

Observations in Taranaki suggest a possibility of infection carried by the bull's organ being a factor, and this aspect of the problem is being followed up. Scientific research is often necessarily slow in producing definite successful results which can be practically applied, and while it is in progress it is necessary to do the best possible, with our existing knowledge, to minimize losses. With this in view, advice regarding herd-management and preventive treatment is being freely circulated among farmers by means of lectures, leaflets, and other literature.

The trend of modern dairy practice in the Dominion is to increase the milking-period of the herd by early calving. Two factors, one decreasing in effect, the other increasing as the season progresses, operate against this aim being always successfully realized. These two factors are (1) adequate early spring-feed provision, and (2) the difficulty often experienced of getting cows and heifers to hold to the first or second service of the season. Cows which fail to hold at the proper time will almost invariably get in calf later on, sometimes in February or March. This means that they are thrown out of time for their next conception and calving; these animals, moreover, are often yielding well when the herd is dried off in the ordinary way. There is now a method developing which is economically sound, in the circumstances, if the farmer is prepared to face the labour and inconvenience involved by winter milking. This is to avoid calving too late in the season by making no further effort to get the animal in calf if she fails to hold after the second or third service, but to milk her on continuously for from eighteen to twenty months, making provision for extra good feeding for the May, June, and July period. Such a cow, if a good ordinary producer, might yield up to 500 lb. or more of butterfat during this prolonged milking-period, and could be dry for from four to six months before calving. Experience is showing that cows treated in this way almost invariably hold to their first service, when they become properly timed for the future.

On the other hand, some farmers with experience hold the view that cows which only hold to service after the New Year, and consequently do not calve until the next season is well under way, will yield as great an amount of butterfat during their shortened milking-period as they normally yield during a full season. Taking everything into consideration, however, the practice of giving the cow a year's rest from breeding seems sounder economically, and is more likely to bring about regular conception at the proper period during the future milking-life of the cow.

TUBERCULOSIS.

The returns furnished by Inspectors at meat-export slaughterhouses and abattoirs show that the number of animals found on slaughter to be affected in any degree with tuberculosis was 5.22 per cent., this being an increase of 0.12 per cent. on the preceeding year's figures. An analysis of these returns indicates that this is limited principally to cull cows fattened for beef in the North Island, and it may be a reflection of the closer segregation of animals on pasture areas of dairy-farms the carrying-capacity of which has been increased by top-dressing, combined with the greater protection given by the heavier growth of herbage to tubercle bacilli voided on to the paddocks. On the other hand, the number of tubercular animals condemned on farms and at saleyards by Inspectors decreased by 4 per cent. as compared with the preceding year. Pigs showed a decrease of 0.38 per cent. As regards dairy cows supplying the main centres of population, the position is satisfactory, as is shown by the fact that of 714 composite samples of the mixed milk of individual herds subjected to biological examination only four were found to contain tubercle bacilli.

THE CHEMICAL LABORATORY.

A large volume of work was done in connection with deficiency diseases by the Chief Chemist, Mr. B. C. Aston, and this is dealt with in his appended report. It was carried out largely in association with the Mineral Content of Pastures Committee of the Research Department, and partly financed by a grant from the Empire Marketing Board. The investigation entails a large amount of analytical work, and this has caused much pressure upon the staff of the Laboratory. More analysts are needed in order to meet requirements for research and for general routine work.

THE VETERINARY LABORATORY.

The Veterinary Laboratory, situated at Wallaceville, has been responsible for a large volume of good work under the direction of the capable Officer in Charge, who furnishes a detailed report which is printed later. This work not only embodies special research into individual diseases, but also a large number of examinations of material sent for identification by field officers of the Live-stock Division, farmers, and others. Additional accommodation is badly needed in order to enable the increasing activities of this institution to be efficiently carried on.