

Senator BRADETTE: I would like to know if there is any truth to that wonderful report that we had about a Dutchman producing vegetables on peaty land around Ottawa, in Russell County.

Dr. RIPLEY: Yes, as a matter of fact there is a large area of muck soil around Alfred. One company tried to develop it as a peat fuel industry. These people now have taken it over and they are making a pretty good job of producing. That kind of soil is very excellent soil for the production of vegetables.

There are several areas containing soil like that. Down south of Montreal we have an experimental station at St. Clothilde, and the muck soil there is a better soil, it is more decomposed and a wonderful soil for the production of vegetable crops. The area at Cyrville, where we get our vegetables for the city of Ottawa, is a muck soil. The Holland marshes below Toronto is another excellent area of muck soil.

These organic soils I believe should be investigated more than we have been doing. We have not had to use them because we have had more than we needed really, as of now, but I think it is a place that we really should do some investigation.

The CHAIRMAN: There is a settlement of Germans northeast of Beausejour, near Winnipeg, that have been using the peat bogs there for cultivation. These bogs are about 18 inches deep. Some of it has been burnt off and some cut off. They are raising wonderful crops there.

Dr. RIPLEY: I think there are great possibilities in these bog areas. These organic soil areas are good areas. Another way I would go about increasing production I think, if I were able to just wave a wand and say do it this way, would be to increase the use of fertilizers.

There is a paragraph on this on page 298 of the booklet headed, Increased Use of Fertilizers. In Canada, which compares unfavorably with many other countries, we use 4.4 pounds of nitrogen, phosphorous and potash per acre of arable land.

Senator McDONALD: That is because of the very low amount used in the western provinces?

Dr. RIPLEY: I think that is the answer to it, but even in eastern Canada, where you get a response from fertilizers, they use only 8 pounds per acre of arable land. I have broken that down into a statement at the end of that paragraph. It is interesting to note by comparison with our use of 4.4 pounds of nitrogen, phosphorous and potash, the United States used 21.9 pounds, Denmark 83.9, the United Kingdom 101.6, Belgium 218, and New Zealand 293.4.

Senator HORNER: The New Zealand figure is not a yearly application. I understand that is merely to tame the soil.

Dr. RIPLEY: That is the average application per year. That information comes from the Food and Agricultural Organization Survey.

Senator McDONALD: Would that be for one crop?

Dr. RIPLEY: Of course New Zealand's crops grow the year around. It is quite a different situation. Dr. Nielsen will have more to say about fertilizers, and I do not want to take his time.

I go on to drainage and irrigation. Drainage is a surprisingly important problem in conjunction with irrigation. If you do not have proper drainage to drain off the surplus water from irrigation, you run into all sorts of trouble; drainage and irrigation is a big problem, and requires more research and more education by the farmer.