

Memorandum re Research in Animal Parasitology

Recognizing that the live stock industry was suffering severe losses because of animal parasites and that no adequate effort was being made in Canada to study this menace, or to deal with it, it was decided to undertake investigation work at Macdonald College. The work was begun in 1928, when it was placed in charge of a Committee composed of members of different departments who were interested in this field of study and who were in a position to participate in it.

At no time has it been possible to determine the extent of parasite infestation but estimates made by veterinarians and by live stock men engaged in education, production and slaughtering have been of value as an index of the economic importance of the problem.

Thus for instance Dr. Alfred Savage, one of our leading veterinarians writes to us, "I have yet to autopsy a country horse without finding literally handfuls of bots and numerous sclerotomes. In certain sections of the province sclerotomes, cyclicostomes, etc., kill scores of yearling colts annually. As a conservative guess I should say there is a loss in Manitoba of 10 per cent of the live stock value through parasitic diseases. The extension veterinarian, with whom I have just been discussing the subject, would double that figure."

Sheepmen regard parasites as the chief peril of the industry, and in Eastern Canada the Dominion Live Stock Branch recommends about thirty-five as the maximum size of flock as it is well known that with larger flocks, trouble from parasites is likely to be excessive. One of the largest packing houses states that in districts where the nodular worm-(*Oesophagostomum*) occurs the returns from casings alone is thirty-five cents a head lower than from some of their other plants where this disease is not prevalent. Mr. J.K. King, Manager of the Maritime Live Stock Board writes us: "Internal parasites are practically driving the farmers out of sheep. In analyzing the shipping statements from different sections of the Province (N.B.) over a period of five years, we find that there is a general decrease in the average weight and finish even in view of the fact that the farmers are following better breeding and feeding methods."

The information with regard to swine is less definite but producers complain persistently of the difficulty of feeding swine economically. Our own studies show the presence of a very marked infestation of intestinal worms and lung worms in parts of Eastern Canada and we are convinced that a very considerable proportion of the trouble experienced in raising pigs economically is due to the invasion of the lungs by *Metastrongylus* and the larvae of *Ascaris*, and to interference with the alimentary functions by *Ascaris*.