

them in the position of knowing which cows are affected and which are not, thus enabling them to take preventive measures which would otherwise be impossible. In this disease the advice of the Division's field officers is always at the disposal of the dairy-farmer, so that he may be able to control and prevent the spread of the disease. While to a great extent a large majority of our farmers put this knowledge into practice, there is still too great a minority who are indifferent and will not take the trouble to segregate their cows at the proper period and take all other methods which will prevent its spread. If a farmer will not take the necessary precautions in as far as they are known to minimize the incidence of this disease, then he must suffer.

Experimental work is being carried out in the field with an attenuated anti-abortion vaccine with a view to the prevention of this disease. Although some farmers are satisfied that a certain amount of benefit has been conferred by the use of this vaccine, the results have so far not been on the whole satisfactory. Further tests are being carried out at the Veterinary Laboratory.

(b) Sterility: The failure of many cows to conceive until late can be looked upon as the most serious problem confronting the dairy-farmers and the veterinary service of this country. During the past few years every field officer of the Department has been devoting much of his energies to this complaint, with the view to discovering a remedy. In addition to this two selected veterinary officers give the whole of their time, in conjunction with the staff at Wallaceville, to the elucidation of this problem in conjunction with work on mammitis and abortion. Many experiments—medicinal, dieting, &c.—have been tried, and although considerable knowledge has been gleaned as a result we are not yet in the position when we can approach the farmer with confidence and assure him of a satisfactory preventive treatment. In Southland, Mr. J. Danskin, Veterinarian, has met with very encouraging results from injecting warm iodized saline solution into the vagina, a small enough quantity being used so that it can be retained for some time. Treatment on lines resembling this has not given as good results elsewhere, hence a good deal of further experimentation on the exact lines of Mr. Danskin's method will need to be done before any definite recommendation can be made regarding it.

*Paturient Eclampsia.*—This disease is still in evidence in a great many dairying districts throughout the country, and considerable loss has been caused thereby. The origin of the disease is somewhat mysterious, and presents a difficult problem to the research workers. Strictly speaking, there is no organic disease. On post-mortem examination nothing abnormal can be observed, and the only assumption that can be arrived at is that the trouble is an absorption of toxins from the intestines or womb, or that it is a lack of some essential element in the system at this particular period. This aspect of the question is being followed up. When making investigation into this complaint one is struck with its similarity to milk-fever. Both these troubles occur in the richer class of country where animals are being well cared for, and many of the symptoms are common to both. So much is this the case that I am satisfied that many cases of milk-fever are mistaken for eclampsia, and on this account treatment is not applied, or, if so, only in a prefatory manner, as there is a preconceived idea that treatment for the latter trouble is useless, and that fatal results will follow in spite of any treatment that may be applied. In these circumstances I am strongly of opinion that when a cow goes down after calving the customary treatment for milk-fever should be applied in every case. It can do no harm, and in many cases will be the means of restoring the cow to her normal condition. If this treatment is properly carried out (the udder should be inflated until it is tense and hard to the feel), and care is taken to see that the animal is kept in her natural position afterwards, I feel sure that mortality among our dairy stock at this season would be considerably lessened.

*Blackleg.*—There has been a considerable increase in the number of deaths from this disease in the Auckland District, while in Taranaki the position is much the same as previously. The increased mortality in the Auckland District is in all probability due to the fact that, on account of the discontinuance of general vaccination, the vaccination of many herds has not been carried out early enough in the season. It will be necessary in all cases where blackleg has previously existed to have the herds vaccinated early, and I feel satisfied that when this is put into force it will have the desired effect.

*Cattle-tick.*—The position in regard to cattle-tick remains much the same as in previous years. Within Area A an increase is reported from some districts, while from others a considerable decrease is observed. In those districts where better farming methods are employed, and the feed kept short, this pest gives very little trouble, whereas the reverse is the case when the feed is allowed to get away. In Area B the pest has appeared on a few farms where it had not been previously seen. Again, in this area, on those farms where it has been seen in previous years no further ticks were noticed after the first infestation, although a strict watch was kept. In Area B when a fresh outbreak occurs a strict watch is kept on the farm and neighbouring properties, and the stock treated. By these methods the pest is kept well in check.

In the quarantine area at Waitara, although all stock in the area were regularly inspected, no ticks were observed this past season. In the Gisborne district a considerable number of ticks were seen in the district north of Tolaga Bay. During the past season amended regulations under the Stock Act for the prevention of the spread of cattle-tick were gazetted, and the district referred to divided into A and B areas. The Uawa County Council erected a cattle-dip and also a sheep-dip, and no stock are allowed to leave the affected area without a permit. It is to be regretted in connection with the control work relating to this pest that a few ticks were found on a farm in the Nelson District. Although exhaustive inquiries were made at the time it was found impossible to get at the source of infection. Strict precautionary measures were taken, and by this means it is hoped that the pest will be eradicated on the farm in question, as has been the case in previous instances when a single outbreak occurred. I would again impress upon settlers in those areas where tick is plentiful the necessity for keeping this pest in check, not only in their own interest but in the interests of those in other districts. To keep cattle clear of ticks during the season is not a difficult matter in milking-herds. Further, if the