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**PERFORMANCE AND MANAGEMENT CHARACTERISTICS
OF WAIRARAPA AND TARARUA WOOL PRODUCTION
SYSTEMS.**

**R. G. Gavigan
April 1994**

**A thesis presented in partial fulfilment of the requirements for the
degree of Master of Agricultural Science in Farm Management at
Massey University.**

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I accept responsibility for any errors or omissions in this report.

ABSTRACT

In 1992/93 the New Zealand wool industry was based on approximately 52.5 million sheep that produced 255500 tonnes of greasy wool. The New Zealand Wool Board Grower Services Group, among others, provided the 24000 sheep farmers involved in wool production with management advice and technical assistance in growing and harvesting wool which was subsequently sold, exported, processed and promoted by a network of wool industry participants.

The purpose of this study was to :

- compile a detailed database of Wairarapa/Tararua wool production systems.
- compare the database compiled with existing databases to test their suitability for describing Wairarapa/Tararua wool production systems.
- identify management variable that may be important in achieving high levels of wool production and returns.
- identify methods to improve New Zealand Wool Board extension in the Wairarapa/Tararua region.

This was achieved by a combined mail and personal interview survey of a stratified random sample of 75 Wairarapa/Tararua wool producers. Descriptive statistical methods were used to describe the physical and financial characteristics of wool production systems and the management systems employed. Multiple regression analysis was used to estimate the relative importance of different management strategies and farm physical characteristics on wool production and clean wool price.

Few significant differences in mean wool production system performance within farm class, summer rainfall, sheep flock size and summer rainfall/farm class groupings were noted in the study. Thus, the Wairarapa/Tararua region was relatively homogeneous in terms of wool production system performance over the past three seasons. A large range in values for most wool performance parameters suggested that wool production system performance on individual farms was influenced more by management variables than by farm physical attributes.

A comparison of the New Zealand Meat and Wool Boards' Economic Service (NZMWBES) Sheep and Beef Farm Survey and Wairarapa Farm Improvement Club (WFIC) databases with data collected in this study indicated that NZMWBES and WFIC data were satisfactory for describing some, but not all of the characteristics of wool production systems in the region. Therefore, in order to maintain a representative overview of Wairarapa/Tararua wool production systems it is recommended that this study should be regularly updated.

Aspects of wool production systems that could be improved on many Wairarapa/Tararua sheep farms mainly related to : the quantification of sheep breeding objectives; use of objective criteria for replacement ewe hogget and ram selection; improved summer feeding of mixed age ewes (if wool prices improve); and improved marketing (objective measurement and offer of wool to a wider range of buyers) of privately sold wool. These aspects can be addressed by New Zealand Wool Board mass extension activities, primarily through newspapers and free publications. While improvements in management for wool production are likely to increase monetary returns to the regions' wool producers, they should be promoted in the context of assisting individual wool producers to achieve their personal goals/objectives.

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