

# WATCH THOSE FLEAS !

## *Messengers of Menace*

Three species of fleas may occur at times in sufficient numbers to constitute a plague. These species are the cat flea, the dog flea and the human flea.

The eggs of fleas are laid singly; those of the human flea are deposited along skirting boards, between floor boards, or under the edges of carpets and linoleum's etc. The cat and dog fleas do not lay their eggs upon their hosts, but deposit them in situations frequented by these animals.

The maggot-like larva of the flea feeds on particles of organic matter and on the undigested blood passed by the adult flea. When fully-fed the larva spins a loose cocoon within which it enters the pupal or resting stage, and after a period in this stage the mature flea emerges.

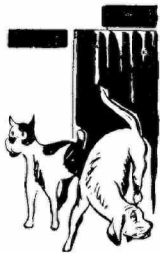
### CONTROL.

To control cat and dog fleas it is essential first to clean the host animal. This may be done by dusting an insect powder such as derris or pyrethrum into the animal's coat.

Dogs, not cats, may be treated with specially prepared DDT or BHC dusts, or they may be washed in carbolic sheep dip, DDT or BHC washes used according to the maker's recommendations, or in kerosene emulsion (1 in 20), which may be prepared as follows:

Cut up half a pound of hard soap and place it in 1 gallon of water and boil until dissolved. Remove from the fire, and immediately stir in a gallon of kerosene and mix until thoroughly emulsified. This makes a stock solution of kerosene emulsion, which, for use, is diluted with water at the rate of 1 pint of stock to 9 pints of water.

The stock solution may be diluted at once with cold water, but if allowed to stand until cool, it must either be reheated or else hot water must be used to dilute it.



If this emulsion or sheep dip is used it should be washed out of the dog's coat after half an hour or it may cause injury. The bedding of the animals and places frequented by them should be sprayed thoroughly with kerosene emulsion or treated with some other suitable insecticide such as derris, pyrethrum or DDT.

The house may be cleaned by scrubbing out with very hot water and soap, or kerosene emulsion, or by several applications of a kerosene-pyrethrum spray mixture.

If the human flea is concerned, the first essential is a thorough cleansing of the house so that no small accumulations of dust remain in which they may breed. Regular use of a vacuum cleaner is recommended as an effective means of keeping down flea populations.

Fleas in houses and buildings can also be controlled effectively by treating the floors with a 10 per cent. DDT dust at the rate of 1 lb. per 500 square feet of floor space. The dusting can be done by using a tin or jar with a tightly fitting perforated lid. Usually a single dusting will give good control of the fleas, but where infestations are heavy it will be necessary to re-treat the floors seven to fourteen days later.

It is advisable to leave the dust on the floors for at least a day, after which it can be removed by sweeping, or with a vacuum cleaner.

Whilst there is little reason to suspect that DDT applied in this manner, would affect humans, precaution should be taken to keep young children off treated floors until the excess dust is removed.

Sprays containing 4 per cent. DDT will give satisfactory control if applied thoroughly around carpets and skirting boards. Casual application by means of the ordinary household atomiser is not sufficient, as it is necessary to spray surrounds and skirting boards, almost to the point of run-off, for effective control.

An alternative insecticide is 5 per cent. BHC, which is used in a similar manner and at the same rate as the DDT dust mentioned above. BHC may also be used in the form of smoke candles, and the directions of the manufacturers should be followed.

Most BHC dusts have a musty odour and their use should be confined to the treatment of out-buildings. High grade BHC formulations, with little smell, are now becoming available and should prove satisfactory for house use.



Hector McLeod, of Wreck Bay.