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MANAGEMENT ASPECTS
OF
PHOSPHATE FERTILISER USE
ON
HILL COUNTRY

A thesis presented in partial fulfilment
of the requirements for the degree
of Master of Agricultural Science in
Farm Management
at
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ABSTRACT

Farmer decisions relating to phosphate fertiliser use greatly influence farm profitability, and Farm Advisory Officers receive many requests for assistance in making fertiliser decisions.

The Cornforth/Sinclair Phosphate Maintenance Model predicts the annual loss of phosphate from grazed pasture production systems. This model is studied in this thesis and used as the basis for an investigation of phosphate use strategies on a sample of Manawatu hill country properties. Alternative management strategies on three case study farms are analysed.

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TABLE OF CONTENTS

	<u>Page</u>
ABSTRACT	ii
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF ABBREVIATIONS	viii
LIST OF FIGURES	ix
LIST OF TABLES	x
CHAPTER ONE	INTRODUCTION AND OUTLINE OF THE STUDY
	1
	1.1 Introduction
	1
	1.2 Objectives of the study
	2
	1.3 Thesis Outline
	3
CHAPTER TWO	THE CORNFORTH/SINCLAIR MODEL FOR CALCULATING MAINTENANCE PHOSPHATE REQUIREMENTS FOR GRAZED PASTURE
	4
	2.1 Introduction
	4
	2.2 The Cornforth/Sinclair Model Components
	6
	2.3 Mathematical Form of the Cornforth/ Sinclair Model
	12
	2.4 Interpretation of the Cornforth/Sinclair Model
	15
	2.5 Comparison of Cornforth/Sinclair and Karlovsky Models for Maintenance Phosphate Requirements
	18
	2.6 Summary
	23

		<u>Page</u>
CHAPTER THREE	ECONOMIC ANALYSIS OF MAINTENANCE PHOSPHATE FERTILISER REQUIREMENTS USING THE CORNFORTH/ SINCLAIR MODEL	25
	3.1 Introduction	25
	3.2.1 Increases in Technical Efficiency	27
	3.2.2 Increases in Economic Efficiency	29
	3.3 Factors Affecting Pasture Utilisation	30
	3.4 Using the Cornforth/Sinclair Model to Predict Pasture Utilisation or Relative Yield	32
	3.5 Monitoring System Performance	34
	3.6 Example Economic Analysis	35
CHAPTER FOUR	REVIEW OF SELECTED FERTILISER RESPONSE FUNCTION RESEARCH	39
	4.1 Middleton's Model	39
	4.2 During and Ludecke Approach	41
	4.3 "Decide" Approach	45
	4.3.1 Introduction	45
	4.3.2 Model Parameters	45
	4.3.3 Application of Decide	46
CHAPTER FIVE	THE FARM SURVEY AND SURVEY RESULTS	50
	5.1 Introduction	50
	5.2 Application of the Model to Survey Farms	52
	5.3 Determination of Model Parameters for the Survey Farms	53
	5.4 Discussion of Results and Applying the Cornforth/Sinclair Model to Existing Management Systems	57
	5.5 Analysis of Fertiliser Use and Stocking Rate Alternatives	59

	<u>Page</u>
CHAPTER SIX	
SPECIFICATION OF STOCK POLICIES AND MANAGEMENT STRATEGIES ON THREE CASE STUDY FARMS	65
6.1 Introduction	65
6.2 Example Policy for Farm 16	66
6.2.1 Stock Reconciliation	66
6.2.2 Management Strategies	68
6.3 Example Policy for Farm 10	69
6.3.1 Stock Reconciliation	70
6.3.2 Management strategies	72
6.4 Example Policy for Farm 4	73
6.4.1 Stock Reconciliation	74
6.4.2 Management Strategies	76
6.5 Comparison of Farming Policies and Management Strategies Affecting Pasture Utilisation on Case Farms	77
CHAPTER SEVEN	
ANALYSIS OF ALTERNATIVE PHOSPHATE USE AND MANAGEMENT STRATEGIES ON CASE STUDY FARMS	80
7.1 Introduction	80
7.2 Farm 16 : Re-estimation of Model Parameters and Analysis of Alternatives	81
7.2.1 Model parameters	81
7.2.2 Current Position of Farm 16	82
7.2.3 Alternative P Use and SR Policies	85
7.3 Farm 10 : Re-estimation of Model Parameters and Analysis of Alternatives	92
7.3.1 Model parameters	92
7.3.2 Current position of Farm 10	93
7.3.3 Alternative P Use and SR Policies	95

	<u>Page</u>
7.4 Farm 4 : Re-estimation of Model Parameters and Analysis of Alternatives	99
7.4.1 Model parameters	99
7.4.2 Current Position of Farm 4	99
7.4.3 Alternative P Use and SR Policies	102
7.5 Changes to Case Farm Policies to Increase Technical and Economic Efficiency	106
 CHAPTER EIGHT SUMMARY AND CONCLUSIONS	 113
 APPENDIX ONE	 118
APPENDIX TWO	145
APPENDIX THREE	148
BIBLIOGRAPHY	151

LIST OF ABBREVIATIONS

ALF	Animal Loss Factor
CC	Potential Carrying Capacity (su/ha)
csu	Cattle Stock Units
DM	Pasture Dry Matter (kg)
GM	Gross Margin (\$)
Hf	Heifers
P	Phosphate
PU	Pasture Utilisation (%)
RY	Pasture DM Yield relative to Y _{max} (%)
s:c	Sheep to Cattle Ratio
SLF	Soil Loss Factor
SR	Stocking Rate (su/ha)
ssu	Standard Stock Units
st	Steers
TGM	Total Gross Margin (\$)
Y	Pasture DM Yield (kg)
Y _{max}	Maximum Pasture DM Yield (kg/ha)

LIST OF FIGURES

		<u>Page</u>
Figure 2.1	Simplified Phosphate Cycle in Grazed Pasture	5
Figure 2.2	Maintenance P Requirement vs Stocking Rate	13
Figure 2.3	Relationships Between Pasture Yield and P Output, P Input and P Output on Medium Fixing Soils	20
Figure 4.1	Determining if Maintenance P Rates are Applicable (For Low P Loss Soils)	44
Figure 5.1	P Maintenance Requirements vs Stocking Rates (Showing Current Position of Survey Farms)	60
Figure 7.1	Feasible Regions for Farm 16	83
Figure 7.2	Feasible Regions for Farm 10	94
Figure 7.3	Feasible Regions for Farm 4	100
Figure 7.4	Gross Margin Per Ha vs Stocking Rate For Case Study Farms	107
Figure A1	P Loss and PU Values for Different CC/RV Combinations at SR 19	150

LIST OF TABLES

		<u>Page</u>
TABLE 2.1	Provisional Soil Loss Factors for New Zealand Soil Groups	9
TABLE 2.2	Animal Loss Factors	10
TABLE 2.3	Factors for Converting Stock Classes to Standard Stock Units	17
TABLE 2.4	Comparison of Fate of P Between Karlovsky and Cornforth/Sinclair (kg P/ha/yr)	24
TABLE 3.1	Financial Loss From Applying Less Than Optimum Maintenance Phosphate Applications and Achieving Less Than Maximum Pasture Utilisations	38
TABLE 5.1	Factors for Converting Replacement Beef Cattle to Standard Stock Units (Hill Country)	55
TABLE 5.2	Results of Application of the Cornforth/Sinclair Model to Existing Management Systems	58
TABLE 6.1	Summary of Management Strategies and Stock Policies for Case Study Farms	78
TABLE 7.1	Income and Expenditure 1979/80 for Case Farms	109