proposed functions. Its members were intended to return to their homes as missionaries. At any rate it is an approach worth consideration.

I shall leave it at that. My purpose has been to start a few people thinking of library systems as a definite phase of public affairs. If I manage to set a few talking, so much the better. If action follows, that will be splendid.

I believe there is unlimited enthusiasm, most of it dormant. I know there is a quicksand of loose thinking about library matters, and somehow we shall have to build a firm road across it. A very trifling steadying agent may suffice to provide the first step over shifting grains. A blanket thrown on the surface is often enough—just as often it is not, and then a blanket is lost. However, it is worth trying. I look on what I have written as a blanket cast on the quicksand. If it is swallowed up and disappears, not anything of value is lost. But if it starts the crossing, why then it will have proved of that much value. And I hope it does.

Pasture Lands in the Maritime Provinces

By C. F. Bailey

THOSE who have had the privilege of visiting the rural communities in the British Isles must have been impressed with the relatively large number of live stock carried on the average farm. There are several reasons for these heavily stocked farms. Undoubtedly the British farmer is a lover of good livestock, but it will also be found that his splendid pastures play an important part in the development of this industry. Apparently these farmers are quite prepared to devote as much and oftentimes more attention to their pasture lands than to the area set aside for cereal and forage crops. In fact, the maintenance of pastures in a high state of fertility is considered of national importance and we find that the British Government has recently announced that a liberal allowance will be made to all land owners for the purchase of fertilizer to be used in keeping pastures in a high state of production.

Let us contrast conditions in the British Isles with those in the Maritime Provinces. It is true that we have a large number of progressive farmers who have become "pasture conscious" and the number is increasing annually. Unfortunately however, there are a great many farmers who look upon their pastures as a cheap and convenient place to carry live stock during the summer months. Some of these pastures are so unproductive that the animals have great difficulty in finding sufficient food to meet daily maintenance requirements. These farmers show the same lack of interest in their live stock and we find their animals are usually undersized and generally unprofitable.

In spite of the apparent lack of interest on the part of many farmers, the future looks bright for the development of good pastures "down by the sea." The soils of the Maritime Provinces vary greatly, but generally speaking, it will be found that they are deficient in phosphorus, potash and organic matter. However, they respond rapidly to the intelligent use of fertilizers and good pasture management. This is mainly due to favorable climatic conditions which are not unlike those found in the British Isles, especially during the growing season. The most important factor contributing to the development of pastures in these provinces is the annual precipita-

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tion. It will be found from a study of the meteorological records covering a number of years, that the annual precipitation at Fredericton, New Brunswick, was 38.62 inches; at Nappan, Nova Scotia—38.81 inches, and Charlottetown, P. E. I.—41.29 inches. In addition to the liberal rainfall, we have relatively cool summers and the moisture is fairly well distributed throughout the growing season. If we compare our weather conditions with Ontario, we find the annual precipitation at Guelph was 31.52 inches, a difference of approximately 7 to 10 inches. Ontario usually experiences hot, dry weather during the latter part of July and August. While the soil in Ontario may be more fertile than in the Maritimes, the lack of moisture and the dry weather in midsummer present problems much more serious than those faced in the Maritime Provinces.

While climatic conditions in the Maritime Provinces are favorable to the development of good pastures, we are required to provide more or less supplementary grazing each year to relieve our main pastures during the dry period. To meet this problem economically, it is suggested that haying begin two weeks earlier than is generally practised. In this way, early aftergrass will be made available for the milch cows. Early haying has another advantage that should not be overlooked. The early cut hay is more palatable and nutritious and it is safe to say that several hundred thousand dollars would be saved to the Maritime farmers each year if haying operations were started two or three weeks earlier. Oats have also been used quite satisfactorily as a supplementary pasture during the dry season. In some sections where pasture fertilization has not been practised extensively, farmers are growing soiling crops such as peas and oats and millet. Hay and grain are also fed during this period. However, the feeding of green feed, hay and grain in the stable represent increased labor and should be avoided if possible.

A brief report of the pasture improvement work conducted at the Dominion Experimental Station at Fredericton, New Brunswick, will serve to show what can be accomplished by modern methods of pasture improvement. Ten years ago, the pastures at this Station were typical of many in the Maritime Provinces. The sod was thin, containing ten per cent moss and the balance was made up largely of brown top and weeds. A start was made to improve these pastures in 1928 and has continued annually since that time. To-day these pastures are recognized as being among the most productive in Canada. A deep sward has developed, moss has practically disappeared and the character of the herbage greatly improved without having to resort to ploughing and reseeding. The securing of this rather remarkable change is due simply to the use of commercial fertilizers, combined with what we consider to be good pasture management. These pastures were carrying one-half cow to the acre prior to 1928, whereas to-day one and one-half cows per acre are being carried in a normal year at a much reduced cost. In the early days the cows received grain when at pasture. To-day grain is discontinued shortly after the cows go to pasture in the spring. In fact, the cows refused to eat grain, especially during the early part of the summer. Cows are also being turned out approximately two weeks earlier in the past two years. It is safe to say that the saving made in feed and labor during these two weeks will more than pay for the fertilizer used on the pastures. It should also be stated that the fertilizer treatment during the early days cost approximately $6.00 per acre, whereas to-day the average cost per acre would be in the neighborhood of $2.00.

Cost of milk production records at the Fredericton Experimental Station also present rather interesting information. The average feed cost of milk and butterfat production for the four years 1932-35 inclusive in January was $1.18 per hundred pounds milk and 30c per pound butterfat, while in June, the feed cost was 30c per hundred pounds milk and 8c. per pound butterfat. On May 11, 1936 under barn feeding conditions, the production from 23 cows, comprising the

milking herd, was 683 lb. milk. Production increased steadily after the cows went to pasture and grain feeding was discontinued after May 20. One month later, the same 23 cows produced 756 pounds milk. Even though 1936 was a favorable year for pastures, it is perhaps safe to say that without improved pastures, these cows would have been barn fed for two weeks longer and the production would have been lower.

Many similar instances could be cited to further emphasize the importance of improved pastures, but space will not permit. That pastures well selected, properly fertilized and well managed, will prove a boon to the Maritime farmers in specialized dairy districts, is generally admitted. Some farmers located in remote districts may hesitate to improve their pastures due to the cost involved. However, new information is continually being made available, and to-day we find that fertilizer treatments recommended represent a much lower outlay of money than was recommended a few years ago.

This whole problem of pasture improvement is being studied extensively in almost every country where live stock raising is an important industry. In Canada every Agricultural College and Experimental Farm is devoting special attention to this problem and the Extension Branches of the Provincial Departments of Agriculture are continually taking the latest information on the subject to the farmers. With conditions so favorable to the development of productive pastures in the Maritime Provinces, we should look forward with confidence to seeing these provinces becoming more prosperous through the greater development of the live stock industry, made possible in part by the improvement of our pasture lands.

Tourist Tides and Tidings

By D. Leo Dolan

WITHIN the last three or four years, Canadians have become more fully cognizant of the potentialities of the tourist industry of this country. Particularly unobservant must be any Canadian who has not been aware of the annual influx of visitors to Canada for recreational purposes, for this influx is now said to be the largest enjoyed by any country in the world. Anyone who cares to delve into recent statistics bearing on the subject will find that our travel industry ranks high among the great export industries of the Dominion. The monetary value of this industry in 1937 reached the figure of $295,000,000; a staggering sum—one which is greater by 100% than the entire gold production of this country. It is a figure which equals the total amount expended by the provincial governments throughout the country on the educational system of the Dominion. Its influence extends from border points far into the interior of the country and even to the far north. Few other industries have such widespread ramifications as has the tourist industry.

It is just about five years ago that the Government of Canada decided the promotion and development of our tourist industry should become a part of our national effort. To efficiently carry this out, there was organized in Ottawa the Canadian Travel Bureau as a branch of the Federal Government. Briefly, this organization was charged with the responsibility of selling the recreational resources of Canada to the travellers of the world. The result of the campaign which this Federal Government organization has carried on in close co-operation with all tourist agencies, both public and private, has been tremendous. To-

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