

if the farmers co-operated to the fullest extent, much unnecessary motor travelling could be avoided. All owners of young dairy heifers should realize that this vaccination work is now practically on a Dominion basis, and the magnitude of the task of the field officers will thus be more readily appreciated. During one month the field officers in the Auckland district vaccinated 12,319 calves against abortion disease.

*Temporary Sterility.*—This phase of disease in dairy herds continues to cause trouble to some dairy-farmers, and farmers in the Manawatu district have experienced more than their share of it. It was also noted that many herds in the district were in very low condition in the early spring. This, and similar experiences in past years, would make it appear that this type of sterility is a functional one. In seasons when feed is plentiful, particularly during the winter and spring, less breeding trouble is experienced among dairy herds. Adequate nutrition and improved husbandry methods in the handling of herds will assist in overcoming some of the trouble, which is undoubtedly accentuated through our system of seasonal production.

*Grass-staggers.*—Last spring, calving and after-calving diseases were not so serious as in some other years. The incidence of grass-staggers in dairy cows was much lower than in other years. The cold, wet spring and the absence of any flush of feed for many weeks after calving had a direct bearing on the lowered incidence. Although the cows were in low condition following the previous season's dry summer and autumn, the cows could only gradually reach peak production, on account of adverse climatic and pasture conditions. Although many animals suffered from weakness and debility leading to paralysis, the incidence of both milk-fever and grass staggers was below what might have been expected under favourable spring flush feed conditions.

*Milk-fever.*—As already recorded, the season did not favour a high incidence of this disease. The cattle were in low condition at calving-time, and no flush of feed was experienced until the danger period had passed. The cold, wet spring had an inhibiting influence on this disease. As might be expected under the seasonal conditions, the number of dairy cows affected with that nutritional disease known as acetonaemia, or ketosis, was comparatively large.

The mild autumn this year should have assisted in the conservation of winter feed, and dairy herds should enter the winter in good physical condition.

*Mortalities due to Poisoning.*—A number of mortalities of stock occurred and were investigated during the year. Quite a variety of toxic agents were involved in these cases.

In Hawke's Bay a mortality in stock was shown to be due to nitrite poisoning, following the consumption of rapidly growing young variegated and winged thistle, in addition to a mortality due to eating mangels. The danger of nitrite poisoning due to mangels was shown some years ago, and the investigation was given full publicity in the *Journal of Agriculture*.

Ngao poisoning, which was referred to in last year's report, occurred again this year following the severe storm in February.

Other accidental poisonings took place due to stock having access to such dangerous poisons as arsenic and lead. Where arsenic is used for dips and other farm needs, great care is necessary to dispose of used containers or any surplus fluid dips. Similarly, when arsenical preparations are used as weedicides, stock should not be allowed access to treated areas.

The chewing of old dip packets by young cattle caused one mortality from arsenical poisoning, whereas in another case an arsenical foot-rot dressing was responsible, and a considerable number of mortalities were recorded following the grazing of areas treated with arsenical weedicide.

In nearly all cases lead poisoning is due to access to paint, painted buildings, or discarded paint containers.