

2000 HSC Notes from the Examination Centre Sheep Husbandry and Wool Technology

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Sheep Husbandry & Wool Technology

Written Examination

General Comments

Candidates this year displayed a good level of knowledge and understanding in their responses.

Section I – Special Topic Short Answers (20 marks)

The Special Topic this year focused on ovine Johne's disease. Candidates were able to recall the symptoms and differentiate between free and sub-clinical infections of this wasting disease. Candidates failed to realise that lambs are the most susceptible age group to Myobacterium Paratuberculosis and that the bacterium can be shed in the sheep's faeces within 6 months of becoming infected.

Candidates knew that a post-mortem was the most reliable method of determining a positive diagnosis, compared to a blood (Elisa) test or a faecal culture.

The Market Assurance Program (MAP) and Owner Declaration were well understood by candidates as a means to minimise the risk of introducing OJD onto sheep properties. Candidates demonstrated a good understanding of the full economic and social cost on a property and its owners if sheep were diagnosed with OJD.

Section II – Short response answers (50 marks)

Question 3

Candidates were able to identify the nominated sheep breeds and indicate their role(s) in prime lamb production.

However, candidates had little knowledge of the role of urea in digestion. Urea is a source of non-protein nitrogen (NPN), which provides the correct C:N ratio for microbes to efficiently digest dry feed.

Question 4

Most candidates displayed a good understanding of the factors influencing lactation in the ewe. Candidates failed to indicate that increasing fleece weight is genetically correlated to an increase in fibre diameter.

Question 5

Candidates had a problem differentiating between a Ked (A) and the Itch mite (D), and the measures to control each.

Question 6

Candidates displayed a good knowledge and understanding of the questions asked in this section.

Question 7

Candidates had little knowledge or understanding of a wool quality assurance program. Two criteria for this program are a guarantee freedom from contamination and crutching three months prior to shearing to eliminate potential urine contamination of the fleece.

Candidates failed to clearly show any advantage of being involved in a wool marketing alliance. Larger, uniform lots being available to buyers and the fact that smaller growers can “ride on the back” of the name of a larger grower (for example, Haddon Rig) are two possible advantages.

Section III – Essays (30 marks)

Most candidates planned and clearly presented in a logical manner responses to the four essays. Most used headings, spacing and underlined the important points.

Question 8 (a)

Candidates who attempted this question failed to clearly describe any attributes of the nominated exotic sheep breeds, or to outline any specific management or marketing requirements.

Question 8 (b)

Most candidates attempted this question. They made a reasonable attempt to discuss the advantages and disadvantages of breeding your own rams as opposed to buying-in rams from a stud. Disease implications and objective measurement of fleece weight and fibre diameter were well discussed. However, in the discussion of flock structure, there was no mention of having to keep all ram progeny.

Question 9 (a)

Only one candidate attempted this question on wool marketing options. This may indicate one of the most important income earning events on the sheep farming calendar is poorly understood. A thorough appreciation of the wool marketing options available to a wool grower can have a profound influence on the main source of income from a wool producing enterprise.

Question 9 (b)

Most candidates attempted this question. However, their responses were very brief and showed a limited understanding of the effects of changing the average fibre diameter on the farm, the flock and the fleeces grown by the sheep.

No candidate indicated an understanding that this process takes many tens of years to achieve. Unless careful attention is given to measuring fleece weight and fibre diameter to quantify the change, fleece weights could decline, as well as the mature live weight of the animals. Careful attention to the wool attributes must be given, so that style doesn't deteriorate, which will significantly affect the wool value.