Field observations as to pasture-management, rainfall, drenching, supplementary feeding on rape and other crops, and other relevant inquiries have been carried out. There appears to be no doubt that seasonal climatic conditions play a big part in increasing or decreasing the parasitic invasion of the animals, and consequently increasing or decreasing the mortality from such an invasion. In these circumstances too much emphasis cannot be laid upon the fundamentals of sound sheep-management (feeding, drenching, avoiding overstocking, supplementary feeding, pasture-control) and sound sheep-nutrition at all seasons of the year.

The weekly radio lecturettes have repeatedly stressed these points, and much of a preventive nature has already been achieved. Several seasons of an intensive fight against the parasitic problem would undoubtedly do much to improve the position and cut down losses to a reasonable minimum.

Infectious Entero-toxaemia (Pulpy Kidney).—The losses from this disease were below the average in most districts. In Otago a considerable measure of control of the losses in lambs is now effected by means of vaccination of the pregnant ewes. From the figures contained in a special report it is observed that the percentage mortality in lambs from unvaccinated ewes was about double that in lambs from the vaccinated ewes. Vaccination of the ewes is justified in all districts where losses of lambs warrant precautions.

The losses occurring in older sheep from this disease are not so easily dealt with. Apparently the immunity conferred on the lamb through the colostrum of the ewe is not of a lasting nature. Although it appears to protect the lamb over the period of lamb-mortality—*i.e.*, from three to eight weeks of age—further vaccination of the lamb itself has been considered with a view to a longer protection to cover losses in older lambs and hoggets. So far the results obtained have not been satisfactory, and further trials will require to be carried out.

As a result of the extent of the losses in young lambs in Canterbury from this disease, it is anticipated that a considerable increase in the vaccination of the ewe flocks in this area will take place during the next winter.

Lymphadenitis.—Although the incidence of this disease in North Island flocks is generally low, lines of aged ewes sent forward for slaughter are frequently seriously affected. In such cases the owners are advised as to the proper methods and precautions to be taken to reduce the infection on the farm. The incision of the carcass glands at all works is necessary in mutton being exported, and a higher incidence is shown in certain South Island works. It is essential for owners to take the precautions recommended so as to keep the disease in check.

Pregnancy Toxaemia (Ante-partum Paralysis) in Ewes.—Among the diseases of sheep in Canterbury, it is reported that this disease had a widespread occurrence. In Otago the incidence was comparatively low last season, the failure of the turnip crops necessitating the feeding of more hay and chaff, with apparently beneficial results. In the absence of the usual prolonged feeding on turnips, the ewes were healthier and more active.

In the North Island the mortality from pregnancy toxæmia was not high. There were a few exceptional cases.

As curative treatment is not satisfactory, this is a disease which it appears necessary to control by prevention. Sound management and winter feeding of the ewe flock in the later stages of pregnancy are effective measures which repay owners for the extra labour and expense involved.

Contagious Ecthyma (Sore Mouth).—The use of the vaccine as a protection against this disease continues to give good results. Numerous outbreaks were seen in unvaccinated flocks during the past year in Canterbury and other districts. It is anticipated that there will be an increase in the number of flocks to be vaccinated next year. Owners are strongly recommended to adopt this course.

Contagious Ophthalmia (Pink Eye).—The dry season experienced revealed quite a number of flocks affected with this eye-disease. Information in regard to it was the subject of radio broadcast lecturettes from 3YA, Christchurch. The disease is not serious if prompt measures in regard to isolation and treatment are put into operation.

Hydatid Disease.—Much publicity has been given to the subject of hydatid disease in man and animals and the prevention of same. During the year the Dogs Registration (Prevention of Hydatid Disease) Regulations 1938 were gazetted, and as from 1st January, 1939, have been in force.

Under the regulations all owners of dogs have been supplied with the effective tapeworm medicine known as arecoline hydro-bromide. It now remains with owners to carry out the suggested dosing of their dogs at regular three-monthly intervals, and to prevent the reinfestation of dogs by prohibiting the use of raw offal in the feeding of dogs. Acting conscientiously along these lines, the incidence of the disease in the human subject should be eliminated and the incidence in animals greatly reduced if not eliminated.

It is on record that the owner of one property reduced the incidence of the disease in his sheep from 15 per cent. to ½ per cent. in a period of three years through feeding no offal (livers and lungs) to his dogs. Only four livers were found affected with hydatid cysts out of seven hundred examined. This should be an incentive to other owners to adopt the same practice and achieve such equally good and encouraging results.

Liver-fluke and Black Disease.—The losses from black disease in the liver-fluke district of Hawke's Bay is now controlled by the regular use of black-disease vaccine. Fluke itself does not cause losses of sheep in New Zealand, but indirectly is responsible for the occurrence of black disease.

Two lines of sheep sent forward for slaughter from the Otago Central District were found infested with flukes in the liver. The increase in irrigation in this area will require to be carefully watched from a stock parasitic point of view. Irrigation and heavier carrying-capacity will tend to intensify the parasitic problem.