

Interestingly enough, this year has been very dry, generally speaking, on the Prairies, but about three weeks ago I had an opportunity of visiting an area in Saskatchewan where normally one would think there would be very little water erosion. There I found very bad water erosion. This occurs locally in many instances throughout any area that has more than about a 2 or 3-per cent slope, depending on the quantity of water falling in any given period of time. Our responsibility is and has been to try and help the farmer maintain this eternal vigilance, as Dr. Hill mentioned, against erosion whether it be by wind or water. Our control measures are almost identical; we all want to stabilize the surface of the soil. This means we have to reduce the water run off and encourage percolation. We do this by maintaining a trash coverage of the surface and thus keeping the wind and water from moving it.

In this respect tillage becomes most important. As Dr. Hill mentioned with respect to wind erosion, tillage is for the purpose of preparing the soil for crop. In this respect we want to keep in mind the control of weeds, but we want to cut down or eliminate the wind and water erosion. Therefore, farmers have stopped using the mould board plow because it did not provide the tillage satisfactory to meet the requirements of both wind and water. As far as preparing the soil for seed-bed, it is very good. We are trying presently to characterize our tillage practices with regard to the effects of wind and water erosion. In this respect we feel much can be done on the local farm level, especially in water erosion, and must be done to avoid losing valuable top soil.

Senator TAYLOR (*Westmorland*): What about contour farming?

Dr. NIELSEN: Yes, contour farming, stubble mulching, grass waterways and so on. However, it is very difficult in some areas to institute contour farming; to take an extreme case, the long narrow farms in Quebec are almost impossible of contour farming.

Senator HAWKIN: Mr. Chairman, we are most indebted to these gentlemen for having come and given us this valuable information.

The CHAIRMAN: Dr. Ripley would like to mention the publications which have been placed on the table.

Dr. RIPLEY: We have publications that have a bearing on the matters we have presented, and there are sufficient copies for all members of the committee.

May I say further that if at any time we can be of further assistance in connection with the work of your committee, either individually or collectively, we are as close as your telephone and will be glad to do anything we can.

Senator TAYLOR (*Westmorland*): May I second the motion of our appreciation to these gentlemen? I believe the information we have received is most valuable.

The CHAIRMAN: Thank you, gentlemen. I have no doubt that we will be seeking your services at some future date when the committee reconvenes next session.

Whereupon the hearing concluded.