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fact that it becomes very highly parasitised. It is attacked by small insect parasites which destroy it completely. Whereas in one year a locality has a very bad attack of the green bug, in the following year or the year after that it may disappear entirely. Such a sudden disappearance is due to the fact that the parasites have increased to such an enormous extent that they had completely wiped out the 'green bug.' One of the best remedial methods is that of destroying the volunteer grain in the fall. The volunteer grain frequently serves as food for this bug. Another remedy is the careful rotation of crops.

*By Mr. Smith (Middlesex):*

Q. To go back a little in your address. The white grubs are very destructive in parts of Ontario to pastures and you have not suggested any remedy that could be applied other than simply changing the system of farming altogether.

A. In the case of pastures it would be well, if you could, to feed sheep upon them. If you penned sheep in a small area as sheep are often penned when they are being fed up, and gradually work them all over the pasture which is very badly attacked, they will manure the land strongly and tread the moisture into the soil which will be closely trodden down, this will result in a very great destruction of the white grub. Such a method has frequently been found of service in dealing with pasture lands.

Q. Well, even that would scarcely be practicable in the case I am suggesting. In the western part of Ontario, as perhaps you are aware, there are very large fields which are entirely devoted to pasture. These fields are one, two, three, and even four hundred acres in extent, and even the sheep proposition would not be practicable there.

A. Is it found that the white grub attacks the whole area?

Q. Yes. Very large patches all over the field are entirely destroyed.

A. I should suggest in the case of the attack occurring in patches like that, it might be worth while drenching them with kerosene, if they are not of a very large extent.

Q. They have an area of fifty or one hundred acres and kerosene drenching would not be practicable.

A. Would it be practicable to plough up those infested portions in the fall?

Q. Yes, but that would mean changing the entire system of farming.

A. At the same time it would rid the ground of the white grub. When you got the insect destroyed you could afterwards let the ground go back to pasture.

Q. In these cases the farms are entirely devoted to pasture. The fences are simply round the outside, and the buildings have been removed and in order to adopt grain rotation a very large expense would be involved.

A. I would not recommend a rotation. I should simply recommend ploughing and cross ploughing as a means of turning up the grubs and exposing them so that they could be eaten by birds and other enemies, and also in order that they could be destroyed by the frost in the winter.

Q. Of course that would render necessary the cultivating of that land and re-seeding again, and it would mean the cultivation of the whole field because these are mostly hundred acre fields or more?

A. Otherwise I do not see any other remedy: either that or the penning out, which you say is not practicable. You might give the land a very heavy dressing of kainit or super-phosphate. That might be found serviceable and of course would not change your system of cultivation.