

sure you will be interested to know that we ship the equivalent of 1,100 carloads of wild oat seeds from the Prairies to the Lakehead every year in dockage.

Senator HAWKINS: What becomes of it when it gets there?

Dr. HILL: I guess some is dumped into Lake Superior. Of course, a good percentage of it goes forward in our exports.

Senator HAWKINS: I am talking about the 1,100 carloads.

Dr. HILL: The 1,100 carloads of wild oats is, of course, an astronomical figure. We would like to be able to find something to control wild oats as successfully as 2-4 D and related compounds control mustard. I am sure that Senator Horner would corroborate the statement that 2-4 D has pretty well controlled mustard, and if we could find something for wild oats that would be as successful as these new chemicals have been with respect to mustard, we would save the farmers of Canada more than \$100,000,000 a year. Seventy per cent of the acreage of western Canada is affected by wild oats. It is our most serious weed. There are probably three or four men in Canada who are devoting their full time attention in research on this important crop.

Senator MACDONALD (*Queens*): With respect to mustard, which is a great curse of weed if there ever was one, I understand that an application of 2-4 D this season would not kill the weed outright, would it?

Dr. HILL: No. It is an annual plant and the seeds remain in the soil and will be there for several years perhaps. It is a continual proposition but it is very cheap and very effective.

Senator MACDONALD (*Queens*): Have the scientists discovered any method for killing it by cultivation at a certain time of year?

Dr. HILL: Mustard?

Senator MACDONALD (*Queens*): Yes.

Dr. HILL: You can get it out, but you cannot cultivate a field of oats.

Senator BRADETTE: Do they control daisy now?

Dr. HILL: Yes, senator. I am very happy to say that I spent a week in Quebec on this trip, and I found the way to get rid of daisy is simply to fertilize the land. Daisy only grows on poor land.

Senator BRADETTE: Not always.

Dr. HILL: Are you familiar with our station at Ste. Anne de la Pocatiere in Quebec?

Senator BRADETTE: No, I am from the clay belt section of northern Ontario.

Dr. HILL: I don't know whether we have experimented at Kapuskasing on this weed but we know that daisies are not a problem in fertile soils. I would be glad to show you from some kodochrome pictures the results of a well-fertilized farm as compared to one that is not fertilized. There is quite a difference.

Senator BRADETTE: You know that red flower plant that grows all over?

Dr. HILL: The orange hawkweed. It is easy to control if you put on lime. It only grows on highly acid soils.

Senator BRADETTE: It is an awful thing to spread.

Dr. HILL: It is. It is all over the farms in Quebec but it is not on the farms which are well limed and fertilized. It is my recommendation to the National Weed Committee that these two weeds do not need much research in the way of chemical control, for they can be controlled by good farm practices.

Senator BRADETTE: I have tried chemicals and they do not work.