

By Mr. Ross (Yale-Cariboo):

Q. Do you think irrigation is going to be a success in that country?

A. Not up there. They cannot get the water out of the Red Deer river, because it runs in a valley 500 feet deep. You know yourself, if you have been there, that it is hard to get in, but it is much harder to get out, if you have a cart.

WHEAT RAISING AS AFFECTED BY ALTITUDES.

By Mr. McCraney:

Q. Did I understand you to say, Professor, that the fact that the slope was north was the reason why the wheat belt would extend northwest?

A. No doubt about that.

Q. Will you explain about that?

A. A gentleman asked the reason why I say that as the land goes north, the wheat belt extends. Altitude has far more to do with the growth of wheat in this country than most people are aware of. The Indian Head farm is pretty high up. It is 1,934 feet above the sea. Now, as you pass north from Indian Head and strike Saskatchewan or Saskatoon, you get into an altitude of 1,574 feet. You see at once that an increase in latitude is compensated for by the decrease in altitude. When you go to Prince Albert, you find it is only 1,398 feet above the sea. You are going up, you see, all the time (pointing towards map), but it is down. The changes that take place after settlement will make the climate of Prince Albert better than that of the countries farther south, which is up. Here is another point which is very important. The Canadian Northern is going to push on towards Fort Churchill, and it is not such a wild-goose scheme as most people think. Just listen, please. Cedar lake, at the point where they intend to cross the Saskatchewan, is only 828 feet above the sea.

By Mr. Derbushire:

Q. Could you show it, please, on the map?

A. (Indicating on the map). Here is Cedar lake and as I say it is only 828 feet above the sea. Prince Albert here is only 1,398.

By Mr. Ross (Yale-Cariboo):

Q. How far could you go before the compensating altitude of which you speak, would be wiped out?

A. It is not going to be wiped out. This point is within three miles of Hudson bay.

Q. Do you mean to say that wheat can be grown there?

A. Yes, sir. Over 40 years ago I went up to Lake Superior and coasted it in a sail boat and decided I was in the northern country. I went out of the boat and walked about 300 yards from the shore and I discovered that the flora changed in less than a quarter of a mile from the lake.

Q. You made the statement that you can grow wheat within three miles of Hudson bay?

A. Of course I do not want to be bound down. I would like to explain to you what I mean.

Q. I am not finding fault with you; it is a matter of opinion.

A. There is no reason why we should not. As you go down the Mackenzie you get into a latitude of $62\frac{1}{2}^{\circ}$ and you are 200 feet above the sea. Yet they have grown and are growing first-class wheat there.

By Mr. Lewis:

Q. How far north is that of Edmonton?

A. Between 400 and 500 miles north of Edmonton. They can grow wheat there without any difficulty.