



# AGRICULTURE



## Increased Hay Crop Reported Over Last Year

### LARGER TONNAGE AVAILABLE IN MARITIMES FOR MARKETING

According to G. LeLachur, Dominion Seed Branch, Sackville, N. B., the New Brunswick hay crop was good over the whole province with increased tonnage available for market in counties which usually produce a surplus, namely Carleton, Victoria, Madawaska, Westmorland and Albert. A quantity of market hay is also available in other districts which normally do not have a surplus. The official estimate of the 1936 N. B. crop is 891,000 tons against 649,000 in 1935. The Nova Scotia crop was 28 per cent over 1935 or 734,000 tons in 1936 against 574,000 in 1935. The P. E. I. crop was 356,000 tons against 263,000 in 1935.

The 1936 crop has more clover than usual and the quality is generally good on the mainland, but showery harvesting weather caused some discoloration, and weedy meadows will also lower the grades in some districts. A considerable portion of the P. E. I. crop was stained by wet weather and is over-ripe from delay in cutting.

The following quantities of market hay were estimated by the Dominion Seed Branch as available on September 10th in the districts stated:

6,000 tons of Timothy, Timothy Grass & Clover Mixtures in Carleton-Victoria.

2,000 tons of Timothy and Clover Mixtures in Madawaska.

10,000 tons of Timothy, Timothy Grass and Timothy Clover Mixtures in Westmorland and Cumberland.

5,000 tons of same classes in Colchester and Annapolis Valley.

4,000 tons of same classes in Queens and Prince Counties, P. E. I.

The fall demand for market hay in the Cape Breton mining towns, Halifax and South Shore districts, has been met in part by truck delivery from contiguous surplus districts, and by rail shipments from Westmorland-Cumberland and Carleton Counties. Lumber camps in Nova Scotia and New Brunswick have taken more than usual quantities chiefly by truck delivery. Quebec supplied Newfoundland demand and exported to Great Britain, but the close of St. Lawrence navigation has left these markets available to Maritime dealers, who must however meet Scandinavian competition in the British market.

Prices to farmers for baled hay on track have ranged from \$5.00-\$6.00—\$7.00 for Grades 3, 2 and 1 in Carleton County.

\$8.00-\$8.50—\$9.50 in Westmorland—Cumberland and \$9.00—\$10.00 in Colchester and Annapolis Valley.

\$8.00—\$8.50 in Prince Edward Island.

The supplies of market hay still available at January 1st are:

Upper St. John Valley 5,000 tons

Westmorland-Cumberland 7,000 tons

Colchester-Annapolis Valley 3,000 tons

Prince Edward Island 3,000 tons

Demand ranges from fair to good. Steady movement in mining towns and lumber camps. There is also a fair demand for export to Great Britain from Westmorland and Carleton Counties, about 60 carloads or 850 tons having gone by boats from Saint John.

The British market requires fair average quality (f. a. q.) or good f. a. q. Timothy-Clover Mixture for the dairy cattle trade, and No. 1 Timothy for horses. An importer has defined "f. a. q." as implying that the hay has been well harvested, of good color, not stained, sweet, and comprised about 50 percent Timothy with as much clover as possible (over 20 percent), with 20 percent or more other grasses of good quality. The London market wants 30 to 50 percent clover with 50 to 30 percent Timothy, and the remainder good grasses.

These descriptions of hay correspond to Canadian Classes and Grades as follows:

Nos. 1 and 2 Timothy Light Clover Mixed.

Nos. 1 and 2 Timothy Medium Clover Mixed.

Nos. 1 and 2 Clover Light Timothy Mixed.

British importers prefer to buy on description, but the Canadian Trade Commissioner at London has stated that Maritime shippers should supply Official Grade Certificates for their own protection in case of dispute as to quality of shipment. It is advisable to send neat bales with three wires, and special color tags to identify lots covered by each Inspection Certificate. Weedy hay, particularly ox-eye daisy, is very objectionable, and hay containing stones which have been picked up in raking, causes serious accidents in chopping machines.

## AMERICANS EATING MORE CHEESE AND CANADIAN EXPORTS ARE LARGER

Americans are evidently becoming a nation of cheese eaters. The per capita consumption increased from 4.64 in 1929 to 5.05 pounds in 1935. During the first nine months of last year Canada supplied 7,979,000 pounds as compared with 569,000 pounds for the same period 1935. Consumption of milk and cream in urban centres is also on the increase. For the first nine months of 1936 Canada supplied the United States with 15,338 gallons of cream, principally from Ontario and Quebec to New York State and Boston.

## Lack of Boron Responsible For Many Crop Diseases, Is View of Fertilizer Council

### THIS SUBSTANCE IS FOUND TO BE EFFECTIVE IN CONTROLLING BORON HEART IN TURNIPS AND OTHER PLANT SCOURGES, RESEARCH DISCLOSES

At a meeting of the Maritime Fertilizer Council, held in Moncton, N. B., recently the subjects of boron in plant nutrition was discussed at length. Boron, according to B. Leslie Emslie, in his Monthly Farm News Letter, is one of the minor elements which, though required in very small amount, is essential to the normal growth of plants. Lack of boron, for instance, has been found associated with brown-heart of turnips, crown-rot of mangels and beets and corky-core of apples.

During several years past the causes and cure of brown-heart in turnips have been investigated in the Maritime Provinces by a committee drawn from the officials of the Dominion and Provincial Departments of Agriculture. Considerable progress has been made, and boron is shown to be distinctly effective in lessening the attacks of brown-heart.

At Macdonald College, Que., a great deal of research work with boron has been accomplished. In Europe the subject has become so important that a Boron Agricultural Bureau has been established at Abford House, Wilton Road, London.

**Boron in Small Doses**

Boron, in the form of commercial borax, is applied usually in the fertilizer and in proportion to furnish as little as ten pounds of borax per acre. Not much, one might remark; yet this small amount of borax applied in a fertilizer for mangels at the Dominion Experimental Station, Kentville, N. S., prevented leaf wilt and produced a yield of 1500 bushels per acre, while the yield from the affected area which received the same fertilizer without borax was only 400 bushels per acre.

Results of experiments made by the West of Scotland Agricultural College indicate that 20 pounds per acre of ordinary commercial borax may be required to control fully the brown-heart of turnips, while the Department of Agriculture of the Irish Free State recommends from 21 to 28 pounds of borax per acre for the control of crown-rot of sugar beets. In the Irish trials borax was used at the rates of 14, 21 and 28 lbs per acre. At some centres borax depressed the sugar content of the beets; but the higher yields obtained gave more total sugar per acre.

**Restricted Use of Boron**

Boron in excess is poisonous to plants and during the war this was brought out very forcibly. When supplies of European potash were cut off recourse was had to the potash-bearing

Maritime shipments of poor quality hay in previous years have caused great dissatisfaction amongst British Importers, and have tended to create a prejudice against all Maritime hay. The Dominion Seed Branch, Sackville, N. B., is sending on January 9th to the Trade Commissioner at London, representative hay samples of the different classes and grades available in the several hay producing districts. These samples will be shown to leading British Importers who have been requested to place their orders on the basis of Canadian Grades, or on f. a. q., the equivalent of say Nos. 1 and 2 Timothy Medium Clover Mixed.

Maritime hay exports must be completed in March, as late British orders are placed in Ontario and Quebec for spring shipment. English Importers prefer Ontario Timothy-Clover Mixtures with Quebec ranking a close second. New Brunswick and Nova Scotia hay is rated down because "it is of softer texture, more like English hay from permanent meadows than from short rotation fields". The mixture of fine grasses in some of our Maritime hays may explain the "softer texture"; and it dictates the advisability of more frequent renewal of our hay meadows, which with necessary lime, manure or fertilizer applications, and draining where required, should result in larger yields of more clover content and less weedy hay.

ing brine of a lake in the United States. This brine contained so much borax that the murate of potash produced therefrom carried about 25 per cent of borax. The results of applying fertilizers deriving their potash from this source proved disastrous to crops and led to lengthy litigation in the courts.

In consequence of this experience a clause was introduced to the Fertilizers Act, which stipulates that no compound fertilizer on the market may lawfully contain more than one-tenth of one per cent of anhydrous borax, or the equivalent of about one-fifth of one per cent of ordinary borax.

Following the comparatively recent discovery that lack of boron in certain soils may be responsible for the occurrence of deficiency diseases, such as brown-heart, crown-rot and corky-core, the restraining clause in the Fertilizers Act has been waived to permit the manufacturer to include boron in fertilizers for turnips, mangels and beets to the extent of two per cent of ordinary borax. The package containing the fertilizer to which borax has been added must bear a special tag imprinted with the statement of boron content and the caution that the substance may prove toxic to crops other than turnips, mangels and beets.

If applied at the rate of 500 lbs per acre, a fertilizer—say, 2-12-6—containing 2 per cent of borax would furnish 10 lbs of borax per acre, and less than this amount could not be expected to effect control of brown-heart.

**Boron Content of Different Crops**

Crops of different kinds vary in their susceptibility to boron toxicity. Cereals contain very little boron normally, legumes notable amounts, and wide variations are found in plants of the same natural order. For instance, beets have been shown to contain 75 times as much boron as was present in spinach, and both plants are chenopods.

Research workers are now studying the influence of residual boron on succeeding crops, and until more is known of the after effects caution marks the recommendations.

**HON. MR. TAYLOR SPEAKS**  
(Fredericton Mail)

Hon. A. C. Taylor, Minister of Agriculture, was the principal speaker at the Supper given by the Warden of York County here Thursday evening. Mr. Taylor represented the Provincial Government in the unavoidable absence of the Premier.

The Minister is, as his friends know, modest and unassuming, but had no difficulty in convincing those who listened to him last evening that he knew exactly what he was talking about. He had a splendid story of achievement to relate and he told it exceedingly well. Particularly pleasing was his reference to the progress being made by farming located in the fertile Saint John Valley in the production of bacon hogs, and expressed appreciation of their co-operation with his department. The story he told of the development by the government of a new and profitable market for New Brunswick seed potatoes in Argentina was almost unbelievable. Yet the farmers of New Brunswick's great potato growing belt have every reason to know that he spoke the simple truth. The action of the government in removing two hundred and fifty carloads of potatoes from the local market, reacted to the advantage of every farmer in the province in the form of increased prices for a leading commodity. The Minister's graceful tribute to the successful Jersey breeders of the Parishes of Stanley and Manners-Sutton, York County, struck a responsive chord, and will be appreciated by the sturdy farmers of these parishes. The Minister struck a decidedly optimistic note in his remarks but it was fully justified by the market improvement in the realm of agriculture.

## Australian Shipments Of Wheat and Flour Are Much Less Than Last Season

### ITALY IS NOW SHOWING INTEREST IN NEW CROP AND PRICES ARE FIRM WITH FARMERS NOT ANXIOUS TO SELL; OLD CROP PRACTICALLY SOLD

M. T. Stewart, Assistant Trade Commissioner, writing from Melbourne in December says that Shipments of wheat and flour from Australia for the period from December 1 to the week ending November 24 totalled 93,986,610 bushels compared with 102,541,528 bushels for the corresponding period of the previous year, and 94,634,879 bushels two years ago.

During the past month Italy has shown strong interest in new-crop cargoes from Australia and prices have continued very firm, with the growers showing little inclination to sell their new crop. The old crop is practically entirely disposed of; this report deals only with new crop quotations.

Harvesting of the new crop is well under way and has been carried on under favorable weather conditions, the latest official estimate placing the crop return at 133 1-2 million bushels. Owing to the activity in the overseas markets, the daily fluctuations in wheat quotations are considerable. The present price is about 5s. 1 1-2 d. per bushel f. o. b. steamer (equivalent to \$1 Canadian) and about 4s. 6 1-2 d. per bushel at country sidings (equivalent to 36 cents Canadian). Undoubtedly the consistent demand for Australian wheat from Italy has been reflected in the local markets and Italy has purchased during November eleven cargoes of wheat aggregating about 3,189,000 bushels. British purchases of wheat in November were about 2,444,000 bushels.

The export flour market, from the miller's standpoint, continues unsatisfactory as although inquiries are more frequent, the supplies of old wheat available for milling are practically exhausted. The new crop is arriving slowly and most flour mills have been working on reduced shifts. Fair business has been booked for Hongkong for December shipment, but Dairen remains closed to Australia owing to the strained political situation.

Export quotations are nominally £10 2s. 6d. per ton of 2,000 pounds in 150-pound sacks (equivalent to \$39.46 Canadian) and £10 10s. per ton in 49-pound calico bags (equivalent to \$40.92 Canadian). The local price of flour is £12 5s. per ton of 2,000 pounds.

**ARGENTINE TRADE PROSPECTS BRIGHT**

**CROP PROSPECTS AND BETTER PRICES HAVE IMPROVED CONDITIONS**

Buenos Aires, Jan. 8.—The current prospects for normal grain crops combined with relatively high prices for both cereals and live stock has greatly stimulated business generally in Argentina and the outlook, on the whole, is very promising indeed for the current year.

The renewal of the commercial agreement with the United Kingdom, except for the duty now imposed on Argentine meats, is not expected in itself to change materially the trade position between the two countries. It removes, however, for another period of three years the feeling of uncertainty among Argentine cattle breeders as to the future of their industry in what is now virtually their only export market. Restricted outlets abroad for agricultural products in recent years have forced Argentina to foster secondary industries, and the increasing political influence of industrial interests has tended to weaken to a corresponding degree the position of the large landowners. The future commercial policy of the country is dependent largely on the possibility of restrictions being removed in the large consuming markets, and at the moment possible developments in the trade relations between Argentina and the United States are being awaited with great interest here.

Despite the much lower exportable surplus of wheat and flaxseed that was available this year, the favorable visible balance of trade for 1936 is expected, due to better prices, to equal that shown last year. The Argentine government have suspended the guaranteed minimum prices on both wheat and flaxseed but continue for the present with the 5-peso per 100 kilos basic price on corn. The improved trade position has strengthened the Argentine peso and the Exchange Control Board have just changed their official selling price from 17 to 16 pesos to the pound sterling. The buying rate remains at 15 pesos, so that the position of the export interests is not affected except in respect of a few minor commodities.

It is generally felt that the Argentine trade outlook warrants a still further appreciation in the value of the peso, and the Government is no doubt studying the reaction to the change already effected with a view to estimating the level at which the peso should be finally fixed and ultimately to eliminate entirely the wide spread between the buying and selling rates. It is not expected that exporters, in view of the high export prices ruling, will object greatly to a rise in the value of the peso.

The steps that are likely to be taken towards ultimately freeing the exchange market entirely from official control other than through operations with stabilization fund to minimize fluctuations will not necessarily mean, and are unlikely for the present to mean, the elimination of the 20 per cent surcharge now in effect on imports without prior permits. Consequently the trade position as between Canada and Argentina, which now confines imports from the Dominion virtually to newsprint and farm implements, remains unchanged.

**Good Definition**

"Define 'appetite,'" requested the instructor in an English school.

"When you're eating you're 'appy,'" announced one student; "and when you're through you're 'tight'; that's 'appetite'."

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## POTATO CROP IS ESTIMATED AT 39,000,000 CWT.

This year's production of potatoes was estimated at 38 million hundredweight which is somewhat higher than the 1935 crop. There were excellent yields in the Maritime Provinces, Quebec, the northern districts of the Prairie Provinces and in British Columbia and these high yields more than offset the low yields which resulted from the severe drought last summer in Ontario and the southern districts of the Prairie Provinces.

The crop of turnips, mangolds, etc., is estimated at eight per cent higher than last year, while the production of hay and clover as well as alfalfa is almost identical with the 1935 crop.

## GERMANY LIKELY TO BECOME BUYER OF CANADIAN GRAIN

### IMPORTS UP TO ONE MILLION METRIC TONS MAY BE FOUND NECESSARY

It has been reported from various sources that Germany is expected to resume her position as a wheat buyer on world markets. Despite what may be a general adherence to the policies in the "Four Year Plan" and the recent restriction of import trade, such a trend appears to have considerable justification and to be complementary to other economic policies which are now in force. Imports of wheat into this country during the first ten months of the year have been valued at the comparatively low figure of \$2,460,000 as compared with one of \$5,265,000 during the same period of the preceding year. It would not be in any way surprising therefore, if to relieve the slightly strained position which exists at the moment, this trade was given some official encouragement. It may also be remarked in this regard that German purchases will conceivably be made principally from those countries with which payment, clearing or similar agreements exist.

The Frankfurter Zeitung reports, in a recent review of the situation, that, allowing for a crop of less than average quantity and quality, imports of up to 1,000,000 metric tons of wheat may be found necessary during the current season. This amount, moreover, will be devoted, it is said, to the satisfaction of consumptive requirements and will not be for storage purposes.

It is provided in the recently concluded agreements with Germany that this country will purchase substantial quantities of Canadian wheat. The value of this trade may be expected to amount to several million dollars per annum, the payments a agreement providing that 35 per cent of the total annual value of German exports to Canada shall be devoted to wheat purchases, also that no maximum value or limit shall be established in connection with this business, as in the case of that in several other commodities.

It has been reported in the pages of this journal on past occasions that considerable proportions of current shipments to German ports have been milled "in transit," and that small amounts only of the wheat or flour milled therefrom have actually entered Germany for consumption. As noted elsewhere in this statement, however, there has been a trend during recent weeks towards the purchase of foreign wheat for consumption and storage, and it is believed that stocks to be bought from Canadian exporters will, for the most part, be taken into use within Germany as in the normal course of events.

To date it is reported that only one sale of Canadian wheat has been made under the recent agreements, a contract for 6,000 tons having been arranged by one of the large international grain firms. No indications as to the issuance of permits for further sales are as yet available.

"I think a young fellow can get as much out of baseball—maybe more—than any other business."—Walter Johnson.

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## China Becomes Great Factor In Grain Trade

### INCREASING RAILWAY CONSTRUCTION CHANGING AGRICULTURAL PICTURE

In matters connected with the world's grain trade, China will have to be reckoned with as an important factor more and more as time goes on. In the past, lack of communications made crop matters one of local concern but with the increasing railway development that is going on in China the picture has changed. No one knows exactly just what China's population is but it is estimated at around four hundred and fifty millions of whom directly or indirectly about 80 per cent represent the farming class. The last six year average of wheat production in China is 820,000,000 bushels, according to the Agricultural Department of the Canadian National Railways. Honan, Shantung and Kiangsu are the three great wheat producing provinces with an average acreage of 10,000,000, 8,752,000 and 5,521,000, respectively. Wheat has been known in China for thousands of years and is a staple article of food north of the Yangtze Valley, while, in the south, rice is eaten to a larger extent than wheat. Purchasing power is the answer to a greater domestic consumption of wheat. In the central and northern portions there are millions of people who cannot afford to eat wheat they grow but sell it to the towns as a cash crop, and exist on kaoliang, millet, corn, etc. The average yearly income in China is estimated at from \$9.00 to \$18.00, Canadian currency. Chinese wheat imports have been dropping steadily since 1931 but it is felt that China, notwithstanding any increased production due to more advanced methods of farming, will still continue to have to rely on imports to adequately feed her growing population and the growing purchasing power it is considered will bring about a greater domestic consumption of wheat.

**HEALTH**

A HEALTH SERVICE OF THE CANADIAN MEDICAL ASSOCIATION AND LIFE INSURANCE COMPANIES IN CANADA

**TIGHT FIT**

The human body like the human mind, desires freedom. Tight fitting garments are uncomfortable and more over they are ill-advised because they may cause damage to the individual. Every part of the body requires an adequate blood supply to keep it healthy and capable of performing its proper function. Anything, therefore, which cuts off or retards blood supply must be considered harmful.

Tight fitting shoes are a splendid example of this. How many thousands of people have suffered from corns and callouses, hammer toes and bunions, cold and clammy feet, because they did not wear proper shoes. And the time to start wearing comfortably fitting shoes is when the individual starts to walk. Toes were never intended to be piled up in a heap to be housed in a cone. They should be freely moveable within the shoe. The foot of the growing child should be carefully watched by the mother. Any sign of rubbing of heel or toes should be checked and if the shoe is at fault, do not let the child wear it again. If this plan is followed through out the growing period, no boy or girl need have corns or callouses and much discomfort of body and mind may be saved to the individual.

But we must not stop there. Throughout life, it is necessary to choose footwear that fits and allows of complete foot freedom. Ill-fitting shoes not only impede blood supply, causing pain and discomfort, but those same symptoms may have a bad effect upon one's temper and judgment, in fact upon one's whole life.

Take proper care of your feet. Questions concerning health, addressed to the Canadian Medical Association, 194 College St., Toronto, will be answered personally by letter.

### WEEKLY REVENUES OF C. N. R. CONTINUE TO SHOW INCREASES

Montreal, Que. Jan. 12.—The gross revenues of the all-inclusive Canadian National Railways System for the 10-day period ending December 31, 1936, were \$5,110,624 as compared with \$4,222,384 for the corresponding period of 1935, an increase of \$888,240.

"The happiest land and the highest civilization is that in which every capitalist is an unhampered laborer, and every laborer a potential capitalist."—Channing Pollock.