Next the nostril and ear cavities of the host were examined for Diptera larvae. The host was then examined for endoparasites. A ventral incision from the pelvic symphysis to the diaphragm was made, the flaps of the body wall reflected, and the entire viscera including the lungs and liver removed. The rumen was cut open and the contents examined for flukes. The following organs were then ligatured and removed: The reticulum, psalterium, abomasum, sections of the small intestine (upper and lower), caecum, and a section of the large intestine. Faecal samples were collected from the rectum.

The liver was next examined for cysts, usually appearing as whitish spots on the surface. The bile ducts were cut into and examined for fluke infestation. The liver was cut up and the pieces squeezed vigorously to remove any flukes present. Cysts adhering to the mesentery or body wall were removed.

The lungs were examined for cysts and the trachea and bronchi slit open and examined for lungworm.

Laboratory technique

Ectoparasites. In the laboratory the hide was examined for ectoparasites using one of the following methods: (a) The brushing and hand picking technique. This was found to be the simplest and one of the most effective methods, especially in the case of the biting lice (*Damalinia longicornis*) which were hard to dislodge by other methods such as the flotation technique, although it must be emphasised here that this method was only useful for macro-parasites. The hair on the hide was parted to expose the parasites, which were usually found at the base of the hair, and the parasites were brushed out or dislodged with a dissecting needle. It was sometimes found, in the case of thick infestations, that a large number of lice could be collected by clipping the hair close to the skin surface and later sorting the lice from the hair clippings.

(b) The flotation technique. This method, described by Gering and Thomas (1953) has been used with a good deal of success by overseas workers and was found to be especially useful in the case of mites and Anoplura. Few Anoplurans and no mites were found from the red deer, so this method did not really have a fair trial, and the yield for Mallophaga by this method is recognised as being consistently low, as the mandibles of these lice firmly clasp the hair of the host and thus make removal difficult.

A piece of hide, small enough to fit comfortably into a large preserving jar, was placed in a quart jar half filled with water, to which a small teaspoonful of detergent had been added. The jar was sealed and shaken vigorously at approximately ten minute intervals over a period of two hours. The piece of hide was then removed, any adhering parasites being washed back into the jar. The solution was left for several hours allowing the parasites to settle to the bottom of the jar. The excess liquid was poured off and the residue examined. The author found, however, that the available detergents were unsatisfactory, producing an excessive amount of foam.

(c) Boiling in caustic. This was especially successful if lice were difficult to remove or were in small numbers. The hide was placed in a beaker with a strong sodium hydroxide solution. The hair dissolved away from the hide leaving the lice and skin remaining. The skin was removed and the liquid filtered off.

Ectoparasites, when isolated by one of the above methods, were placed in 70% alcohol. They were then cleared and mounted in polyvinyl-lactophenol mountant.