

Combating Wasps : Recommended Practices for Beekeepers

FOUR years have passed since wasps of the species *Vespa germanica* were first discovered in the Waikato district. In this article C. R. Paterson, Apiary Instructor, Department of Agriculture, Hamilton, describes the experience gained in recent years in combating the wasps and recommends certain apiary practices which beekeepers must adopt to protect hives against the pest.

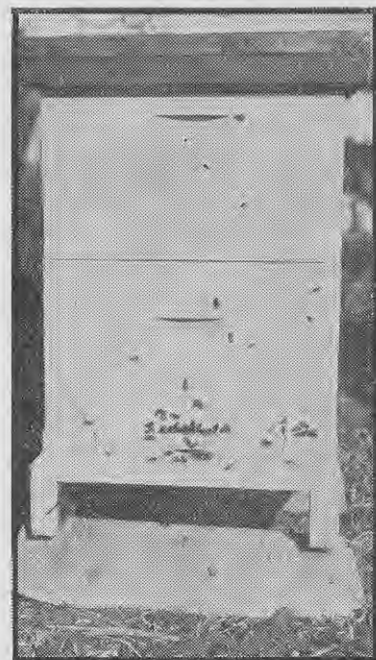
SUFFICIENT time has now elapsed to enable first-hand information to be collected and for the position as to the extent wasps constitute a menace to the beekeeping industry to be reviewed. In an analysis of the exact position regarding the activity of wasps it is necessary to consider the locality in question and the incidence of infestation, or the conclusions reached may be wrong. Many beekeepers who are asked to what extent they consider wasps are harmful to beekeeping will say frankly that they have not been worried by them in the least. Others located in the same district are considerably concerned at the attention the wasps give their colonies.

What, therefore, is the reason for this difference in experience? There appears little doubt that the destruction of active nests is a very definite means of reducing the number of flying wasps in a particular district. In clean, open country nests are soon discovered, as people generally are on the alert. This means that apiaries in such areas receive very little attention. Yet apiaries only a mile or so away may have almost as many wasps as bees flying around at certain times

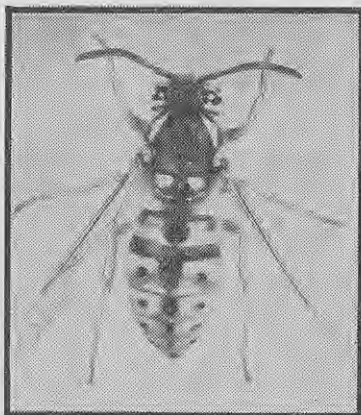
of the year. Apiaries so affected are generally very close to large, scrub-covered gullies or weed-infested areas, and where these conditions exist it is almost impossible to locate nests. This means that nests are able to build up to maximum strength and by autumn large numbers of wasps are searching for suitable food.

How Wasps Affect Beekeepers

From January onward wasps become actively interested in sweet substances such as fruit juices, jam, and honey, and honey houses become a centre of attraction. Buildings that are considered bee proof will not keep out wasps, which have the determination and



A hive with a restricted entrance, which gives bees a reasonable chance of repelling invading wasps.



A queen wasp of the *Vespa germanica* species, showing the distinctive markings, which are black on a bright yellow body.

ability to force their way through openings through which a bee would never attempt to pass. Where large numbers of wasps are flying round in the honey house when honey is being extracted or, especially, when it is being packed the beekeeper is faced with a major problem.

With characteristic persistence wasps attack relentlessly hives which are not able to offer sufficient resistance. On many occasions it may be possible to see bees ejecting numbers of wasps, but if the beekeeper maintains a watch he will notice that wasps are continually evading the guards and gaining entrance to the hive. It is amazing how wasps hover round and, as soon as an opportunity occurs, enter the hive. Bees would have a reasonable chance of coping with wasps but for the fact that the latter appear to have a degree of intelligence which they use to good purpose. As bees

form themselves into a partial cluster at night or during unsettled weather, wasps find it comparatively safe to enter hives early in the morning or late in the evening, when guards are mostly off duty, and on wet days it is possible to see wasps flying in and out of hives without encountering much opposition. Under these conditions colonies short of stores very soon find themselves on the point of starvation and, when this state has been reached, very little can be done to save the hives, except perhaps to remove them to another site.

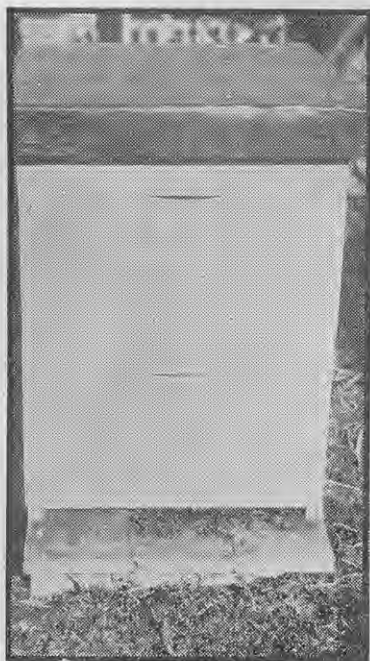
It is in the establishment of nuclei during the autumn that beekeepers are most likely to be seriously affected by wasps, if all wasp nests close to hives are not destroyed. Wasps (workers and drones) give newly-made-up colonies a great deal of attention and there have been many instances where nuclei have been wiped out.

Beekeepers' Experiences

Checking the actual experiences of beekeepers has been somewhat difficult because of the delay in receiving reports. There is no doubt, however, that many beekeepers have lost numbers of nuclei during the past few years. In certain areas it is possible to find wasps intermingling with bees in the hives.

A case involving the loss of approximately 34 hives last winter has been reported.

It is believed that the apiary concerned had received the normal autumn management and about 4



A hive with a full entrance. Note the space at left where wasps could easily get into the hive.