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A STUDY OF MANAGEMENT PRACTICES
AND PRODUCTIVE PERFORMANCE ON A
SAMPLE OF HILL COUNTRY SHEEP
FARMS IN NORTH-EAST WAIRARAPA.

W.J. Parker
December 1984

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 dedicate this work to my wife, Vivienne, who faithfully provided support and encouragement throughout this study.

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

The research reported in this thesis was directed towards the analysis of the inter-relationships between management practices and productive performance on a survey group of 30 north-east Wairarapa hill country farms. The initial survey, which essentially concentrated on the period between ewe weaning and tupping, incorporated a combination of mail and personal interview techniques. In addition, sample liveweights of ewe hoggets in autumn (April 1) and of two tooth and mixed aged (MA) ewes prior to mating were obtained to describe production levels more objectively.

Preliminary results and apparent opportunities for improving the management of existing production systems were presented to the survey farmers as a group. As a consequence, a follow-up mail survey directed at management practices and associated production levels during the winter and spring (post-mating to weaning) was implemented in August 1983. Sample liveweights of ewe hoggets at spring shearing and ewe and lamb weights at weaning were collected. Results were discussed with the 29 participating farmers.

Descriptive statistical methods (e.g. frequencies, cross-tabulation) were initially used to describe farm physical characteristics and the management systems employed. Subsequently, multivariate techniques (regression and MANOVA) were used to estimate the relative importance of different management strategies and farm physical characteristics on system performance.

The major recommendation from this study is that increased emphasis should be placed on rearing ewe lambs
so that they achieve a liveweight of 35 kg or more by May 1. The average April 1 ewe lamb liveweight on the survey farms in 1983 was 30.2 kg (range, 18.7 - 40.0 kg). Other recommendations include mid-October or later commencement of calving, delaying ewe mating until April 1, earlier weaning of lambs and calves in dry summer areas (8-10 weeks and 12 weeks average age respectively) and increasing the winter rotation lengths of ewes. It is suggested that a large proportion of the potential level of production on hill country can be realised inexpensively through relatively small changes to existing management practices (such as those mentioned above) and associated management control of production system performance.
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