

Grasshopper eggs are very resistant to cold and other weather conditions, and once the eggs are laid there is every assurance of a very large proportion of them hatching.

Drenching rains when grasshoppers are small often drown very large numbers of them; but this is of such rare occurrence and takes place upon so restricted an area that it holds out no material hope of seriously reducing the menace to the crop in the West in 1934.

There is virtually no hope of natural control factors materially reducing the number of grasshoppers in 1934 before the crop is ready to harvest, and before the full damage for the season has been effected.

Hon. Mr. SHARPE: A cold, wet spring would not do us much good, then?

Dr. BARTON: It would delay hatching.

Hon. Mr. BURNS: If it happened to be a very wet season it would kill them off, wouldn't it?

Dr. BARTON: If, coupled with that, you had warm enough weather to promote fungus growth.

Hon. Mr. HORNER: What about the grasshoppers that are hatching out in the middle of February? Would they survive?

Dr. BARTON: There are some, I believe, but they are not of much consequence.

Hon. Mr. HORNER: They would not survive to do any damage next summer.

Dr. BARTON: Not with the weather we have had here.

Hon. Mr. HORNER: You can freeze them and they come to life.

Hon. Mr. McGUIRE: What effect has the distribution of poison on bird life? Has it any?

Dr. BARTON: Not so far as I know.

Hon. Mr. McGUIRE: That means that they do not eat it?

Dr. BARTON: It would depend to some extent, I suppose, on how it is distributed. It should be distributed very lightly.

Hon. Mr. RILEY: A good many years ago we had a plague of grasshoppers in the High River district. They destroyed pretty nearly all the crop except the wheat. There was nothing left of the wheat except the naked stalk and the head, but the quality of the wheat, and possibly the yield did not seem to be injured. All the other crops were eaten up, even the wild hay. There was nothing left but the big coarse stem. That year the farmers poisoned, and the next year there were no grasshoppers. It was a wet season, and they all disappeared. We had had them for two years, and the second year they were very bad. We first used bran, which was supplied by the Government at mixing stations scattered all around. Those stations could not mix the bait as fast as it was needed, so the farmers mixed it themselves. Then the bran played out, and we used sawdust, and we found it just as effective as bran. We bought molasses by the barrel, and put it with water, and sweetened the sawdust with the solution.

Dr. BARTON: They used to use other materials, such as lemon, too; but as a result of investigation they found they were not necessary.

Hon. Mr. BURNS: I think it was probably the same year that we had grasshoppers, and we used to say they ate the grass at night and came out to eat the grain in the day. We used to put straw around the side of the grass, and mix it with poisoned bran, and in the evening when the grasshoppers would go in there we would set fire to the straw.

Dr. BARTON: I will show you the maps you asked for of the territories affected.