## Can Nova Scotia Be Made Agriculturally Self-Sufficient

By F. W. WALSH

MUCH has been written and said in the past ten years regarding the heavy annual importations of food stuffs into Nova Scotia. The average citizen I believe is fully aware of the fact that each year millions of dollars of Nova Scotia money leaves the province for the purchase of food stuffs. The opinion has been expressed by many that much of the food stuffs that are imported could be produced in the province. It is doubtful, however if the situation from the standpoint of the items which make up the imports and the part that Nova Scotia producers could play in supplying these needs has ever been presented to the public at large.

In dealing with this matter there are three questions that we must answer:

- (1) Is Nova Scotia agriculturally self sufficient and if not to what extent?
- (2) What are the products that are imported in the greatest volume and to what extent can these be produced in the province?

(3) What methods can be taken to remedy the situation?

The answer to the first question is obviously "no". Statistics have been prepared from time to time which indicate that the annual importation of food stuffs to Nova Scotia are valued from \$10,000,000 to \$16,000,000. The Honorable Norman McLeod Rogers, now Federal Minister of Labor, in preparing a brief for the Jones Royal Commission of 1934 presented figures covering imports in 1932 which show a total value of \$12,787,142.65. These are the last authentic figures which have been presented and therefore will be used in this article.

In answering question No. 2, it is impossible in a few words to adequately analyze the situation and cover all of the commodities. There are a few products, however, on which there should be some comment to show the true situation.

One of the largest items is the import of flour which amounted to \$3,474,707.30. Some of this flour was re-exported but this was not a big item. Flour is produced from wheat and wheat suitable for flour production must be grown under certain climatic conditions. One of the essentials of successful wheat growing is reasonably steady, dry weather during the growing season. The wheat of the world is produced under such conditions, with the great prairies and plains of the United States, Canada, Russia and the Argentine contributing the bulk of the world's supply. Large areas of cheap land must also be available. The average yield per acre in Western Canada over the past five years would not be greater than 15 bushels. The present price of wheat to the farmers is around \$1.00 per bushel. In other words, the gross return would be \$15.00 per acre. The average farm in Nova Scotia has not more than 50 acres of tillable soil. If all of this were producing wheat, the gross return to the farmer would only be \$750.00, providing he got a yield equal to that of Western Canada.

In the face of this it is quite clear that a prosperous agriculture could not be built up in this province on the basis of growing wheat for flour production. The yield per farm would not be sufficient and the quality of the wheat would not be satisfactory for the production of flour suitable for general sale.

This, therefore, should fairly well clear up the situation from the standpoint of flour, so that in estimating the annual imports which could be produced in this province, the large item against flour could be eliminated for normal calculations.

EDITOR'S NOTE: F.W.Walsh, B.S.A. is Director of Marketing in the Nova Scotia Department of Agriculture. The 1932 figures show an importation of corn to the value of \$241,836.30. Corn is a product that is grown in a longer season and warmer climate than we have in Nova Scotia. The production of corn for sale in Canada is very limited and is practically confined to two or three counties in South Western Ontario, and even there it is generally believed that the cost of production is somewhat higher than many sections south of the line.

Under fresh fruits other than apples there is an item of \$213,060.80. The bulk of this is for citrus fruits, bananas, hot house tomatoes, etc. It is doubtful if anyone in this province would advocate that because we are spending this amount of money for the importation of citrus and other tropical fruit that we should endeavor to grow them in this province. This item likewise could be eliminated from any constructive discussion.

Under the heading of "grain and grain products", which are those largely used for live stock feed, the importation amounts to over \$2,000,000. This is for oats, barley, other grains and other grain products. This is an extremely large item and one which should give all Nova Scotians, especially farmers of this province, a great deal of concern. It is true that a great many of the successful live stock producing countries and areas in the world where mixed farming —stressing dairying, hog production and poultry—is followed, are large importers of grain. Denmark, Great Britain and Eastern United States are examples of such areas. Nevertheless there is no question but what Nova Scotia is in a position to produce a larger proportion of her grain requirements for live stock feeding and thereby reduce the cost of production, for the producer is at all times confronted with two major considerations, first, cost of production and, secondly, marketing.

Another large item which appears is that for dressed meats, fresh, cured, salted and other packing plant products. These items amount to over \$4,000,000, of which over half is for fresh meats. This item is largely for fresh beef. It is quite possible that a certain percentage of this beef could be successfully pro-

duced in this province. Over the bulk of the province, however, farmers have diverted their interest from beef production to dairying, having in mind the true economics of the situation whereby beef is produced in areas where they have large tracts of land and very cheap grain, and dairying is conducted in areas nearer centers of population with smaller farm holdings and more intensive production per acre.

Of the \$4,000,000 for meats, approximately \$1,000,000 is for cured and salted meats. A considerable proportion of this is for pork products. It is generally conceded that hog production could be increased in this province to a point where at least our home requirements from the standpoint of pork and bacon are met. There has been a decided move in this direction. Statistics taken in June 1937 show 52,730 hogs as compared with 43,300 one year earlier.

In other specific items we have butter, eggs and poultry. In butter alone the value of importations is over three quarters of a million dollars. This represented in 1932 close to 3,500,000 lbs. The creamery production for the province is in the vicinity of 6,000,000 lbs. The present plants could easily manufacture twice the present volume. The price of butterfat to the farmers of Nova Scotia is higher than to producers shipping cream to creameries in any other part of Canada. Here again the problem is largely that of production.

In eggs, approximately 100 carloads each year are imported. In 1932 this represented a value of over a quarter of a million dollars. Successful poultry production depends on low cost of feed and efficient marketing, and during the past two or three years there has been a decided gain in poultry production in this province.

In dressed poultry the annual imports amount to some forty carloads, valued in 1932 at over \$150,000. Poultry production and eggs, of course, go hand in hand and here again there is a real field for increased quality and production, which is gradually being met by producers throughout the province.

In summing up the answers to question 2, therefore, we find that a few large items, particularly flour, corn, tropical fruits and vegetables, which constitute an annual cost of from \$4,000,000 to \$5,000,-000, cannot be successfully produced in this province. Half of the \$4,000,000 spent for dressed meats is made up of fresh beef. Only a portion of this product could probably be successfully produced by Nova Scotia farmers. The other items for pork could no doubt be met by efficient production and marketing. With butter, poultry and eggs there is a large field and this situation is gradually being met by producers.

The answer to Question No. 3, while the most important, is no doubt the most difficult. To state that Nova Scotia annually imports a large quantity of food stuffs and that because of this farmers here should produce these, will not remedy the situation. There must be constructive thinking and constructive programs. One program alone will not be sufficient. If, however, one were asked to give one remedy only to meet the situation, the writer is of the opinion that the answer would be "improved soil management and fertility."

The major products which probably could be produced here are grain and grain products for live stock feeding, certain dressed meats, butter, poultry and eggs. The cost of feed is the biggest item in "cost of production" with live stock production. We have in Nova Scotia conditions suitable for producing economically, high class pastures, large crops of hay and excellent crops of roots. Today the majority of the farmers are making a fair success in connection with these items. Their big costs are for grain and grain products purchased. If the soil were improved by judicious use of lime, more efficient fertilization, coupled with crop rotation and the use of good seed, the yield per acre could be greatly increased. This is especially true in connection with grain. At present Nova Scotia produces annually around 90,000 acres of oats, 10,000 acres of barley and 7,000 acres of mixed grains. The average production per acre on the

bushel basis for the past five years for these crops is 33.8, 27.4 and 32.7 respectively. These yields, while quite comparable to yields in other provinces in Eastern Canada, are pathetically low. By better soil management and general improved crop production, the yield of these grains on the present acreage could be increased ten bushels per acre. This would result in an annual increased production of close to 20,000 tons of live stock feed. This would represent at least half of the present purchases and greatly improve the production costs. This therefore seems like the logical method to follow in increasing total grain produced and decreasing annual importations.

When yields have been brought to a higher level it would then be very practical to slightly increase the acreage in each farm. Yields per acre, however, cannot be increased overnight. must be built up and this is a costly and slow process. Many yields at the present time are low because of inadequate drainage. Considerable land is not producing satisfactorily because the soil is sour. The application of limestone would remedy this situation. The average cost of this, however, would amount to over \$6.00 per acre, which is a large item. Individual farmers throughout the province, however, realize the necessity for action in this regard and are making their plans accordingly. The main drawback is lack of finances.

In connection with the production of hogs, it has already been pointed out that considerable progress has been made along this line. Farmers in many areas are endeavoring to turn off each year two bacon hogs for each dairy cow maintained. Cooperative live stock shipping, with sales made on the live, graded basis, have materially assisted in bringing this about. Three times as many hogs were marketed thus up to date in 1937 compared with the corresponding period of 1936. With better production the tendency is upward. The quality of the breeding stock is fairly high.

Statistics show that there are 114,000 dairy cows owned in the province. Ap-

proximately three quarters of these are producing milk for butter production, the balance catering to the fresh milk trade. An increase of 50 lbs. of butterfat per cow each year would be sufficient to meet the annual importations. The low production of butterfat per cow is at present largely due to inadequate feeding rather than inferior breeding. Increased crop production per acre and per farm will remedy this situation.

Real strides have been made in poultry and egg production. Each year the quantity of imports is decreasing. Probably poultry presents one of the best examples of what can be accomplished in a short period of time by a constructive program in breeding, feeding and marketing. Poultry producers in Nova Scotia have complained for many years that they have found it difficult to satisfactorily market their dressed poultry each fall. They contended that it was difficult for them to find a market that would take their product in volume and pay a price comparable to what the imported product was realizing. They also contended that the existing system of purchasing on a flat rate with no differentials for quality was not conducive to improvement. With the view of remedying this situation, poultry associations were organized in a number of sections of the province. Instruction was given in a number of matters including breeding, feeding, care and management, finishing and dressing. At the end of the season the birds were brought together at a central grading house where the poultry was graded, packed in an up to date manner and offered for sale to the wholesale trade. Under this pool system some 9,000 lbs. were marketed in 1934; 12,000 in 1935; 42,000 in 1936; and it is estimated that 100,000 will be marketed under this system in 1937.

These figures indicate a fair gain.

The figures covering improvement in quality are even more outstanding. In 1934, 25% of the birds were placed in the first grade, and 41% in the third or lowest grade; but in 1936, 60% were in the first grade and 10% in the third grade, which clearly indicates the necessity of

sale and purchase on a graded basis. Farmers cannot be expected to improve quality if the resulting improved product, which has entailed increased labor and expense, does not bring an increased price over an average or a low grade product.

This year, Nova Scotia graded poultry is a factor in Nova Scotia markets. Producers are selling their products at a price comparable to the imported product and farmers have been encouraged to increase and improve their flocks. If the present rate of gain continues, Nova Scotia will shortly be not only able to produce her own requirements but have a

certain quantity for export.

In the foregoing, the writer has merely dealt with some of the highlights in connection with the general question of making the province agriculturally self sufficient. He has not endeavored to deal with the broader picture of balancing importations against exports. All sections of Canada are not equally fitted for the producing of the same kind of crops. Nova Scotia has no peers in the production of many other agricultural commodities, particularly apples, potatoes, vegetables, hay and pasturage. The annual value of the exported apple crop alone amounts to around \$5,000,000. This at least would neutralize importations of flour.

The greatest improvement in meeting the present situation has been brought about through farmers working collectively on a community basis. The problem must be first met by improving the As this improves, production costs will lower and if these activities are associated with a sound marketing policy, with payment to the producer on a graded basis, production will gradually increase to a point where we become agriculturally self sufficient. Such production, however, will not preclude the importation of certain agricultural products which other sections of Canada or other countries are in a better position to produce, but it is hoped that the production can be increased to a point where the net exports will be greater than the net imports.