

[Photo at right by Sparrow Industrial Pictures Ltd.]

Left—Bee comb and healthy and contented bees. Right—Comb showing diseased brood and ropy nature of dead brood when probed with match.

neighbourhood of clean apiaries. It is the responsibility of the owner of the bees to obtain the necessary permit. Failure to do so renders the beekeeper liable on conviction to a fine of up to £25.

A beekeeper may remove any bees, bee combs, or apiary appliances from any of his registered apiaries to another for the purpose of apiary management or extraction of honey, provided his apiaries are free from disease.

Movable-frame Hives

Keeping bees in ordinary box hives is a breach of the law. Bees must be kept in hives fitted with movable frames so that an examination of the brood and bees may be made at any time, for colony management, and for control of diseases. Where bees are not provided with movable frames fitted with full sheets of foundation wax the bees may so build the combs

that it is impossible to manipulate and inspect the interior of a hive.

The condition of a colony of bees cannot be judged merely by looking at the entrance to a hive or at the top and bottom of the combs only.

Bees in Walls of Buildings

Bees established in the walls or other parts of buildings are not under proper control, they cannot be inspected for disease, and they provide a means by which foul-brood may be spread to apiaries properly established in frame hives. The Apiaries Act gives power to an inspector to take proceedings against any person who refuses to remove or allow to be removed any bees or bee combs established in buildings owned or occupied by him. If the property owner is unable to do the work himself, the local Apiary Instructor of the Department of Agriculture will usually be able to provide

the names and addresses of persons who are willing to undertake the work.

Any bees that have become established in trees or other irregular shelters must be transferred to a movable-frame hive or destroyed, and it is the responsibility of the property owner to see that this is done.

Diseased Bees

Experience has shown that the shaking or McEvoy method of treatment to clear foul-brood from infected apiaries has not been successful in eradicating the trouble and that in most cases where foul-brood tends to recur this may be attributed to the

handling of bees and equipment removed from infected hives. Consequently beekeepers are now required to destroy the contents of diseased hives found by inspectors and to sterilise thoroughly any remaining hive equipment by approved methods within a specified time.

Diseased bees must not be sold or disposed of in any way other than destruction by fire. Neglect of these precautions can involve neighbouring beekeepers in much trouble and expense and cause widespread outbreaks of foul-brood, which may take years to eradicate.

Diseases and Pests Listed

Most beekeepers are aware that brood diseases of bees and several pests exist in New Zealand, but in many cases it is assumed that use of the term "disease" is applied only when American foul-brood is under discussion. This assumption is incorrect, as several other diseases and pests are included in the definition of disease as set out in the Apiaries Act, as follows:—

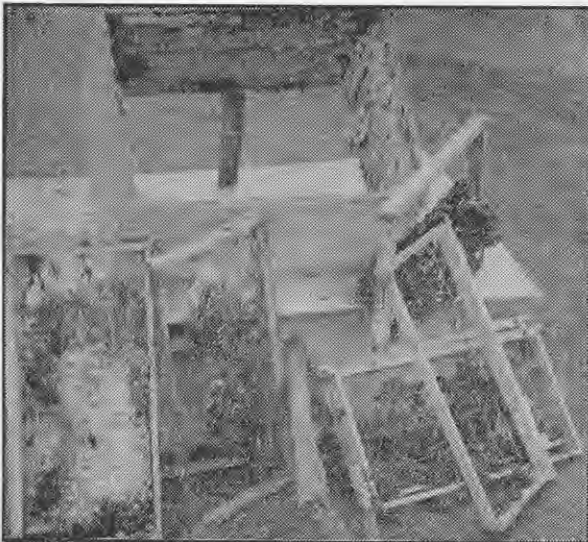
European foul-brood (*Bacillus pluton*), Isle of Wight disease (acarine disease), *Nosema apis*, the greater wax moth (*Galleria mellonella*), the lesser wax moth (*Achroea griseella*), and the bee louse (*Braulta coeca*).

Fortunately for beekeeping in New Zealand, acarine disease, the most devastating of all adult-bee diseases, is not present in New Zealand.

Notification of Disease

Every beekeeper in whose apiary disease appears is required to take immediate and proper steps to prevent its spread and should also notify the Apiary Instructor for the district of its presence within 7 days of the appearance of the disease.

Full particulars of methods for painless killing of diseased bees before burning and details of methods to treat the various diseases and pests of honey bees found in New Zealand may be obtained from the local Apiary Instructor of the Department of Agriculture.



Bee combs destroyed by greater wax moth.