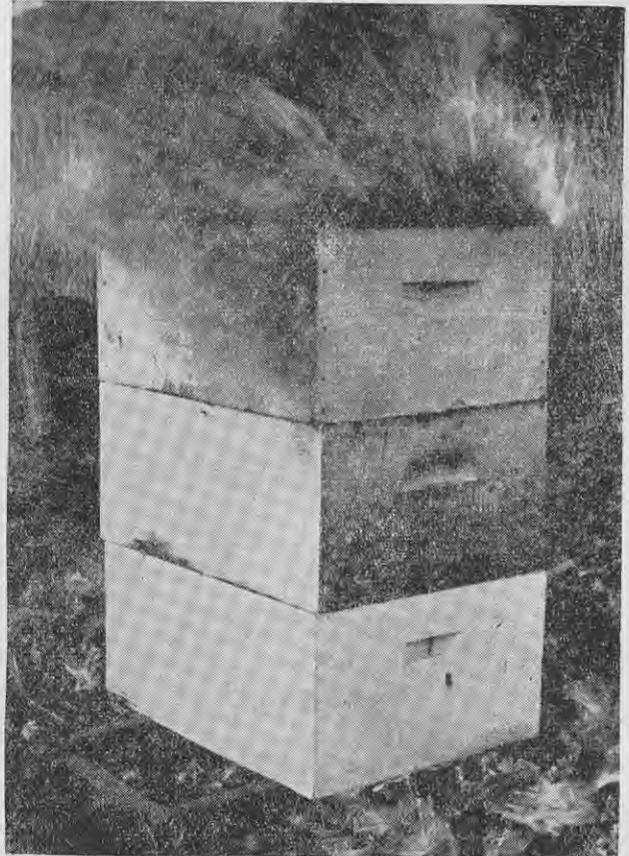




Method of burning bees and hive contents affected with foul brood.

Supers placed on iron bars above a fire for final → scorching.



amount of honey will require supplementary feeding.

If artificial feeding has to be resorted to, a 50-50 sugar and water syrup should be fed. The simplest way of feeding this is with an ordinary 5 lb honey or similar tin with a press-in lid. Several small holes are punched in the lid and the tin is filled with the syrup and then inverted over the frames of the brood nest and enclosed with an empty super. To prevent robbing care should be taken to ensure that no syrup is spilt round the hive and that the bees are not given any more syrup than can be taken and stored by them in the one night.

Though shortages of pollen occur at times in some districts, it is doubtful if the domestic beekeeper will be seriously affected by this trouble. There are usually enough flowering plants handy to domestic apiaries in populated areas to ensure sufficient supplies for normal brood rearing. If pollen deficiency is suspected, it is advisable to confer with the Apiary Instructor for the district.

Symptoms and Recognition of Foul Brood Disease

In the early stages of American foul brood (*Bacillus larvae*) infection a

larva assumes an unnatural position in the cell and then gradually flattens out with its tail turned slightly up and its head lying flat. The dead matter has a coffee colour, is at first slightly viscid, later becomes ropy, and finally reduces to a scale which sticks hard to the bottom of the cell. When the dead matter decomposes it darkens and develops a strong smell resembling that of hot glue.

With the pupa, decomposition is the same except that the tongue appears as a fine thread pointing toward the top of the cell. This characteristic is manifest only in American foul brood.

Cappings of brood affected by American foul brood become dark, greasy, and sunken, with sometimes a small pinhole in the centre of the capping.

Simple Test

A simple test for this disease is to remove the cap from an infected cell and probe the dead matter with a match or straw, which should be given a slight twist and then slowly withdrawn from the cell. If part of the contents of the cell adheres to the stick and ropes out some distance ($\frac{1}{2}$ in. or more), it is fairly conclusive evidence of the disease.

Method of Destroying Diseased Hives

American foul brood is a highly infectious disease of bees for which there is no known cure. The disease is transmitted by bees robbing honey from diseased combs and the interchange of infected equipment. Should disease be found, the beekeeper must take immediate steps to dispose of the hive to avoid the spread of infection to other hives.

The most effective and safe treatment is to destroy completely all bees, frames, combs, and honey within the infected hive by burning. Supers, lids, and bottom boards that are sound in all respects may be saved, provided these are thoroughly sterilised by scorching.

In some districts, particularly in closely populated areas, it may be necessary to secure a permit from the local fire authority to light a fire in the open. Suitable weather should be chosen before carrying out this work.

The most practical way to kill bees is with calcium cyanide gas. For this purpose it is obtained as granules which when exposed to the air give off a lethal vapour. A level tablespoon

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