cod, green-salted; and whitefish.

The United States was still the principal market for fresh and frozen fish, but the United Kingdom, the West Indies and Oceania all took small amounts of the product. The United Kingdom, France and the United States were the main markets for canned salmon, with Australia, New Zealand and the Stralts Settlements also taking appreciable amounts; the United States took the major portion of the dried cod, followed by Cuba, the British West Indies, Brazil and British Guiana; while the main market for canned lobster had shifted to the United Kingdom, followed by the United States, France and Denmark.

No. 289. Fri. Sept. 15, 1944 -- Fish Exports in Recent Years

In 1930 the effects of the world-wide depression were making themselves felt on the trade and the total value of fish exports was only \$31,869,350, owing partly to lower prices and partly to lesser quantities. Fresh lobster had advanced to fifth place and was all directed to the United States. The only change in the market for dried cod was that I taly took close to 17 per cent of the amount exported, or nearly eight times as much as in 1920. Canned salmon was sent to most of the countries of the world, I taly, Belgium, Chile and British South Africa being added to the list of nations taking an appreciable amount.

In 1939, the latest pre-war year, the value of fish exports dropped by seven per cent to \$29,641,232. Shipments of canned salmon, however, increased both in quantity and value, at prices slightly lower than in 1930; "Other fresh-water fish", in second place, also showed increases in quantity and value, in spite of considerably lower prices than in 1930; while fresh lobster showed the same trend and had out-stripped the canned product in value. Fresh and frozen salmon was in fourth place, with a large increase in quantity but only a limited rise in value, owing to a fall in price of about 19 per cent. Canned lobster declined in both quantity and unit price. Exports of halibut, in the fresh and frozen state, were valued at \$1,203,135, and showed an increase of 223.7 per cent in quantity and of 158.8 per cent in value over 1930.

No. 290. Sat. Sept. 16, 1944 - Effects of the War in Canadian Fisheries

At the outbreak of war in 1939 the Pacific fisheries were efficiently organized, both as to landing and processing operations, with large corporations and strong unionization of labour as outstanding characteristics. The product was shipped largely in the canned or frozen state and the trade was dependent to a major degree upon the export market; only about 35 per cent of the salmon catch of 1939, for instance, being consumed within the Dominion.

While the Pacific fisheries suffered from the requisitioning of vessels by the Navy and later from the exclusion of Japanese from the fishing grounds and the canneries, these developments do not appear to have affected production appreciably. The war caused the loss of the Oriental market for salted herring but this has been replaced by the canning of herring for the British Government, which has also taken the major proportion of the output of canned salmon. Large quantities of fresh halibut and other flat fish are also sent to the United Kingdom.

The inland fisheries are of a highly seasonal nature and their product is almost wholly in the fresh form. While they could be considered as a relatively undeveloped industry at the outbreak of the war, both the Federal and Provincial Governments have been taking an increased interest in this resource, with a resulting intensification of exploitation. The chief effect of the war has been the diversion of a larger proportion to the United States, as a result of the higher prices obtaining there.

The Atlantic fisheries were in a state of arrested development with catching techniques backward and a probable excess of labour in the important ground-fishing phase of the industry. The fisheries fall naturally into two main branches, the fresh and canned and the salted. The first suffered from inefficient catching technique and consequent variability in supply and from an equally inefficient distributive mechanism; the combination of these two conditions resulting in very high costs of production and distribution.

The main canned products were lobster and sardines (herring). The first was declining in importance owing to the growth in the fresh lobster trade. In the ground-fish industry, the production of fresh frozen fillets was being developed at the expense of other forms of fresh, smoked and salted fish.

While the once-paramount salted-fish industry is still important, it faces steadily contracting markets, practically all the product being exported. In the past salt fish has served as a cheap protein food for tropical and semi-tropical countries and of late has experienced great difficulty in meeting the competition of higher-grade, lower-cost or subsidized products from other exporting countries, and of substitutes made available by modern refrigeration. In addition to suffering from the same inefficiencies as the fresh trade, uneconomic competition between exporting firms was an added difficulty.

The effects of wartime conditions on the Atlantic fishery have been the most far-reaching. Especially during the 1942-43 period, prices have risen rapidly and are now about three times the pre-war level; they are, for the most part, under ceilings.

The need for increased production has led to some attempt to rationalize the industry on the East Coast for the first time. The Dominion Government has subsidized trawler (dragger) construction by firms and groups of fishermen and has undertaken experiments to perfect other high-efficiency techniques for the catching of groundfish.

The War has provided the Atlantic Coast trade with a greatly expanded demand for its products and the necessity of ensuring equitable distribution of food supplies among the Allied countries has resulted in the rationing of the exportable surplus of salted fish among the countries whose need is greatest. Less rigid restrictions are placed upon the trade in pickled fish. Large quantities of fresh and canned fish are earmarked for the United Kingdom or for relief and rehabilitation purposes. In all this, however, the market contacts of the trade have been preserved in so far as possible.

No. 291. Sun. Sept. 17, 1944 -- Post-war Position of Canada's Fisheries

The problem of the fisheries in the early post-war period cannot be viewed apart from those of the national economy as a whole. A general rise in living standards — combined with efficient methods of catching, preparing and distributing fish-food products — might double the present domestic consumption, but the industry could be expanded to produce a much larger supply for export as well. The outlet for this supply will depend upon the welfare and trade policies of the nations after the war.

The Pacific fisheries will probably be able to produce a greater pack of salmon when the effects of the removal of the obstruction in the Fraser River are fully

realized and should be able to maintain its position in the United Kingdom market, although competition will probably be encountered from the similar products of the U.S.S.R. The wartime production of canned herring will presumably be reduced but may be replaced by the production of salted herring should conditions in China improve, while the expansion of the herring-meal and -oil industry will be regulated by the absorptive capacity of agriculture and the chemical industry. The wartime production of vitamin oil may quite probably carry over to pence-time, but the expansion of the halibut industry is limited by the demands of conservation.

On the Atlantic Coast, the improvements in the ground-fishing industry may be extended to the pelagic fishery, with the possible establishment of floating factories equipped to handle both ground and pelagic species. The salt-fish industry will probably continue to decline, with the emphasis shifted to the production of fresh and frozen fillets; but the wartime improvements in the canning of sardines may permit of greater competition with the European product.

No. 292. Mon. Sept. 18, 1944 - First Estimate of Grain Crops

The wheat crop in Canada in 1944 is placed at 447,656,000 bushels in the first estimate of production of principal grain crops issued by the Domin on Bureau of Statistics. Compared with the third estimate of the 1943 crop, production in 1944 is 154,000,000 bushels greater. The crop this year is the third largest produced during the five years of war. The 1942 wheat crop totalled 557,000,000 bushels and that of 1940, 540,000,000 bushels.

Production of wheat in the three Prairie Provinces this year is estimated at 423,000,000 bushels compared with 277,000,000 bushels in 1943. The 1944 crop includes 11,000,000 bushels of amber durum wheat divided equally between Manitoba and Saskatchewan compared with less than 7,000,000 bushels produced by these two provinces in 1943. The average yield of wheat in western Canada this year is estimated to be 18.3 bushels per acre compared with 16.6 bushels in 1943.

Ontario accounts for most of the wheat produced outside of the three Prairie Provinces. Production of winter wheat there this year is estimated at 20,708,000 bushels and spring wheat at 771,000 bushels, making a total wheat crop of 21,479,000 bushels. Some winter wheat is produced in Alberta but the quantity is relatively small and is included in the spring wheat total for that province.

Production of oats in Canada this year is estimated at 526,138,000 bushels compared with 482,022,000 bushels in 1943, an increase of approximately 44,000,000 bushels. This increase is due largely to the better crop in Ontario where production is placed at 65,000,000 bushels compared with about 35,000,000 bushels last year. The oats crop in western Canada is only slightly above that of last year but acreage in 1944 was 1,342,000 acres smaller than in 1943.

Barley production in 1944 is smaller than a year ago despite a fairly substantial increase in the size of the Ontario crop. The new crop is estimated at 203,776,000 bushels for the Dominion compared with 215,562,000 bushels produced in 1943. Acreage seeded to barley in western Canada in 1944 was about 1,000,000 acres less than a year ago and this more than offsets the better yields per acre in the Prairie Provinces.

A large rye crop is indicated for 1944, production in Canada of both spring and fall rye being estimated at 10,581,000 bushels compared with 7,143,000 bushels in 1943.

The flaxseed crop this year promises higher yields per acre but the acreage in the Prairie Provinces was sharply reduced this spring and the western crop is little better than half of the 1943 production. The total flaxseed crop in 1944 is estimated to be 10,082,000 bushels compared with 17,911,000 bushels produced a year ago.

No. 293. Tues. Sept. 19, 1944 -- Canada Develops New Weapon

Long on the secret list, a powerful new weapon, the Sexton, a 25-pounder full-tracked, self-propelled gun mount, was revealed recently. Designed by Canadians and built only in this country, it has already been made in sufficient quantities to supply the Canadian Army, and is now being made for the British Army.

In making the announcement, Munitions Minister Howe paid tribute to the genius of the Canadian designers of the new weapon. "Canada can rightly take pride in the inventiveness of her engineers and skill of her workers in turning out this Canadian weapon," he said, adding that much of the credit is owing to the Army Engineering Design Branch and the Automotive and Tank Production Branch of the Munitions and Supply Department.

This new weapon travels on tracks, and serves as an artillery unit in armored formations. It is also employed as a tank buster. A modification of the Canadian-designed Ram tank, it is actually a turretless tank carrying the deadly 25-pounder gun. It has the same speed and manoeuvrability as the fastest of Allied tanks, and fires with great effect at high speed and long range.

The gun for the new mount is virtually the same as the 25-pounder which stopped Rommel at El Alamein, and has been used with great effectiveness in all subsequent British and Canadian engagements. On the Sexton mounting, the mobility and usefulness of the 25-pounder have been more than trebled.

Operated as a single unit, it dispenses with the standard artillery tractor and trailer, and carries within itself its crew of six and its ammunition. Its great speed and climbing power are supplied by an air-cooled aviation engine situated at the rear. Its gun fires from a frontal position, can be elevated 40 degrees and depressed nine degrees below the horizontal.

This "blitz mount" is open topped, and provides armor protection for the crew to approximately shoulder height all round, with higher and heavier shielding in front. Equipment for the crew includes machine guns which can be fired free or from mountings, as well as sub-machine guns and rifles. Each vehicle is fitted out with wireless equipment permitting the crew to talk to each other, to crews in other armored vehicles, to headquarters and to distant establishments.

Many of these Canadian "tank busters" have already been turned out by the Government-owned tank arsenal in Montreal. Before undertaking this contract, the arsenal delivered 1,940 Ram medium cruiser tanks, as well as a number of Grizzly M4-A1 tanks, the Canadian version of the U.S. Sherman, and a few other types of tracked vehicles. The guns are produced by the Sorel gun plant which has made more than 3,000 since the spring of 1941, including 1,684 units on standard mobile carriages.

The Canadian Ram, from which the Sexton was developed, was designed by Canadian engineers. Manufactured from the spring of 1941 until the summer of 1943, the Ram incorporated the best features of British and American medium cruiser tanks, plus several purely Canadian innovations, including the one-piece cast-armor

upper hull. It has been acknowledged that the Ram served as the inspiration for the femous U.S. Shermen tank, which is now the standard medium cruiser tank for all United States, British and Canadian armored forces.

No. 294. Wed. Sept. 20, 1944 -- Christmas Trees Will Be Scarce

Wartime shortages, which brought about an over-all scarcity of Christmas trees last year, have been increased by the needs of the invasion, and this year the marketing of Christmas trees will be still more difficult, according to government sources. Cutters, dealers, shippers, and retailers, have been warned that they will be handicapped by the shortage of railway equipment, by the critical scarcity of manpower, and by the restrictions on the use of trucks.

Transport Controller T.C. Lockwood stated that the railways have been prohibited from carrying Christmas trees in flat or open-top cars, or in box cars suitable for transporting grain, feed, and other essential commodities requiring such equipment. "The war developments of the past few weeks, have placed enormous pressure on the railways", he said. "In all probability this pressure will reach a peak this coming autumn. Thus it is unlikely that even rough freight cars will be available for non-essential commodities".

Arthur MacNamara, Director of National Selective Service, announced that his officers are being instructed to refuse work permits for Christmas-tree cutting. This will make it impossible for contractors to hire men for this purpose.

"No special permits exempting applicants from the existing regulations will be granted to motor truck operators for the transportation of Christmas trees," said J. R. Croft, Administrator of Services, Wartime Prices and Trade Board.

Timber Controller Alan H. Williamson stated that no regulation will be issued to restrict the cutting of Christmas trees by individual farmers. "But with overall stocks of wood fuel still below normal, and with fuel a national problem, I would urge farmers to produce firewood wherever practicable", he said.

No. 295. Thurs. September 21, 1944 - Profit in Poultry Flock

Selection is the basis of successful poultry operation, and quality not quantity is the factor that will eventually determine the profit that may be made from the poultry flock. In September it is necessary to decide on the number of pullets that will be kept and to select from the range those that will comprise the flock for next year's work. As one hundred good pullets may lay more eggs then two hundred poor ones, the importance of selecting only those of good quality will be readily recognized.

To a great extent successful selection will depend on the operator's experience and power of observation though the promising bird carries unmistakable signs of quality, chiefly by her size and maturity. Pullets hatched before the end of April should be laying or closely approaching that condition before it is necessary to bring them in off the range. Those approaching maturity are readily recognized by their full coat of glossy feather, reddening comb and bright eye.

All the birds should be handled and examined individually and those showing slow growth of feather, immaturity, or any physical defect should not be kept under

any circumstance. Unthrifty birds take up feed, space, and labour that should be spent on a profitable laying bird. The weakling is a menace to the rest of the flock. It is often the medium of infection and disease.

Though governed to some extent by date of hatch, feed and environment, early maturity and all round quality are the result of good breeding. In the Barred Plymouth Rock flock on the Experiemntal Station at Harrow the average age of maturity or first egg is five months for April hatched pullets. Generally pullets hatched later than April are not only later in reaching maturity but take longer, consequently they are more expensive to raise.

Cost of production increases in proportion to the number of birds of poor quality in the flock and the time to cut the poor bird liability is now.

No. 296. Fri. Sept. 22, 1944 -- Boys' and Girls' Farm Clubs

Plans for the 1944 national competitions and educational program for junior farm club teams were made at a recent meeting of the Executive Committee of the Canadian Council on Boys' and Girls' Club Work.

This annual national event will be held during the week beginning November 19. Provincial championship teams, selected in provincial elimination contests, will arrive at Toronto on that day. The various project contests, for the dairy cattle, beef cattle, swine, poultry and seed grain and potato projects, will be conducted on November 20 and 21 and the remainder of the week will be devoted to educational tours ending in Ottawa on Friday, November 24.

The competition in each project includes an oral examination and judging classes. The oral examination will be held at Toronto on November 20. While arrangements are not yet completed, it is hoped to have the judging work for all projects at the Ontario Agricultural College, Guelph, on November 21. Last year, for the first time, all of the club teams were taken to the College at Guelph for their judging classes. This arrangement proved to be so satisfactory that the Executive Committee of the Council unanimously agreed that, if possible, a similar plan be arranged for this year.

Interest in junior farm club work is being strongly maintained again this year despite the scarcity of young people in rural areas, transportation problems, shortage of farm labour and other handicaps resulting from war conditions.

No. 297. Sat. Sept. 23, 1944 - Winter Storage of Vegetables

Vegetables should be harvested as late in the season as possible for winter use, and when digging the roots care is necessary so as not to damage them as the slightest bruise will cause rot in storage, says an official of the Dominion Department of Agriculture.

The tops should be cut off close to the crown, as the ends of the leaf stalk if left on will also cause rot in storage. Beet tops should be twisted off, not cut. Good housekeepers can the beet roots when small as they become tough if kept in storage for any length of time.

Carrots, parsnips and salsify may be stored in boxes, placed in layers with either damp sand, moss, or sawdust. If sawdust is used it should be from hardwood, as softwood sawdust may cause rot or fungus. In the fall a few parsnips may be

buried about one foot deep in a corner of the garden and dug up again in the spring, when the quality of the parsnips will be found to be improved.

Potatoes and swede turnips do not require packing in any material, but put in boxes or barrels with the top exposed. Potatoes when dug should be left for a short time on the ground so as to allow the outer skin to dry. This is not necessary for turnips.

The later varieties of cabbage such as the Late Danish Ballhead are better for storing, as the earlier varieties do not keep well. A few plants may be pulled with roots intact. All leaves except a few close to the head should be removed and the plant suspended from the roots from the ceiling of the storage room; or the heads may be cut just below the base. Loose leaves should be taken off and the heads placed on a slatted shelf, head down in two or three layers. As the cuter leaves decay they should be removed. Heads will keep well in some cellars if rolled in several sheets of paper.

Onions should be pulled and left in the garden for a week or ten days before storing. The tops and roots should then be removed and placed in slatted boxes or spread cut on the floor in a dry warm place for a few weeks, then placed in the coolest part of the cellar.

Celery, like parships, should be harvested at the end of the season. Choose a dry day and lift the plants with most of the soil on the roots. All decayed outer leaves and any suckers appearing around the base of the plant should be removed. Place them in boxes, covering the roots with soil, or, if space will allow put them as close as possible on the floor in a bed of about four plants to a row. Cover the roots and keep them well watered but be careful not to let the water on the leaves or into the heart. Leeks may be treated the same as celery.

Squash, citron, vegetable marrow and pumpkin, unlike the foregoing, require warmth, and should be stored in the warmest part of the cellar or in the attic, where it is dry and warm. The fruit should be well ripened on the plants and harvested before the cold nights come. Place the fruit on shelves where possible, but never in barrels or boxes. Be very careful not to bruise the outer skin at any time. Examine the fruit often, using the unripened first as they will not keep well.

No. 298. Sun. Sept. 24, 1944 -- History of Wheat Growing

The growing of wheat in Canada can be traced back approximately 340 years. A French settlement in the Maritimes is reputed to have grown wheat in 1605 and in 1616 Champlain writes of a fine sample of wheat being cut at Quebec for shipment to France.

In the middle of the eighteenth century, Canada was actually exporting wheat, shipments in 1754 amounting to 80,000 bushels. Newfoundland and the French West Indies were the principal markets in which the wheat was then sold, but in 1770 export shipments to Great Britain were recorded.

The records of 1802 show that between April 5 and July 5 of that year some 29 wessels cleared from the port of Quebec with wheat. Of this number six sailed for Barcelona, five for Hull, three for Cork, three for "Cork and a market", two each for Halifax, Bristol and Liverpool, and one each for Greenock, Cadiz, Sunderland, Newfoundland, Jersey, Madeira and Leghern.

But it was not until later in the nineteenth century, when Western Canada went into the production of wheat, that the type known in world markets as "Manitobas" put the hallmark of quality on Canadian wheat which the Prairie Provinces to-day still jealously guard.

The Lord Selkirk settlers who came from Scotland to the Red River valley in 1812 first introduced wheat growing to the western provinces, and it was in the Province of Manitoba that the strong hard wheat for which Canada has become famous first made its appearance.

Failures, plagues of mice and grasshoppers, and floods in turn destroyed the crops of the early colonists and in 1868-69 wheat for seed had to be brought in from the United States. It is believed that among this wheat was the seed from which the famous "Red Fife" type was grown. From this wheat Dr. Saunders produced, between 1904 and 1909, the celebrated "Marquis" type upon which Canada has built a world-wide reputation for quality wheat, unsurpassed to-day in any producing country.

The first shipment of this superior wheat of the western plains, direct to Great Britain, was made in 1877. It was consigned by Robert Gerrie to Barcley and Brand, Scotland and went cut by Red River steamer to St. Paul, thence by rail to seaboard.

Seven years later, with the completion of the Canadian Pacific Railway in 1884 as far west as Moose Jaw, the first shipment of Western Canada wheat to Britain by the all-Canada route was made by the late Thomas Thompson of Thompson & Sons, Brandon, Manitoba.

This shipment consisted of 1,000 bushels of Manitoba No. 1 Hard. It was sacked and shipped by rail and water to seaboard. Exacting 21 days after the movement of the wheat commenced from Brandon, it was landed on the docks at Glasgow. By this shipment the "all-Canada export route" was established.

So much for the beginnings and early history of wheat growing in Canada. We come now to the era of rapid development, not only of the area sown to wheat, but of transportation and handling facilities which enabled Canadian wheat to spread itself around the world, and find markets in almost every corner of the globe.

No. 299. Mon. Sept. 25, 1944 -- Methods of Marketing Wheat

Methods of handling and marketing Canadian wheat, took shape with the formation of the Winnipeg Grain Exchange in 1908 and the legislation which established the Canada Grain Act in 1912. The Winnipeg Grain Exchange, a voluntary association, defines one of its objectives in the constitution of 1908 as follows: "To organize, establish and maintain an association not for pecuniary profit or gain, but for the purpose of promoting objects and measures for the advancement of trade and commerce respecting the grain trade for the general benefit of the Dominion of Canada". This organization established what is known as the "futures market", with headquarters in Winnipeg. There had previously existed an organization known as the Winnipeg Grain and Produce Exchange which came into being in 1887.

The erection of country elevators and terminal storage warehouses developed with the expansion of the grain-growing business in Western Canada in the early part of the twentieth century, and in 1912 the Canada Grain Act was enacted, by which was established a grading system for Canadian wheat and the issuing of Government certificates as a guarantee of quality. Buyers of wheat in Europe made their

purchases from countries like Argentina, Australia and India on the basis of f.a.q. (fair average quality), while from other countries they bought on a "sample" basis; but in the case of Canadian wheat they bought on the Canadian Government "certificate final". The grain is inspected by Federal grain inspectors and graded according to the terms of the Canada Grain Act, while terminal and other elevators also come under the supervision of the Board of Grain Commissioners set up to administer the Canada Grain Act.

The Grain Research Laboratory, established by the Board of Grain Commissioners, collaborates with the Inspection Department and has made a very valuable contribution to the maintenance of high quality in Canadian wheat. The Laboratory has conducted over a period of years annual surveys of the protein content of Western Canadian wheat, and has published informative bulletins and maps each year. It also conducts baking tests with flour milled from Canadian wheat and issues annually a report dealing with the baking quality of the Prairie wheat crop.

No. 300. Tues. Sept. 26, 1944 - Wheat Pools

A challenge to the marketing system established by the Winnipeg Grain Exchange came in 1923 when farmers in the Prairie Provinces began to organize co-operatives. The first of these organizations, known as the Alberta Wheat Pool, came into being in the fall of that year. This body commenced operations on October 29, 1923, with a membership of nearly 26,000 and with 2,500,000 acres of wheat under contract. Then followed the organization of similar bodies in Saskatchewan and Manitoba, but it was not until the fall of 1924 that the Saskatchewan and Manitoba wheat pools began to handle wheat.

With the three wheat pocls in operation in the Prairie Provinces it was decided to establish a central selling agency, which would undertake the disposition of wheat delivered by members to their respective provincial organizations. The central selling agency was established in Winnipeg in the fall of 1924, and in the succeeding years the wheat pool organizations handled wheat on the basis of an initial payment to the growers, which was decided upon each year, plus interim payments as the grain was disposed of on world markets. The pool organizations operated largely on the basis of direct sales to buyers abroad, preferring to by-pass the machinery of the futures market and the hedging facilities of this market. A general collapse of prices in the fall of 1929 ran the wheat pools into financial difficulties, and the provincial governments had to provide a backing, which the pools have been repaying with interest.

The fall in wheat prices continued through 1930, and it became necessary in November of that year for the Federal Government to undertake stabilization operations. These were continued until 1935, when the Canadian Wheat Board Act was passed, and a three-man board established for the purpose of stabilizing the price of wheat by offering a fixed price to growers. This was substituted for the former method of stabilizing through purchases on the futures market. In the meantime, the central selling agency of the wheat pools had closed down its fore gn offices, and the pools operations were confined largely to the handling of the r members grain at country elevators and the large terminals which had been erected at Fort William-Port Arthur and on the Pacific Coast.

No. 301. Wed. Sept. 27, 1944 -- Canadian Wheat Board

The creation of the Wheat Board in 1935 did not interfere with futures trading on the Winnipeg Grain Exchange as had the Board of Grain Supervisors established by

the Dominion Government in 1917 and the first Canadian Wheat Board established in 1919. The Boards of the first Wold War period had been established in an effort to halt the rise in wheat prices, and it was found advisable at that time to close the futures market at Winnipeg; but under the terms of the Wheat Board Act of 1935 the new Board was authorized to use regular trade channels in the course of its wheathandling operations.

It was not until September of 1943 that it became necessary to close the futures market at Winnipeg and place full authority in the hands of the Canadian Wheat Board for the marketing of the Western Canadian wheat crop. The Federal Government at that time established a fixed initial price of \$1.25 per bushel for No. 1 Northern wheat in store Fort William-Port Arthur or Vancouver. The Canadian Wheat Board was empowered to take over all stocks of cash wheat, and futures trades were ordered to be closed out at the closing price ruling on the Winnipeg Grain Exchange on September 27, 1943.

It was during the first World War that acreage and production of wheat in Canada expanded most rapidly, particularly in the three Prairie Provinces. The wheat acreage in 1914 in Canada was just over 10,000,000 acres, but in 1919 it exceeded 19,000,000 acres. The production in Canada of 393,000,000 bushels in 1915 saw the Prairie Provinces produce an average yield of 26 bushels of wheat to the acre, a record which still stands.

Acreage continued to expand in the period between the two Great Wars and reached the highest point on record during the first year of World War II, when 28,726,000 acres were seeded to wheat in Canada, and all but 1,000,000 acres of this in the three Prairie Provinces.

No. 302. Thurs. Sept. 28, 1944 -- Wheat Trade Between Wars

International trade in wheat witnessed its greatest expansion during the ten years after World War I. Net world exports of wheat and wheat flour in the five years 1909-14 had averaged 686,000,000 bushels annually, but in the five years 1922-27 this annual average rose to 777,000,000 bushels and during the crop year 1928-29 the all-time record of 946,000,000 bushels was reached. These figures are taken from a statistical record compiled by the Wheat Advisory Committee in London, England.

Canada's share of the world market rose steadily during this post-war period and almost 43 per cent, cr 406,000,000 bushels, of the record total shipped in the crop year 1928-29 consisted of Canadian wheat and wheat flour. Europe had not yet recovered from the devastation of the 1914-18 war and the wheat surplus-producing countries of the world enjoyed a very liberal trade in foodstuffs.

Nationalistic policies began to emerge in the late twenties, however, and when the depression era arrived in 1929-30 and reached its depth in 1932-33 there existed in many European countries tariffs and other obstacles to trade in wheat, while national policies were mostly in the direction of subsidizing wheat production at home. This resulted in contraction of the market for Canadian and other wheat from overseas, and in 1935-36 the total net exports of wheat and flour in the international market shrank to 525,000,000 bushels.

Trade began to pick up again in 1938-39 when fears of a second European war were developing and a number of countries began to lay in reserve stocks. Net exports of wheat and flour in that year totalled about 643,000,000 bushels and held

close to that level in 1939-40, the first year of World War II. Thereafter, with most of Europe occupied by the Nazis, international trade dwindled rapidly and was estimated at only 360,000,000 bushels in the crop year 1942-43, of which Canada furnished 215,000,000 bushels or about 60 per cent.

A period of severe drought in North America in the early thirties brought about changes in the sources of wheat supplies. The United States changed from a heavy exporter of wheat to a net importer for several years, but Australia and Argentina, and for a short period Russia, became strong competitors of Canada in the world market. The United States returned as an exporter of wheat in volume in the two years preceding the outbreak of the second world war and in that period all four of the major exporting countries found themselves with growing surpluses despite the fact that Canada had practically cleaned out all her surplus wheat by the middle of 1938, following a crop failure in 1937.

The growing wheat surplus, produced by the shrinking world trade and continuance of heavy production in the major exporting countries, had created an international problem of magnitude and discussions on an International Wheat Agreement took place in London, England, during the first eight months of 1939. These discussions were halted by the outbreak of war on September 1, but a resumption of wheat agreement talks took place in Washington in 1941 between the representatives of the four major wheat exporting countries and representatives of the United Kingdom Government. These talks culminated in the signing of a Memorandum of Agreement on June 27, 1942, which was approved by the Governments of Argentina, Australia, Canada, the United Kingdom, and the United States, effective on that date.

No. 303. Fri. Sept. 29, 1944 - Wheat Conditions in Present War

The second world war produced many changes in the wheat situation. Stocks of surplus wheat were heavy in the fall of 1939, but for the greater part of the first year of war international movement of wheat was on a fairly liberal scale. The invasion of Norway, Denmark and the Low Countries in the spring of 1940, and later the conquest of France, eliminated markets to which Canadian wheat had been sold in substantial quantities prior to the war, but this was offset by larger exports to Great Britain.

The shipping situation had greatly curtailed the movement of wheat from Australia and Argentina, and the entry of Japan into the war further aggravated Australia's position as a wheat exporter. As a result, Canada became the principal source of supplies, particularly for the United Kingdom market, and continued in that role into the fifth year of the war.

The first major change in wartime wheat policy in Canada was made in 1941, when the Dominion Government encouraged a reduction in the acreage seeded to wheat by direct payments to farmers. The growing demand for Canada to supply live stock and live-stock products was largely responsible for the shift away from wheat to the production of feed grains. The existing reserve stocks of wheat were large enough to permit of a drastic reduction in wheat acreage and Canadian farmers responded to the new policy by reducing the acreage planted to wheat in 1941 by nearly 7,000,000 acres. Continuation of these payments into 1943 saw the wheat acreage in Canada fall to its lowest level since 1918, but in 1944, when acreage reduction payments were discontinued, a sharp increase in wheat acreage took place.

The crop year 1943-44 witnessed a phenomenal use of wheat for live-stock feed, particularly in the United States where feed grain supplies were insufficient to

maintain the greatly increased live-stock population. It became necessary to substitute wheat for corn and other feed grains, and eventually Canada had to ship very large quantities of wheat to the United States for use there as live-stock feed. At the same time the use of wheat for animal feed in Canada also increased to a record level of more than 100,000,000 bushels. Preliminary figures for the twelve months ending July 31, 1944, indicate that a total of 570,000,000 bushels of wheat was fed to live stock and poultry in North America or about the same quantity as required to feed the human population. Substantial quantities of wheat were also used for the production of industrial alcohol in both the United States and Canada.

Canada's volume of wheat exports has not suffered during the five years of war. The total exports of wheat and flour in this period actually show an increase of about 35 per cent over the five years immediately preceding the war, but the distribution of these exports changed radically in the war period for reasons already mentioned.

No. 304. Sat. Sept. 30, 1944 -- Fire Prevention Week

By Proclamation published in the Canada Gazette the week commencing Sunday October 8 and ending Saturday October 14, 1944 has been appointed "Fire Prevention Week" in Canada. Authoritative statistics compiled by the Dominion Fire Commissioner show that during the past ten years 470,000 fires in the Dominion have destroyed insurable property valued at more than \$264,000,000 and that during the same period 2,869 persons lost their lives, and at least 10,000 others have been seriously injured as the result of fire.

As pointed out in the Proclamation, humanitarian, wartime, and economic considerations demand that human life and material resources in Canada be so far as possible conserved in order that Canada's war effort be unobstructed and the general welfare of the people may be increased.

· Towards this end, the Proclamation recommends that at some time during the week, as may be found most practicable, the following methods of fire prevention should be carried out:

That all residential, assembly, institutional, commercial and industrial buildings be carefully inspected and all conditions likely to cause or promote the spread of fire removed;

That all farm buildings and their surroundings, elevators, and warehouses be carefully inspected and all fire hazards remedied so as to safe-guard vital food supplies;

That fire drills be held in all schools, institutions, and factories in order that a greater degree of safety be ensured by acquainting the occupants with the best and most expeditious ways of exit in time of danger, and that special instruction on the subject of fire prevention be given by the teachers and by municipal officials in the schools;

That all legislation and regulations enacted or issued by the Dominion, Provincial, or Municipal authorities dealing with fire prevention be given publicity by the municipal officials, and that by public meetings, the press, radio broadcasts, specially-prepared motion pictures, or otherwise as may seem most fit, endeavour be made to impress upon the citizens the national importance of safeguarding life and property from loss by fire.

Now is the time to look around to make certain that not a single preventable cause of fire will be overlooked.



