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# Review 45
Tussock Grasslands & Mountain Lands Institute – August 1988

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**Editor**  
B. T. Robertson

**Cover design**  
Pat Prendergast

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**Cover**  
A Champion superfine Merino ram, bred by Malvern Downs Stud, Central Otago.  
(Photo: Shirley Diver, Central Otago News)
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Wool Clip Preparation Standards Debated

B. T. Robertson

Research results which questioned the wisdom of conventional clip preparation did not find ready acceptance by representatives of the wool broking and exporting sectors, at a Seminar held at Lincoln College in May.

Current guidelines had moved away from emphasising uniformity within a number of lines, according to set criteria, to stress that only wools very different in processing use should be separated from main lines, said Mr Hedley Sanderson, lecturer in wool science at the College.

These guidelines were based on research carried out by scientists over many years. Dr Alan Edmunds, a scientist at WRONZ pointed out that the primary source of variation in fibre diameter is along individual fibres. Depending on breed, evenness of feeding, lambing stress and shearing time, this variation can be relatively small or extremely large.

"The largest source of variation in diameter is between the fibres in an individual staple, contributing over 70% of the total variation."

"The variation between sheep in an evenly bred flock is quite low in comparison with the total variation within the fleece, the ratio being of the order of 1 to 20.

"A similar situation existed with fibre length. The variation in length between fibres in a staple was by far the largest source, being up to 8 times greater than the variation between staples in a fleece and the variation between fleeces in a flock," Dr Edmunds said.

"Within a flock there is good correlation between staple length and mean length of the fibres in a staple, so that staple length is a useful guide to mean fibre length."

This information has resulted in advice which recommends that most fleeces from a flock can be bulked together, with those at the coarse end, and those with manufacturing faults being removed from the main line. Other cast lines could include short, tender wool, stains, cotted and doggy fleeces.

The Australian Wool Corporation "Code of Practice" suggests a merino line of bulk 64' (20 micron) could include some 60's (23 micron) and 70'y (19 micron).

However, the Code recommends that, if there is sufficient superfine wool available to produce a bale, fleeces should be classed to individual quality numbers, i.e. 100's (15 micron) 90's (16 micron) 80's (17 micron) and 74's (18 micron).

In a press statement after the Lincoln College seminar, organisers Dr David Cottle and Mr Hedley Sanderson said there was a danger that woolgrowers would receive contradictory advice from the Wool Board and woolbrokers or merchants. Unlike Australia, New Zealand does not have a set of clip preparation guidelines drawn up by all sections of the industry.

"Returns to growers, brokers and exporters, depend on satisfying the needs of processors and final consumers."

"What is in dispute is the best on-farm preparation to meet this need while maximising the returns to the grower, broker and exporter.

"Traditionally, bellies were separated on the shearing board; stains, second pieces and locks removed; first pieces skirted from the fleece on the table and fleeces classed into strong, medium and fine lines. The Wool Board has made recommendations that skirting be as light as possible to remove processing faults such as cotts and unscourable yellow, and that classing of crossbred clips into several lines on the basis of fineness is not necessary.

"Claims that clip preparation standards are falling, which lend support to arguments for traditional methods, are difficult to substantiate. More specification of wool in marketing means that these standards must be assessed in
a changing environment. The practices of exporting, broking and clip preparation must change together to meet new conditions.

"At the Lincoln College seminar the results of recent Australian and New Zealand research was presented, which calls into question two currently accepted practices; skirting of first pieces and classing of fine wools. Lance Wiggins presented the results of Wool Board trials involving 35 crossbred clips over six seasons. Flocks were separated into two mobs at shearing. The wool from both mobs was handled in exactly the same manner, except that one mob was skirted for first pieces while the other was not. When the returns for the fleece wool and skirtings were combined it was found that, on average, returns were 10 c/kg higher for unskirted clips. Only in four cases were returns improved by skirting.

"Similarly, Australian research has examined the overall returns from trial clips and these results indicate that classing and skirting do not improve the total net value of a clip to the grower. Any increase in the price received for "top" lines was more than compensated by lower prices for skirtings or other classed lines.

Elaborating on this point, Mr Sanderson said the total return from a 20 micron average clip offered as one line (excluding faults) should be the same as the return from the same clip classed into 19, 20 and 21 micron lines. This is because, over the fineness range of most clips, the price-premium curve for fineness is close to a straight line. It would be rare to class a clip right on a point of change in the curve and make an overall price gain from the fine line, he said.

"Woolbrokers and exporters were quick to dissuade growers from applying such findings to their clip preparation procedures in the shed. There is some merit in arguments for a cautious approach to change. The Wool Board itself has not yet recommended any "radical" changes.

"However, comments to the effect that processors require that traditional clip preparation methods be maintained must be put into perspective. If this were the case, then the prices received at auction should reflect this requirement in significant premiums for traditionally prepared wool. Making the mistake of looking only at the "top line" price might lead to this conclusion, but the figures produced by research on returns for the whole clip shows the contrary."

Supporting this view is the conclusion reached in an information leaflet produced by the Australian Wool Corporation.

"Woolclassers can do very little to reduce the overall variability of the fibre diameter of wool from a mob of sheep. In attempting to do so, by making lines of different visual qualities, they are usually fragmenting wool which is essentially consistent for fibre diameter. In addition, the wool will also be consistent for other factors such as vegetable matter and staple length and strength. Such fragmentation adds to the cost of wool preparation, wool testing, bulkclassing, interlotting, marketing and consignment building."

This is not to devalue the role of the woolclasser. If anything, that role is becoming even more important. As one participant at the seminar said, a woolclasser's job is primarily quality control. "Removal of non-scourable yellow, cotted, pen-stained, polypropylene fibre or vegetable matter contaminated wool are the most important operations after shearing that will influence quality," Dr Cottle and Mr Sanderson said.

"It would be to the advantage of the whole industry if this increasing technical knowledge and economic information could be allied to the commercial experience of the trade. The objective should be a coherent and widely accepted set of clip preparation guidelines. The Department of Wool Science at Lincoln College is attempting to facilitate this process," they concluded.

The published proceedings of the May Seminar "Wool Production and Preparation for Profit" are available from the Bookshop, Lincoln College, for $12.00 plus $2.00 postage.
The Outlook for the New Zealand Sheep and Beef Industry

N. W. Taylor

The following is an edited version of an address to the N.Z. Fertiliser manufacturers' Association Conference held at Nelson, 16 June 1988.

Introduction

The farming industry, along with many other exporters are facing their worst operating environment post war. Regrettably the macroeconomic policies which have brought the present position about appear to be set in concrete and there is, at least to date, no alternative strategy being considered.

While it is true that inflation has been the major problem in the economy over the past decade at least, an economy with low inflation, low investment and low growth coupled with high unemployment is not an economy which is going to provide the standard of living which we would all like to see.

The present position

Currently the sheep and beef sector is suffering from two major problems — inadequate cash flow and declining equity. The problem with cash flow is brought about by several factors including low farm gate prices for some products (even though market prices may not be depressed), high processing and shipping costs, and an overvalued exchange rate. This is compounded by falling stock numbers especially for lamb, and also wool. This low level of gross income means that total expenditure is being severely depressed with a decreasing proportion of that low expenditure being allocated to the productive inputs such as fertiliser and repairs and maintenance. In fact we currently estimate that at the present level, the volume of these inputs is between 35 and 40 per cent below that required for the maintenance of present stock numbers.

The capital base of the industry is being eroded.

Even after the sharp cut-back in inputs the net income position remains weak, is some 10 per cent below last season, and in real terms is only 35 per cent of the 1975-76 levels. This low level of net income, currently estimated at $20,700 per farm (not per farmer) has to meet drawings, tax, and principal payments. This means that the average farm is currently accumulating debt at a rate of $9,500 per farm per year.

Interest payments now make up 26 per cent of farm expenditure whereas 5 and 10 years ago the figure was 12 to 16 per cent. For the heavily indebted farm it is even more; some 24 per cent of farms are now committing 45 per cent of their gross income to interest, and this group is growing annually.

The decline in the level of inputs in recent years is now reflected in falling stock numbers. The decline in overall stock numbers in the year to June 1987 was the largest annual fall in over 25 years. The trend in some districts is most marked and is set to continue downwards.

The relationship to fertiliser use and stock numbers is interesting. In 1975-76 2,177,898 tonnes of fertiliser were manufactured at which time we had 99.6 million stock units of sheep,
beef and dairy cattle. In the past two years manufactured tonnage has been little more than 1,000,000 tonnes yet stock units have totalled around 105 million. This represents a 52 per cent reduction in the tonnage per stock unit and this clearly demonstrates the rundown in investment which is occurring.

Figure 1 indicates the volume fall in fertiliser use on the average sheep and beef farm. Fertiliser usage per farm in the current year remains at only half the average of the past 5 years, and one third of the usage of the 1970s.

The increased expenditure on interest which has taken place is illustrated in Figure 2.

In addition to the problems of inadequate cash flow has been the decline in equity resulting from falling land values.

Figure 3 shows the distribution of capital net worth among all sheep and beef farms as at June 1986. The shaded area in Figure 3 represents the 24 per cent of farms with less than 50 per cent equity. These farms cannot progress easily as they have high debt servicing charges. The situation by and large has not changed since June 1986 except that the low incomes now forecast for 1987-88 will place these farmers under extreme pressure.

Figure 3 also shows that 5 per cent (1,100 farms) have no equity or negative equity and cannot survive as farm businesses. A further 5 per cent of farms with very low equity (less than 20 per cent) are also under extreme risk as farm businesses. At the other end of the scale 40 per cent of farms have high equity (80 per cent or more) and these, because of relatively low debt servicing commitments, are least at risk.
There is no one common characteristic of those farms at risk except their low equity. They are geographically well spread and can be large, medium or small farms. Regionally, Canterbury and other areas with cropping have a larger proportion of farms at risk than the national situation shown in Figure 3.

Stock Performance and Profit

With the current trend in the industry to lower stock numbers one would logically expect stock showing the least profit to be those that are reduced in number first.

Previous studies carried out by the Economic Service have shown the importance of high stock performance to produce high profits. The situation remains unchanged today and the following analysis clearly illustrates this for the 1985-86 farming year when incomes fell steeply on previous years.

The analysis was based on Class 4 North Island hill country farms which were grouped into low and high performance farms (see Table 1). Performance was defined as gross income from livestock per livestock unit wintered. This measure of performance summarises quality and volume of production and prices received for the season.
Figure 3: Distribution of 1985-86 Capital Net Worth as a Per Cent of Total Assets at Close All Farms

Physical data in Table (1) show that although stocking rates were similar for the two groups of farms there is a clear distinction in terms of animal performance.

The high performance group of farms show a 1.2 kilogram (28%) advantage in per head shorn wool production. Their lambing percentages are significantly higher (18 percentage points) than the low performing group and calving percentages are also higher.

The farms in the high performance group are also shown to have a higher usage of fertiliser for both the year under consideration and the average over 4 years. Interestingly, the low performance farms responded to lower incomes in 1985-86 by cutting fertiliser expenditure by a greater amount than the high performance farms (59% reduction from the 4 year average versus 46% on high performance farms).

Financial data for the two groups of farms show that both had similar valuations for land and buildings at June 1986.

Financial data for the high performance group of farms show a 45 per cent higher gross income per hectare than the lower performing group of farms. This advantage from high performance livestock reflects both better quality and higher volumes of production for sale as both groups faced the same price environment during the season.

Interest expenditure per hectare was similar for both groups of farms. Expenditure per hectare (before interest expenditure) was 26 per cent higher for the high performance group of farms which in part was due to the higher fertiliser usage on those farms.

Net farm income (before interest expenditure) for the high performance group of farms at $136 per hectare was significantly above
### Table 1  Class 4 North Island Hill Country 1985-86

<table>
<thead>
<tr>
<th>Performance</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.U./Ha</td>
<td>10.4</td>
<td>10.9</td>
</tr>
<tr>
<td>Labour Units</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td>S.U./Labour Unit</td>
<td>2,416</td>
<td>2,269</td>
</tr>
<tr>
<td>Wool kg/hd</td>
<td>4.14</td>
<td>5.31</td>
</tr>
<tr>
<td>Lambing %</td>
<td>90.3</td>
<td>108.5</td>
</tr>
<tr>
<td>Calving %</td>
<td>82.0</td>
<td>84.9</td>
</tr>
<tr>
<td>Fertiliser kg/S.U.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985-86</td>
<td>4.3</td>
<td>8.5</td>
</tr>
<tr>
<td>4 year Average$^1$</td>
<td>10.4</td>
<td>15.7</td>
</tr>
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</table>

<table>
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<th>Financial:</th>
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</thead>
<tbody>
<tr>
<td>Gross/S.U.</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Gross/ha</td>
<td>22.50</td>
<td>31.00</td>
</tr>
<tr>
<td>Interest/ha</td>
<td>51.60</td>
<td>52.25</td>
</tr>
<tr>
<td>Expenditure/ha$^2$</td>
<td>159.70</td>
<td>201.10</td>
</tr>
<tr>
<td>Net/ha$^2$</td>
<td>73.50</td>
<td>136.40</td>
</tr>
<tr>
<td>Average Unit Cost$^3$</td>
<td>0.68</td>
<td>0.60</td>
</tr>
<tr>
<td>Average Unit Cost$^4$</td>
<td>0.91</td>
<td>0.75</td>
</tr>
<tr>
<td>Land Valuation/ha</td>
<td>1010</td>
<td>1030</td>
</tr>
</tbody>
</table>

$^1$ Sub-sample, pasture fertiliser  
$^2$ Before interest expenditure  
$^3$ Expenditure (excluding interest) per unit of output ($)  
$^4$ Expenditure per unit of output ($)  

**Source:** N.Z. Meat & Wool Boards' Economic Service Sheep and Beef Farm Survey.

(+85%) that for the lower performing group of farms. The high gross income more than compensated for higher expenditure on the high performance group of farms. Another way to view the financial performance of farms is to express expenditure as a proportion of gross income. This provides the average unit cost for each dollar of gross income and this measure is included in the Table. For the low performance group of farms 68 cents was spent to produce each dollar of income. In comparison the average expenditure was 60 cents for each dollar of income on the high performance farms reflecting the financial advantage from high performance levels of livestock. For total expenditure the figures were 0.91 cents and 0.75 cents respectively.
Figure 4. Actual and real overdraft and interest rates.

Source: N.Z. Meat & Wool Boards Economic Service
Department of Statistics Reserve Bank

Figure 5. Sheep and beef numbers

Source: N.Z. Meat & Wool Boards Economic Service
Based on Department of Statistics data 14 June 1988
Figure 6. Net farm incomes and farmland sale prices compared.

Outlook

The sharp change in the economic environment in which farmers (and other exporters) find themselves today has placed them in an impossible position.

Because of the depressed product prices at farm gate in New Zealand (brought about largely by the high exchange rate), and high input costs, farm cashflows are completely inadequate to meet normal requirements for a large number of farms, and most are continuing to accumulate debt at an increasing rate.

The overall financial viability of the industry is being put at risk in the short run. Yet many of these units could have been viable in the long term. The industry has serious difficulty coping with the magnitude of the change and the length of the adjustment period. The human, social and financial cost is high.

In the short run, farmers are being forced to severely cut expenditure to below maintenance levels, to destock, to "shrink back" the enterprise in every possible way simply to survive.
For some this is not sufficient and mortgagee sales are taking place. For some it is the only way out. For others a more gradual and balanced implementation of policies leading to the "more market" liberalised economy would have seen them survive, even flourish.

There are three main causes for the widespread problems in the industry. These are the present high exchange rates, high inflation (at 8-10%) relative to our trading partners and excessively high interest rates.

In the short run only a change in the exchange rate can give the income position the boost it needs. For example a 10% devaluation would add $15,000 to gross income on an average farm, while costs would rise by only $1,100.

To achieve that by a reduction in interest charges the interest bill would need to halve. Both are needed. What we need is export led growth in the economy.

Furthermore inflation needs to come down to zero and be held there for a decade to get our costs back in line with our competitors' costs.

Prices

Treasury say that the export sector must be market led. The price obtained at farm gate is determined by—
1. prices in the overseas markets
2. off-shore costs
3. the exchange rate
   and
4. on-shore costs e.g. processing.
   The farmer gets the remainder!

Therefore when assessing future prospects for each product it's important to consider trends in all four. It is equally important to ask how direct are market signals. What are the real signals and what are short term premiums, exchange rate effects and so on? How directly are the market signals being transmitted?

Overall and looking into the 1988-89 year there is little likelihood of a major improvement in market returns, and while the present exchange rate continues at its present levels, farm gate receipts will not improve greatly either.

It is worth noting however that there is a leverage effect at farm gate from a currency move, and this varies markedly between products, as the following table shows. Generally the more the product is further processed in New Zealand the greater the fall in farm gate returns from a revaluation. Prices can change quickly.

For a 10 per cent revaluation the following leveraged effects on farm gate prices are:

<table>
<thead>
<tr>
<th>Product</th>
<th>Farm Gate Price Change</th>
<th>Approx %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wool</td>
<td>-10%</td>
<td>Little added</td>
</tr>
<tr>
<td>Beef</td>
<td>-12%</td>
<td>30%</td>
</tr>
<tr>
<td>Dairy</td>
<td>-18%</td>
<td>45%</td>
</tr>
<tr>
<td>Lamb</td>
<td>-18%</td>
<td>50%</td>
</tr>
<tr>
<td>Mutton</td>
<td>-32%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Base November 1987 forecast prices.

Source: N.Z. Meat & Wool Boards' Economic Service
N.Z. Dairy Board

The Future

N.Z. has a comparative advantage in the conversion of grass to protein. (The disadvantage is being so far from our main markets.)

N.Z. has no other real competitive industries (or likely to) other than land based activities. (N.B. tourism, services).

Land will go out of agricultural production world wide and those that remain will have high output per unit of input (i.e. efficient operations) and here we have an advantage.

This means that we need to keep up our technology input at all stages in the chain, and rather than less expenditure on research nationally we should be putting in more, (e.g. genetic engineering) if we are to keep up with the rest of the world.

Industry organisation and structure will become more critical. Do we really have the best structures in place to get a fair share of the final market price back to the producer and keep him viable? I suggest not. (Remember a commercial firm is interested in maximum return to its shareholders!)
The form in which we sell our products will change. With greater emphasis on fresh and chilled products, I believe we will sell an increasing proportion of our meat, as live animal exports. It should be noted that there is a large world trade in live animals and we really have not been part of that trade in the past.

The costs of shipping, access to markets, the costs of further processing can frequently be reduced by moving these activities closer to the final consumer. (This trend has real implications for the meat processing industry in N.Z.).

Small changes in the levels of subsidy in our main markets could result in lower volumes of production which in turn could mean good opportunities for us. We can produce our products at a lower cost and in the end this comparative advantage could be the trump card for us.

The real issue for many in our industry is how to survive the present disastrous period. We are destocking rapidly as a nation, and not maintaining our assets, and our export figures are beginning to reflect this.

When inflation is finally brought under control, and when farm gate returns improve in the future, the concern is that many of the producing/servicing businesses, (be they farms, transport, processing industries or retail activities) which would normally benefit from this improved economic environment, will have been lost as a result of the present protracted unfavourable climate. These businesses will not return.

What then? What will New Zealand look like with a sharp drop (up to 30 per cent) in export receipts from agriculture (and other export sectors) two to three years out? Where are the alternative activities to take the place of the vast agricultural industry? What alternative employment opportunities or G.D.P. generating activities will we have in place in this time frame? Silence!

Our greatest single asset is undoubtedly our land-based resource and our ability to grow grass and produce protein products. They will be in demand again in the future, and farming will be profitable as a result of a more favourable economic climate. But the present cold economic winter will need to end quickly.
Resource Management
Law Reform

The Minister for the Environment, Geoffrey Palmer, announced a review of the major resource management statutes in January. The review, covering town and country planning, water and soil management, and minerals, will also consider whether environmental assessment procedures should be incorporated in resource management legislation. It will also look at other related statutes where relevant. The aim is to have new legislation by the end of 1989. This article summarizes material provided by the Ministry for the Environment.

The aim of the review is to produce legislation which is integrated, workable, efficient and fair and it will address concerns expressed about the existing laws (for example, that they are too costly, slow and bureaucratic and do not give third parties adequate opportunities to be heard).

The review is to be closely linked with the review of regional and local government. The Minister for the Environment chairs the ministerial committee which will oversee these two reviews (the Committee on Reform of Local Government and Resource Management).

Other members of the Committee include the Ministers of Conservation, Maori Affairs, Trade and Industry, Finance, Tourism, Local Government and State Services.

People and resources

The Government has decided that the review should draw widely on the range of relevant skills and expertise in the public and private sectors.

The Ministry for the Environment has convened a four person core group consisting of Treasury and Environment officials, an adviser on Maori issues and a lawyer working in the natural resources area. The core group will lead the investigation and consultation, and report to the Ministerial Committee.

It is not working in isolation. People from government agencies, local government, the private sector and other interested groups are working on a number of issues related to resource management law reform.

Some of the topics covered so far have included an analysis of existing statutes, resource ownership and user rights, resource values (sustainability, the needs of future generations and the values of ecosystems), Maori cultural and spiritual values, the Treaty of Waitangi and public participation.

Guidelines

Initial guidelines for the review as agreed by the Government were as follows:

Objectives

1. The primary goal for government involvement in resource allocation and management is to produce an enhanced quality of life both for individuals and the community as a whole through the allocation and management of natural and physical resources.

2. Resource management legislation should have regard to the following, sometimes conflicting objectives:
   a. to distribute rights to resources in a just manner taking into account the rights of existing right holders and the obligations of the Crown. The legislation should also give practical effect to the principles of the Treaty of Waitangi;
   b. to ensure that resources provide the greatest benefit to society. This requires that rights to use or conserve resources are able to move over time to uses in which they are valued most highly, and that the least cost way is adopted to achieve this transfer;
   c. to ensure good environmental management as specified in the World Conservation Strategy and proposed New Zealand Conservation Strategy; which in-
cludes considering issues related to the needs of future generations, the intrinsic value of ecosystems, and sustainability; d. be practical.

**Allocation of rights**

3. Resource management statutes and processes must aim to clearly define the property rights which they create.

4. The review must consider all advantages and disadvantages of changing allocations of rights to resources.

5. Where new legislation brings about major changes in allocation, compensation for those who have been manifestly disadvantaged may be appropriate. This should be considered on a case by case basis.

**Means for resolving conflicts**

6. In selecting mechanisms for resolving conflict the following principles are relevant:
   a. mechanisms for transferring rights should aim to ensure in the least cost way that resources are used where they are valued (financially and non-financially) most highly and that any equity objectives are achieved;
   b. where ownership rights are clearly defined and easily transferable without significant impact on others, then voluntary contracting may provide the least cost system;
   c. where trading of rights is likely to significantly affect other right holders and people face barriers to contracting, there may be a more active role for government in reallocating resources;
   d. recognising failure in both market and government systems, alternative mechanisms should be evaluated and those chosen which provide greatest advantage relative to disadvantage.

7. In order to achieve the goals and objectives above, resource management statutes and processes should aim to achieve the following (noting that several of the principles conflict and there will be a need to make trade-offs on a case by case basis):
   a. recognition of the principles of the Treaty of Waitangi is an essential element of all resource management statutes and processes;
   b. resources with similar characteristics and in similar circumstances should be treated in like manner;
   c. all relevant values must be given due consideration;
   d. there must be equal and effective access for all parties to decision making processes; participation or success should not be dependent on income or wealth, culture or gender;
   e. those who use and develop resources should bear an equitable share of the costs of their actions; where individual groups receive benefit from a process they should in principle bear an appropriate share of the costs (noting that different, or sometimes no, shares may be appropriate in different circumstances);
   f. processes should be cost-effective;
   g. there should be some certainty (although not necessarily uniformity) of process;
   h. there should be flexibility to address issues in an appropriate way;
   i. processes should lead to outcomes which are consistent;
   j. there should be clear and direct relationships between statutes dealing with the same resource and, wherever practicable, the integration of decision making processes;
   k. statutes should be clear and unambiguous in purpose and scope, and should be consistent in terms of resource management principles agreed by government;
   l. the performance of the statutes and processes should be monitored.

**Feature of an agent/agency/organisation required**

8. Where an agency or organisation needs to be responsible for the interests of a group, several principles guide the organisational arrangements to ensure its accountability:
   a. clear non-conflicting objectives or transparency in deciding on trade-offs between objectives;
b. incentives on members of the organisation to act in the interest of the organisation (e.g. ability to be re-elected or dismissed);
c. those principles contained in the Government economic statement on 17 December 1987 relating to the reform of local government.

Maori issues

The Treaty of Waitangi has become much more widely considered in recent times because of the findings of the Waitangi Tribunal and recent court decisions. The principles of the Treaty of Waitangi are evolving.

The Court of Appeal in New Zealand Maori Council v Attorney-General emphasised the spirit of the Treaty rather than its wording and spoke of the principle of partnership between the Crown and the Maori requiring the utmost good faith on both sides and a need for the partners to act reasonably towards each other.

The concept of a partnership has implications in the resource management area in terms of power sharing, Maori representation on decision-making bodies and proper consultation.

There has been much debate centred on the interpretation of two words in the Maori version of the Treaty, namely the relationship between “kawanatanga” and “tino rangatiratanga”. While the English version of the Treaty guarantees to the Maori full exclusive and undisturbed possession of their lands, estates, forests, fisheries and other properties, the Maori version refers to tino rangatiratanga which has been described as the unqualified exercise of chieftainship over lands, villages and all treasures (which includes resources). The treaty therefore has implications for the reform of resource management law.

The Treaty of Waitangi

Article the First

The Chiefs of the Confederation of the United Tribes of New Zealand and the separate and independent Chiefs who have not become members of the Confederation cede to Her Majesty the Queen of England absolutely and without reservation all the rights and powers of Sovereignty which the said Confederation or Individual Chiefs respectively exercise or possess, or may be supposed to exercise or to possess over their respective Territories as the sole Sovereigns thereof.

Article the Second

Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties which they may collectively or individually possess so long as it is their wish and desire to retain the same in their possession; but the Chiefs of the United Tribes and the individual Chiefs yield to Her Majesty the exclusive right of Preemption over such lands as the proprietors thereof may be disposed to alienate at such prices as may be agreed upon between the respective Proprietors and persons appointed by Her Majesty to treat with them in that behalf.

Article the Third

In consideration thereof Her Majesty the Queen of England extends to the Natives of New Zealand Her royal protection and imparts to them all the Rights and Privileges of British Subjects.

Discussion Paper

A discussion paper on options for managing resources was issued recently. The deadline for submissions on this document was September 26, although Dennis Bush-King, Project Manager of the R.M.L.R. team, told a public meeting in Christchurch on 8 September that the Ministry had an open-door policy on submissions.

The discussion paper, “Directions for Change” is available from the Ministry for the Environment, P.O. Box 10362, Wellington. The price is $6. A four-page summary of the discussion paper has also been prepared. This contains suggested models for resource management law reform.
The first would involve a single Resources Management Act operated principally by regional government. It would deal with all environmental spillover issues (including those related to minerals, legislation and mining). Control over particular matters could be delegated to territorial local government. First order resource allocation decisions (i.e. when the Minister or Authority decides whether or not a resource should be used) would then be dealt with by a different Act and administered by central government.

The second model would involve a single act as described above but would involve territorial local government having direct responsibility for land related resource management.

The third model would involve a single Act with split functions as described in model two, but with coastal management dealt with centrally by the Department of Conservation and minerals dealt with centrally by the Minister of Energy.

Finally the fourth model would involve four separate pieces of legislation: water, soil and air resource management administered by regional government; land use and noise management administered by territorial local government; coastal legislation administered by DOC and minerals legislation administered by the Ministry of Energy.

Mountain Land Consultative Group

The Tussock Grasslands and Mountain Lands Institute recently convened a meeting of a Mountain Lands Consultative Group to discuss “Directions for change”. This group, made up of representatives from conservation, recreation and farming groups considered the document.

Following are extracts from the Institute’s submission.

The best option for the management of natural resources lies within the integrated framework of an omnibus Resource Management Act providing a consistent, transparent, efficient and accountable national policy for the management of land, water, air, minerals, and energy by regional authorities.

Provided the necessary rules and standards are legislated for, central government should feel confident that regional government can manage natural resources. It will, for instance, be necessary for central government to decide on nationally important issues such as the disposal of hazardous substances, and the utilisation of strategic or finite resources, and, in most instances, directly fund and manage nationally important areas such as national parks and reserves.

We submit the following as a long title for this Act: “An Act to promote a national policy for the management of land, water, air, minerals and energy; to provide for the integration of all statutes relating to the use of these resources; to provide for sustainable use of renewable resources; provide criteria for the use of non-renewable resources, and to provide for the management of these resources by regional government.”

We regard the separation of national policy from management as an essential means of avoiding a potential conflict of interest between responsibility for the making of national policy and responsibility for the making of particular allocation decisions.

Water and Soil Conservation

We consider the resource management principles embodied in the existing water and soil conservation legislation to be very important. The public ownership and management of water and water courses, and a comprehensive policy for conservation of soil (land) resources is seen as the cornerstone of any future legislation.

There is considerable merit in the retention of the management plan concept, as used by water and soil conservation authorities, for the management of all natural resources. In particular we believe that, in the high country, management plans are essential for the management of resources on a comprehensive basis.
Management plans should integrate all aspects of resource use in mountain lands including catchment management, land and water use, land tenure, and conservation. We recommend regional resource management plans to comprehensively address issues involving the allocation and regulation of natural resources. We much prefer the development of effective management plans for the management of resources to the cumbersome process involved in multi-faceted regional planning schemes.

Hitherto participation in run plan programmes has been on a voluntary basis and has been targeted to the control of soil erosion problems. We believe it is now appropriate to provide incentives for participation by all hill and high country land occupiers in comprehensive resource management plans designed to address all resource management issues including land use and tenure. It follows that all ad hoc, or special purpose activities in mountain lands such as the protected natural areas programme, soil and water conservation plans, reclassification of pastoral land, and the like, be terminated and replaced by an integrated approach involving individual land holdings, groups of properties, and whole catchments.

We recommend that, because of its importance to land resource protection, the responsibility for policy and funding (including the distribution of any national funding) of weed and pest management should be vested in regional government. Weed and pest management in the high country should be an integral part of comprehensive resource management plans, but operations in the field be undertaken by local government, contractors, or individual land occupiers.

Existing water rights require protection during their term but changes in water allocation at the end of the right period should not be precluded. We recommend that notified use rights for water should be terminated and adjudicated on the same basis as all other water rights.

Water allocations should be made according to the provisions of a regional resources management plan which forms a benchmark for balancing instream and out of stream uses, and for balancing national, regional, and private uses.

To ensure full public participation, regional and local resource management plans should involve affected communities and public interest groups in their planning and implementation. Provision must be made for an appellate body similar to the Planning Tribunal.

Resource rentals for water could be introduced to better allocate water according to the value of the water resources and to fund the management of water resources. Separation of water rights from land rights would enable separate trading of property rights and a more certain valuation of the resource. Water resource rentals could be fixed annually and set at a percentage of the assessed value of the resource.

Minerals and Energy

The Consultative Group asked the question – should land, minerals, oil, gas, and geothermal energy be treated as parts of the same natural resources?

All proposals for mineral, oil, gas, and geothermal energy exploration and extraction should be subject to integrated consent procedures, and, if approved, on public land be subject to equivalent conditions of tenure applying to all public lessees and licences including the payment of resource rentals and in all cases be subject to rules regarding soil disturbance and restoration. The principle governing the management of all natural resources should ensure that the management of mineral and energy resources should be neutral and not treated as a special case. It is proposed that the omnibus legislation specify national policies and rules for the extraction of non renewable and strategic mineral and energy resources. Further, there should be no actual or implied right of entry onto land to implement prospecting or mining right.

Lands set aside for protection purposes or any other public purpose should generally be exempt from mining.

Planning

The present town and country planning legislation tends to promote development. New legislation should have as its principal objective neutrality in respect to the use of resources.
It follows that new legislation will need to achieve a balance of land use without undue restraint on or stimulus to social and economic development.

A Planning Act requires a clear philosophical statement with consistency of purpose which aims to reconcile conflicts in land use. We see a need for a legislative means of enabling planning authorities to purchase existing rights to use land when they conflict with public land policies.

Co-ordinated legislation covering both soil and water conservation and town and country planning is the appropriate means to control land use in regions. This approach is preferable to the use of tenure as the determinant of Crown land use. A uniform approach to district schemes and regional management plans is highly desirable.

Integration of regional resource management plans with district schemes allows two approaches to the regulation of land use within zones: either

(a) allow within specified performance standards all activities unless expressly forbidden, or
(b) forbid all activities unless expressly allowed. We consider the former to be applicable to all commercial land, and the latter applicable to 'conservation' land. The result should be a more effective management of land resources than is the case at present.

Environmental impact reporting and audit should be an integral part of any planning application and be administered by regional authorities. Audit of environmental impact statements on behalf of regional authorities must be undertaken by persons or organisations independent of the authority responsible for deciding on the planning application.

Before preparing its submission the Institute consulted with the following people:

Mr H. R. Ensor, Chairman, High Country Committee of Federated Farmers.
Mr D. Henson, Federated Mountain Clubs.
Mr A. Kane, Federated Farmers.
Dr G. D. McSweeney, Royal Forest and Bird Protection Society.
The Chairman of the Consultative Group was Dr J. A. Hayward, Director, Centre for Resource Management.
Protected Areas Legislation Review

The many pieces of legislation concerning protected areas are being reviewed. Minister of Conservation, Helen Clark, points out that such legislation has developed in an ad hoc fashion and has been administered by a number of different departments. However with the establishment of the Department of Conservation, this legislation is now administered by a single body.

In the Preface to the recently released review document, Helen Clark writes that the objective of the review is to rationalise existing legislation and develop a classification system for protected areas which has a clear basis and is consistent.

The review has been co-ordinated by a working group with expertise in protected areas management and planning, and administration, recreation, historic resources and Maori, cultural and scientific perspectives.

The product of their work to date is a 68-page discussion paper designed to elicit the views of interested parties about what form protected areas legislation should take. The paper puts forward a number of issues in which decisions will have to be made in order to draft new legislation.

The closing date for submissions is 30 August 1988 but there will be further opportunity for public input at the Select Committee stage.

The report deals with the principles of protection, its purposes, the categories of Protected Area, public participation in decision making, management provisions, protection of private and Maori land, control of protected areas and related legislation reviews.

The goals of the review are to prepare for legislative changes which will:
- achieve consistency of administration and public involvement;
- ensure that management objectives for protected areas can be effectively met;
- review and improve the mechanisms for protecting conservation values on private and other land;
- consider the implications of the Treaty of Waitangi for protected areas legislation.

The Introduction to the discussion paper states: "The review of protected areas legislation needs to be considered in the context of related legislation reviews to ensure that all issues are discussed and legislative proposals are compatible. Of significance are the current reviews of local government, and resource management statutes—in particular the Town and Country Planning Act, Water and Soil Conservation Act, Soil Conservation and Rivers Control Act, Mining Act, and Environmental Assessment Procedures. Proposals to improve legislation relating to marine protected areas, historic places and species protection are also under independent consideration by the Department of Conservation." Among some of the questions addressed in the document are the following:

Should there be one single piece of legislation containing the main principles, and covering all kinds of protected area including national parks? Or, should there be separate legislation for classes of protected area serving different functions? If so, what would be appropriate divisions?

Should the legislation continue to place primary emphasis on maintaining and enhancing the distinctive indigenous qualities of the New Zealand landscape, fauna and flora, or should it accept the impact of change and human use?
To what extent and how should the principles of the Treaty of Waitangi be applied to protected areas?

Should commercial recreation and provision of facilities for intensive recreational use be fostered in protected areas?

To what extent should provision be made for historic values in protected areas legislation as well as in the Historic Places Act or the Maori Affairs Act?

What conceptual framework is necessary to provide for protection of areas reflecting both Maori and European values?

Should protected areas legislation provide for protection of multiple use, including sustainable economic use of some protected areas?

Is the concept of protected cultural landscapes of value in New Zealand?

What are appropriate categories of protected area? Should there be fewer categories with more flexible management provisions to cater for regional variation? Should the criteria for classification be specified in legislation?

Should there be a category of protected area which provides for land to be held in trust for future and existing purposes and which encompasses a broad spectrum of management objectives?

What procedure should be adopted for the classification of protected areas? Who should classify protected areas, the Minister, the Conservation Authority, Conservation Boards or a combination of these?

Which management decisions require public submissions?

What changes are needed to public participation processes?

Should there be a common procedural pathway for policy preparation under all protected areas legislation? Should legislation provide more administrative detail to give greater direction to policy?

Should policy preparation be based on functions and activities, such as protection, recreation, and the role of mining, or on protected area categories, such as national parks policy?

What statutory rights of entry should the public have over protected areas?

Should freedom of public access be able to be limited by the administering body/manager?

How should legislation reconcile conflicts between protection of natural areas, and the existence of non-indigenous resources which are valued by some sectors of the community?

Should grazing by domestic stock, or burning, be allowed to maintain specified values in natural landscapes?

What statutory mechanisms should the Department of Conservation have to covenant and protect private and Maori land?

Should there be provision in legislation to give departmental staff access over private land to enable them to assess conservation values?

What incentives should there be in revised legislation which would encourage private and Maori landowners to set aside areas of their land for conservation purposes?

Is it desirable for private land subject to covenants to have the same protection as publicly owned protected areas, requiring the Minister of Conservation's consent to a mining privilege after consultation with the owner?

What statutory mechanisms might best achieve protection of cultural landscapes on public and private land in New Zealand?

Should protected areas legislation protect, by agreement, conservation values on Maori land, or should there be provisions in parallel in the Maori Affairs Act?

What linkages should there be between the provisions of the protected areas legislation and the resource management and local government statutes?

Copies of the document are available from the Department of Conservation at $5.00 per copy.
Ngai Tahu Land Claim

(i) High Country Concerns

B. T. Robertson

Readers of "Review" will be aware of the general revision of natural resource management law and ownership and the accompanying Maori interest in both. It is the Maori interest in the ownership aspect which has aroused most public interest. Most Maori action is based on the Treaty of Waitangi and claims before the Waitangi Tribunal. In order to understand why Maoridom is using the law to address the issue of land and fisheries ownership it is necessary to understand the importance placed on the Treaty of Waitangi.

The basis of the claims vary greatly. Some are founded on questions of confiscation of land, some on questions of contract and some on legislative assumption of Crown ownership alleged to be improper. Some allege that legislatively imposed forms of leasehold were contrary to the Treaty.

Those parts of the Ngai Tahu Claim affecting the High Country are founded on questions of contract and dispute about what was included in deeds of sale. There is willing agreement that some lands were sold but dispute about which ones.

The question at issue is whether the Crown properly acquired rights to the land and resources it claims as its own or which it has sold on as guaranteed title.

Despite the anxiety of many interest groups the present debate is between the Maori and the Crown.

The Chairman of the Ngai Tahu Trust Board Mr Tipene O'Regan, has again emphasised that it was not the intention of the Ngai Tahu to occupy high country Crown land if it was awarded to the Ngai Tahu people. Speaking recently at the annual conference of the South Island High Country Committee of Federated Farmers he said the worst thing that could happen to Crown pastoral lessees was that the Ngai Tahu would become their landlords.

In a wide ranging address Mr O'Regan pointed out that although the Maori comprised 16% of the population, 85% were under the age of 25 and 60% under 15 years of age. He predicted that by the turn of the century more than 30% of the population would be Maori. Many are currently disadvantaged and tensions were heating up, he said.

"The bulk of the Maori population live North of Lake Taupo: that's where the worst stresses lie in terms of race relations. Auckland is not the Eldorado many think it is and the problems you face here are small in comparison. We believe that the situation can be defused by removing large blocks of resentment using the due process of the law. Ngai Tahu believed that this was a reasonable way of removing tensions and fears. So we pushed for the establishment of the Waitangi Tribunal — corporatisation came along, and the only option open to us was to bring a claim against the Crown before Crown land was passed to the corporations. The Court of Appeal ruled in our favour and the Crown now has to negotiate with us," Mr O'Regan said.

Mr O'Regan told the conference that Ngai Tahu are anxious to negotiate an outcome. "All of us are part of the same landscape," he said. "This generation is the last one that will have the chance to sort this issue out. The inevitable scenario, if we can't reach a negotiated settlement, is one of an ageing endangered pakeha majority facing a young embittered Maori minority."

He said that many pastoral leases contained a considerable amount of Crown land and it was
not Ngai Tahu's intention to reoccupy those lands. "On a commercial basis we become your landlords and we offer you the same level of guarantee in terms of your leases that you currently enjoy with the Crown," he said.

He went on to say that Ngai Tahu had given the law "the best shot we can give it." The scenario becomes real and unpleasant, he said, if a negotiated settlement is not reached.

"Having Ngai Tahu as landlord is not too big a price to pay for the permanent occupancy of land which did not belong to the Crown in the first place. The attitude we have taken has been fair and measured but in some quarters of Maoridom we have been accused of taking a whimpish approach."

Mr O'Regan was invited to speak to the Conference following correspondence between the Chairman of the High Country Committee, Mr Hamish Ensor, and himself. We reproduce below some of the correspondence concerned.

"Dear Mr O'Regan,

As chairman of the High Country Committee and principal representative of South Island Pastoral lessees I take this opportunity to write to you seeking some clarification in respect of your claims over land held in these leases. It is clearly our understanding that your Trust Board has absolutely no intention of resuming any of this land for your own use. However you are reported to be interested in the possibility of transfer of some or all of the title of this land to the Ngai Tahu people, as a possible remedy for other land that was not correctly allocated or reserved for your people. The uncertainty that surrounds this whole issue is having a very unsettling effect on the people that my committee represents and we believe that the time has now come for some clarification in writing from your Board before feelings run any higher and the situation becomes unhealthy.

"We now believe that the uncertainty of who will eventually hold title to this land is affecting the value of the lessees equity, their ability to borrow money, their attitude to further development and their general morale in an already difficult time for farming. More important, will be the gradual decline in sympathy we have towards what the Ngai Tahu people are trying to achieve. In explanation of this I would doubt if there is any other group of New Zealanders who have a greater understanding of land and an affinity to it than do the genuine high country people. Because of the many issues covering the land we work so closely with, we know exactly what it feels like to be threatened with the removal of resources and hence our understanding of your position."

H. R. ENSOR

"Dear Mr Ensor,

It is not the intention of the Ngai Tahu Maori Trust Board, in respect of its claims against the Crown, that the Ngai Tahu people should necessarily resume pastoral land for their own use.

"We have specifically stated that existing leaseholders are secure in their occupation should a result of our claims against the Crown be the transfer of title from the Crown to our people. Should the nature of the leases pertaining to any such transferred land be such that we are permanently prevented from occupation or use then it is a matter for possible compensation between the Crown and Ngai Tahu. That compensation might be by way of alternative Crown land or possibly by way of money. Again it might be by a combination of both. I do not exclude the possibility of a conventionally negotiated resumption of some leases in the future. I stress that any such resumption would be negotiated in an ordinary-voluntary-commercial manner. I do not think it appropriate that the situation of a pastoral lessee should be any stronger or more secure in respect of a Ngai Tahu lessor than it currently is in respect of a Crown lessor. Conversely our claim does not envisage that it should be less secure in any way.

"I trust that the foregoing meets your request for clarity on this question.

"Finally, I thank you again for the tenor of your letter and for the absence of hostility on the part of your members that it demonstrates. Like you my Board looks forward to a reasoned and equitable settlement of these issues.

"It is our wish that the sour after taste of the past will not be present in our common future."

TIPENE O'REGAN
Ngai Tahu Land Claim

(ii) The Claim

The Ngai Tahu claimants filed claims dated November 24, 1986 and December 16, 1986 but were requested to particularise those claims. An amended claim dated 2 June 1987 was lodged with the Waitangi Tribunal and this claim is reprinted below.

IN THE MATTER of claims to the
WAITANGI TRIBUNAL by
HENARE RAKIHIA TAU
and NGAI TAHU TRUST
BOARD

AMENDED CLAIM

WHEREAS the Claimants have already filed claims dated respectively the 24th November, 1986 and the 16th December, 1986 AND WHEREAS both those claims were accompanied by schedules* AND WHEREAS they are now requested to particularise those claims.

THE CLAIMANTS SAY:

THE CLAIM

From 1840 to the present day the Crown has, in respect of the Maori people, their land, their culture and their well being, consistently acted in ways contrary to the Treaty of Waitangi, and therefore has been and remains in breach of the Treaty and its principles. The multiplicity of the Acts complained of and the extent of the lands involved, together with the range of cultural and social grievances is such that, short of calling the evidence to be presented at the hearing of the claims, it is not possible for the complainants to succinctly state their grievances. For this reason, the complainants are concerned lest any omission from this document should be held to deny them the right to later seek redress of grievance in respect of the omitted material. They therefore give notice that in the event of matters not covered by this document arising later, they will seek leave to further amend their claims.

PARTICULARS

LAND

In 1840 the Ngai Tahu people owned virtually all of the land in the South Island south of a line drawn between Cape Foulwind in the West and White Bluff just north of Cape Campbell in the East. Today they own very little land. The acquisition of this land by the Crown and the subsequent sales to other owners, were contrary to Article 2 of the Treaty of Waitangi in that Ngai Tahu did not “wish or desire” to sell, nor were they “disposed to alienate” all of the land. Further, the prices paid for the various blocks were never “agreed upon” in the manner required by Article 2.

Land purchases apart, other Crown dealings with the land were contrary to Article 2 of the Treaty. In particular the Crown has:

(a) Failed to allocate reserves which were an integral part of the agreements for sale and purchase of Ngai Tahu land to the Crown.

(b) Failed to allocate all the reserves required by the South Island Landless Natives Act 1906.

(c) Confiscated without compensation various reserves in the South Island.

(d) Appropriated to itself Ngai Tahu land without consultation or agreement and, in at least one case, namely Greymouth, without the knowledge of its Ngai Tahu owners.

* These schedules included a full list of pastoral leases and licences (Ed.)
(e) Without the consent of its Ngai Tahu owners has converted freehold land into Leases in perpetuity.

(f) Without the consent of its Ngai Tahu owners has fixed unrealistically low rentals for their leased lands.

(g) Without the consent of its Ngai Tahu owners has fixed unrealistically long rests between rent reviews in respect of their leased lands.

(h) Has refused to permit registration of land in the names of the Maori tribes and/or in other ways which would reflect Maori customary land ownership.

All these actions are contrary to the preamble and Articles 2 and 3 of the Treaty of Waitangi in that the Crown:

(i) Has failed to "protect the just rights and property" of the claimants.

(ii) Has failed to "guarantee" to the claimants and their ancestors "the full, exclusive, and undisturbed possession of their lands and estates, forests and fisheries and other properties so long as they wished and desired to retain the same in their possession."

(iii) Has failed to "import" to their ancestors all "the rights and privileges of British subjects."

The land transactions giving rise to these breaches of the Treaty occurred at Horomaka (Banks Peninsula), Te Pakihi o Waitaha (North Canterbury), Kaikoura, Otakou (Otago), Murihiku (Southland), Rakiura (Stewart Island) and on Te Tai Poutini (West Coast of the South Island). The lands which the claimants seek to have allocated to them or which they seek to be compensated in respect of are largely described in a schedule lodged with the Claim dated the 16th December, 1986. It should be noted that the schedule is as complete as the data made available by the Crown thus far permits and the claimants give notice that the schedule will be extended as further necessary data becomes available.

MAHINGA KAI

According to the Treaty of Waitangi and later specifically confirmed by the Kemp Deed the Ngai Tahu people were guaranteed "the full, exclusive and undisturbed possession" of their kainga and mahinga kai, but the acts and omissions of the Crown and agents of the Crown have in fact dispossessed Ngai Tahu of their mahinga kai. Ngai Tahu have thus been deprived of a major economic and sustaining resource in their mahinga kai including birding, cultivation, gathering and fishing resources. Since the issue of Treaty rights to mahinga kai, especially in respect of fisheries, is sub judice in the Muriwhenua Claim now proceeding in the Waitangi Tribunal it would be inappropriate to detail it further at this stage, but notice is given now that claim will be pressed for a share in the fisheries, including the commercial fisheries, of Te Waipounamu and for the recovery of or compensation for birding and other traditional resources of which Ngai Tahu have been wrongfully deprived.

CULTURE

From shortly after 1840 down until the present time, all legislation affecting the Maori people, (and therefore the claimants) has reflected a policy of assimilation. As part of this process the Maori has been required to adapt to a Westminster system of central and local government which gives little or no recognition to Maori ways of performing these functions. Wherever the Maori and Pakeha cultures have been in conflict it is the Maori who has had to bend. The result is that Maori cultural and social patterns and values have broken down and the people have become confused and dispirited, with some now tending to seek radical remedies for Maori grievances.

The claimants seek a recommendation that the policy of assimilation be reversed. This would involve a substantial programme of legislative reform to all statutes which reflect that policy. The claimants believe that the Treaty of Waitangi can be read for the principles which it spells out and for the spirit which underlies the whole document. The former are currently under consideration by the Court of Appeal so comment on them would be presently inap-
propriate. The spirit which underlies the Treaty, and the instructions given to those who wrote it, is a simple acceptance of the fact that we are two races. The Treaty is a partnership between those two races and that partnership requires consultation, the absence of which is the root cause of all the grievances now held by the Maori people. The claimants therefore seek a recommendation that the Crown should now unequivocally give a public assurance that hereafter the Maori people will be consulted and listened to in all matters affecting them.

REMEDIES
Changes to Crown policies and attitudes have already been mentioned. These will need to be extensive and the detailed implementation of them will be difficult and may take a long time. The claimants believe that these changes are fundamental to the future of our country, and the only reason that they do not develop this aspect of the claims further at this stage is their belief that the changes will be largely uncontroversial if carried out with sensitivity.

The resolution of land based claims is quite another matter and is likely to be extremely controversial. For that reason it is important to state that the claimants acknowledge the sanctity of contracts and the provisions of the Land Transfer Act. Although they seek land as a partial remedy for their claims, they acknowledge that people who have bought or leased land for value cannot be dispossessed of it.

Contracts arising from the operation of the State Owned Enterprises Act may be another matter, but that Act is currently under consideration by the Court of Appeal, so the claimants reserve their position in respect of it. For those reasons the claimants seek the allocation of Crown Land to them. The lands which are the subject of the claims have largely passed into private ownership and so other lands are sought in substitution. Any lands allocated to the claimants should be representative of the lost land in both character and geographic distribution. It may well be that any recommendation of the Tribunal should be limited to the kind and quantity of the land to be allocated leaving the identification of particular parcels for determination elsewhere. Alternatively, if the Tribunal is minded to recommend allocation of land, it might give an interim decision to that effect. The claimants and the Crown could then consult with each other and, hopefully, reach an agreement which they could present to the Tribunal for its approval.

The claimants recognize that complete compensation in the form of land may prove impossible. In that event they would seek compensation in the form of a mix of land and money. They have also considered whether they should claim interest on the money value of all disputed land from the date of the dispute down to the present day. At this moment they have not decided whether to make such a claim but hereby give notice of the possibility, so that those potentially concerned may take such steps as they are advised in case such a claim is finally made.

JOHN C. ALLEN
A.N.Z.I.V., M.N.Z.S.F.M.
Registered Valuer, Registered Farm Management Consultant.
Specialist Area: Pastoral lease issues, farm budgeting and farm supervision in High Country
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QUEENSTOWN

24
Rabbits

They were introduced for a bit of sport
Came from England — jolly good sort.
Now they eat the brier rose hip
It’s hard to keep a stiff upper lip
The folk in town think it super fun
To shoot the odd one with a gun
While chewed out cockies hope and pray
That myxomotosis will come one day
“But that’s so cruel” town folk reply
“Such a shocking way to die”.
Ms Helen Clark agrees
She must want farmers on their knees.
Tara Hills say grow more grass
And then the rabbit scourge will pass
The dreamers say its a great resource
A mighty fur industry of course
Some say it’s a myth this neophobia
Ask the boys round Alexandria!
When PNA’s are eaten out
Then Ms Helen loud will shout
By then it may just be too late
Too many cockies out the gate.
All in all it isn’t funny
The dear old public love their bunny
It’s like a lot of things they do
They want their cake and eat it too!

Jim Morris
Change from Sheep To Cattle Promotes Conifer Spread

Roger Gibson*

Introduction
The occurrence of successful spread of introduced conifers from self-sown seedlings in New Zealand conditions has been well documented. Smith (1903, cited from Hunter and Douglas) first noted this type of spread before the turn of the century. More recently Benecke (1967), Hunter and Douglas (1984) and Ledgard (1988) have documented the occurrence, ecology and some management implications of conifer spread. Although the relationship between sheep grazing and conifer establishment has been studied from grazing trials, exclosure plots and from intuitive observations there has been little or no opportunity to study the change in introduced conifer establishment after a change in grazing management on a run size scale.

The study area
The study area is located on “The Hossack” Station near Hanmer Springs in North Canterbury to the east of Hanmer state forest. Rainfall averages 1200mm a year but the most important feature of the climate, as far as this study is concerned, is the very strong north west winds during summer which blow across the plantation forest and on to the surrounding run country. The study area is moderately steep dissected by small streams running off the Hanmer range.

Before 1974, the “Hossack Station” ran sheep. The stocking of the study area was usually intensive with up to 3500 sheep at a time during the months of November/December, February/March and May/June and was often used as a holding paddock during shearing. In 1974 a major change occurred from sheep to cattle. Now only low numbers of sheep are grazed on the station on a temporary short term basis.

The seed source
The adjacent plantation forest was established shortly after the turn of the century. Plantings were made of mainly Corsican Pine (Pinus nigra var larico) and Ponderosa Pine (P. ponderosa) with some European Larch (Larix decidua). Since the 1950s further plantings and replanting have been made mainly with Pinus radiata and Douglas Fir (Pseudostuga menziesii) although many other species have been used in trial plantings.

Seeding would have commenced about 20 years after the first plantings. Jolliffe’s (1940) observations elsewhere around the plantation forest and the Amuri range, as well as some very old trees in dense scrubby areas on “The Hossack,” attest to this early date for introduced conifer spread.

Methods
In March 1987 several plots were placed in each of several areas selected to cover a variety of slopes, aspects and vegetation cover. The amount of vegetation cover and the number, species and age of introduced conifers present on each plot was recorded. Soil samples were taken for analysis to estimate soil fertility. Slope, altitude and aspect were also recorded.

Results
All the study areas presently affected by conifer spread showed a dramatic increase in establishment dating from 1974. Conifer establishment in grassland areas was virtually non

* Miss E. L. Hellaby Indigenous Grasslands Research Fellow
existent before this date. Scattered mature conifers, some over 40 years old, were present but only within the Kanuka/Manuka scrub on the property. Several new species of conifers were also evident in the post 1974 cattle era population.

The areas most vulnerable to invasion were those with poor natural vegetation cover and/or subject to disturbance or erosion. During the fieldwork conifers were observed growing on freshly deposited, poorly mineralised, alluvium and recently disturbed areas emphasising the ability of this group of trees to establish and grow on infertile sites.

Conifers were sparse on areas of high natural fertility where there was lush dense vegetation showing that competition by existing vegetation alone can negate the invasion of conifers on these sites.

Discussion

Climate and seedfall on and around the study area have been suitable for conifer establishment for at least 30 years prior to the changeover from sheep to cattle. The few conifers that established within the Kanuka/Manuka scrub and on surrounding run land attest to this. The increase in conifer spread is considered to be a result of the lack of browsing of seedlings by cattle. The intensive mob stocking with sheep before 1974 was a successful strategy for controlling conifer establishment. Although not all seedlings may have been killed outright intensive browsing by sheep would have kept them suppressed. Following the removal of the sheep any suppressed seedlings would have quickly come away.

Lack of conifer seedlings on the fertile densely vegetated areas shows that where there is vigorous vegetation the establishment of conifers can be resisted by vegetation competition alone. The implications of this are that development programs of topdressing and oversowing can have additional benefits as far as this type of weed control is concerned.

A control strategy

A good strategy for areas prone to conifer establishment would therefore appear to consist of periodic intensive mob stocking by sheep.
especially during the summer months when most growth is occurring and new shoots are most edible. When economically feasible, oversowing and topdressing would improve an area's ability to compete against conifers.

Conclusions
Changes in farm management can result in intensive weed problems. Undeveloped land downwind from plantations is susceptible to invasion by conifers. Changes in farm management should include possible implications for weed growth and a strategy to cope with them.

Intensive mob stocking by sheep can control introduced conifer establishment on a run scale. Areas of high natural fertility and good vegetation cover can resist conifer invasion through competition alone.

Acknowledgements
Mr Nick Ledgard and Ms Liza Crozier of the Forest Research Centre Ilam, Dr Gavin Daly from the Department of Plant Science Lincoln College and Mr L. Rae of "The Hossack" station Hanmer.

References
Landcorp’s Ruralplan

Landcorp has recently launched a scheme to keep competent farmers on the land and to allow their creditors to recover as much money as possible. Called Landcorp Ruralplan it will attempt to lift cash flow by improving farm management and reduce debt servicing to a realistic level.

Landcorp’s Assistant General Manager (Property), Mr Bob Austin, says the scheme would work for up to 90% of the estimated farmers in financial difficulty.

"Many farmers and their creditors are in a no-win situation. Forced farm sales, or even open market sales, will mean that some good farmers will lose everything and some creditors will fail to recover even one cent in the dollar", he says.

Ruralplan will offer financial institutions an independent assessment of the property, something Mr Austin feels they often find difficult to get.

Spurred on initially by corporatisation, Landcorp set out to identify the needs of the farming public, and how best the organisation could assist overcome these problems utilising the particular skills it had in-house. Independent debt analysis and management is one such skill Landcorp's staff have inherited from their days of administering the Lands and Survey settlement schemes. These schemes were notable in that they assisted new farmers on to the land at very low equity levels. Often these were as little as 10% of the total property value, and required very careful monitoring and budget control to enable farmers to farm their way into a more satisfactory equity percentage. In many ways there are a number of farmers today in situations little different from those faced by settlers on these Lands and Survey settlement farms.

Ruralplan does not involve Landcorp putting any money into farms. Instead the Corporation will provide a consultancy service to assist farmers develop a strategy to solve their problems. As a second step Landcorp would offer to arbitrate between the parties concerned, and should a negotiated settlement be reached requiring pay-off over a certain period of years, Landcorp would provide financial and budget guidance to the creditors and the farmer during those years.

There are a number of options available for rationalising debt situations and in many instances it only requires an independent party to put forward the benefits of these options to all involved. Landcorp accepts that in some instances there will not be any ready solution, and some farms may have to be sold. However this is not necessarily an undesirable situation as it may allow the farmer and investors to walk away with some dignity and some remaining assets. At the same time it will allow the natural amalgamation of farms into more economic units able to withstand the economic pressures currently surrounding the farming arena.

The initiative from Landcorp has been warmly accepted by both Government and community leaders. Mr Ralph Maxwell, Under Secretary to the Minister of Agriculture, recently said in Wellington, "I strongly commend the Landcorp package announced recently to farmers and all rural creditors. This package provides a package of debt restructuring formula from which, given goodwill and self interest, creditors will find better outcomes than from forced sales."

Mr Maxwell continued, "It is important to realise that this package cannot, and is not designed to prop up every farmer in trouble. There will be many that Landcorp will advise it is time to go but they can then go knowing that everything possible has been done."

Other farming leaders have also commented upon the appropriateness of the initiative from Landcorp.
Sir Peter Elworthy, currently Chairman of the Queen Elizabeth The Second National Trust Board, and Past President of Federated Farmers, recently stated in Wellington that Landcorp has a lot to offer the rural community.

"In particular in its Rural package it is aiming its particular expertise and clout at the rural debt problem," he said.

"Landcorp's staff are very knowledgeable in rural matters, and able to bring those skills to bear upon the resolution of that problem. Their background experience gained in Lands and Survey settlement days allows them to take a no nonsense approach to sorting out these problems.

"Many farm families face urgent restructuring. Some, the sale of their farms. Landcorp's Ruralplan, with its industry and people expertise, and its no nonsense approach, can fill a most useful role in resolving farmers' and financiers' difficulties with the least pain," Sir Peter said.

Since the introduction of this approach to the farm debt problem there has been a satisfying response from both farmers and financiers. Landcorp has successfully negotiated settle-

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Trends in High Country Farming
1981/1982 to 1986/87

I.G.C. Kerr and M. Abrahamson

Introduction

A survey of high country farm production undertaken last year has revealed a 23 per cent increase in wool production per run since the last survey in 1981/82. The survey, in a shortened form, followed similar surveys conducted every five years since 1962.

The objective of the survey was to monitor changes in high country farming since the 1981/82 TGMLI survey. The results of this survey provide a benchmark for the industry (high country farming) and for the more exhaustive surveys carried out by the New Zealand Meat and Wool Board's Economic Survey and the Government Statistician. The results for individual runs are summarised for each of the surveys since 1962.

What follows is a summary of results.

Results

To ensure comparability with earlier surveys, return from 159 of the 310 operating high country farm units were analysed.

Six new independent runs have been established through subdivision since 1981/82. The number and regional location of the participating runs in each of the 1981/82 and 1986/87 season is shown in Table 1.

Earlier surveys (before 1981/82) were carried out by personal interviews and this resulted in a 100% response. Because resources were limited in 1981/82 and 1986/87, the surveys were postal surveys (with a few personal interviews).

Livestock wintered

The number of livestock wintered (expressed as stock units) and stock numbers for each of the two surveys were compared to show trends in production. This information is set out in Table 2.

Table 1: Runs with comparable records

<table>
<thead>
<tr>
<th>Region</th>
<th>1981/82</th>
<th>1986/87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlborough moist</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Canterbury moist</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Canterbury wet</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Otago dry</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Otago moist</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>Otago wet</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Southland moist</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>All regions</td>
<td>153</td>
<td>159*</td>
</tr>
</tbody>
</table>

* 51 per cent of all high country runs in survey (310 in 1986/87)
Table 2: Livestock wintered 1981/82 and 1986/87

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Units</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sheep</td>
<td>6325</td>
<td>1.9m</td>
<td>6980</td>
<td>2.1m</td>
</tr>
<tr>
<td>cattle</td>
<td>1980</td>
<td>0.6m</td>
<td>1922</td>
<td>0.6m</td>
</tr>
<tr>
<td>deer</td>
<td>50</td>
<td>&lt;0.1m</td>
<td>65</td>
<td>&lt;0.1m</td>
</tr>
<tr>
<td>total</td>
<td>8355</td>
<td>2.5m</td>
<td>8967</td>
<td>2.8m</td>
</tr>
<tr>
<td>Regions (stock units per run)</td>
<td>13199</td>
<td></td>
<td>14174</td>
<td></td>
</tr>
<tr>
<td>Marlborough moist</td>
<td>6858</td>
<td></td>
<td>6731</td>
<td></td>
</tr>
<tr>
<td>Canterbury moist</td>
<td>9227</td>
<td></td>
<td>8724</td>
<td></td>
</tr>
<tr>
<td>Canterbury wet</td>
<td>7021</td>
<td></td>
<td>7958</td>
<td></td>
</tr>
<tr>
<td>Otago dry</td>
<td>7166</td>
<td></td>
<td>8408</td>
<td></td>
</tr>
<tr>
<td>Otago moist</td>
<td>8403</td>
<td></td>
<td>9343</td>
<td></td>
</tr>
<tr>
<td>Otago wet</td>
<td>17601</td>
<td></td>
<td>18774</td>
<td></td>
</tr>
<tr>
<td>Southland moist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Stock numbers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All regions (stock numbers per run)</td>
<td>8056</td>
<td>2.4m</td>
<td>8948</td>
<td>2.7m</td>
</tr>
<tr>
<td>sheep</td>
<td>400</td>
<td>0.1m</td>
<td>386</td>
<td>0.1m</td>
</tr>
<tr>
<td>deer</td>
<td>21</td>
<td>&lt;0.1m</td>
<td>33</td>
<td>&lt;0.1m</td>
</tr>
</tbody>
</table>

* average per run
** total high country (estimate)

Overall there has been a 7 per cent increase in livestock — almost wholly in sheep. In the Canterbury high country livestock numbers per run have fallen but because several new runs were created by subdivisions between 1981/82 and 1986/87 total livestock units increased by approximately 7 per cent. Substantial increases have occurred in Otago.

Wool Production

Because wool income constituted a high proportion of the gross income from high country farming (67 per cent) the trend in wool production is of crucial importance as a measure of high country farm production.

The 23 per cent increase in total wool production is by any standards large and demonstrates not only a seasonal influence but also a clear trend towards an increased reliance on wool — particularly fine wool.

This shift towards increased wool production has not been at the expense of output per sheep. All regions show an increase; two in particular (Marlborough and Southland), spectacular increases.

Table 3 records, in summary, wool production in 1981/82 and 1986/87.
Table 3: Wool production 1981/82 and 1986/87

<table>
<thead>
<tr>
<th>Regions (kg/sheep)</th>
<th>1981/82</th>
<th>1986/87</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlborough moist</td>
<td>3.9</td>
<td>4.8</td>
</tr>
<tr>
<td>Canterbury moist</td>
<td>3.6</td>
<td>3.8</td>
</tr>
<tr>
<td>Canterbury wet</td>
<td>3.4</td>
<td>3.6</td>
</tr>
<tr>
<td>Otago dry</td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Otago moist</td>
<td>3.7</td>
<td>3.9</td>
</tr>
<tr>
<td>Otago wet</td>
<td>3.4</td>
<td>3.8</td>
</tr>
<tr>
<td>Southland moist</td>
<td>3.4</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Land development

The early 1980s were characterised by an incentive driven production push. Investment in land development in the high country was proportionally as much as anywhere in the country. Incentives for, and attitudes to, land development were vastly different by the 1986/87 season. The change is exemplified in Table 4.

Table 4: Land development

<table>
<thead>
<tr>
<th></th>
<th>1981/82 Area(**)</th>
<th>fertiliser(***</th>
<th>1986/1987 Area(**)</th>
<th>fertiliser(***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryland development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cultivation pasture</td>
<td>11.6</td>
<td>3.0</td>
<td>9.3</td>
<td>2.1</td>
</tr>
<tr>
<td>lucerne</td>
<td>2.5</td>
<td>0.5</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>overdrilling pasture</td>
<td>1.5</td>
<td>0.3</td>
<td>0.5</td>
<td>0.1</td>
</tr>
<tr>
<td>native</td>
<td>19.0</td>
<td>3.5</td>
<td>2.3</td>
<td>0.5</td>
</tr>
<tr>
<td>aerial ostd*</td>
<td>193.4</td>
<td>53.5</td>
<td>24.3</td>
<td>2.6</td>
</tr>
<tr>
<td>Irrigation development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>spray</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>borderdyke</td>
<td>1.4</td>
<td>0.3</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Treeplanting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>new plantations</td>
<td>0.4</td>
<td></td>
<td>0.3</td>
<td></td>
</tr>
</tbody>
</table>

* oversowing and topdressing
** hectares (average per run)
*** tonnes (average per run)
This survey showed a massive fall in the rate of investment in all categories of land development. It seems the increased livestock being wintered was being carried on the results of earlier capital expenditure.

As fertiliser use is an indicator of the rate of new land development, Table 5, which shows the regional use of superphosphate for development (not maintenance), confirms the decline in land development occurred in all regions.

Table 5: Development fertiliser

<table>
<thead>
<tr>
<th>Area(*)</th>
<th>1981/82</th>
<th>Fertiliser(**)</th>
<th>1986/1987</th>
<th>Fertiliser(**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlborough moist</td>
<td>342.0</td>
<td>69.0</td>
<td>243.3</td>
<td>14.9</td>
</tr>
<tr>
<td>Canterbury moist</td>
<td>140.4</td>
<td>34.2</td>
<td>26.4</td>
<td>5.4</td>
</tr>
<tr>
<td>Canterbury wet</td>
<td>137.6</td>
<td>35.0</td>
<td>48.1</td>
<td>9.2</td>
</tr>
<tr>
<td>Otago dry</td>
<td>277.1</td>
<td>76.2</td>
<td>4.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Otago moist</td>
<td>294.1</td>
<td>75.6</td>
<td>29.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Otago wet</td>
<td>213.9</td>
<td>63.7</td>
<td>24.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Southland moist</td>
<td>197.5</td>
<td>93.8</td>
<td>3.3</td>
<td>0.1</td>
</tr>
<tr>
<td>All regions</td>
<td>229.4</td>
<td>61.3</td>
<td>37.6</td>
<td>5.7</td>
</tr>
</tbody>
</table>

* hectares (average per run)
** tonnes (average per run)

The approximate amount of fertiliser (as superphosphate) applied per run for 1981/82 and 1986/87 is shown in Table 6.

Table 6: Maintenance fertiliser

<table>
<thead>
<tr>
<th>Are(*)</th>
<th>1981/82</th>
<th>Fertiliser(**)</th>
<th>1986/87*</th>
<th>Fertiliser(**)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marlborough moist</td>
<td>133.6</td>
<td>123.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canterbury moist</td>
<td>88.2</td>
<td>46.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canterbury wet</td>
<td>102.3</td>
<td>67.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otago dry</td>
<td>132.9</td>
<td>67.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otago moist</td>
<td>105.4</td>
<td>43.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Otago wet</td>
<td>78.4</td>
<td>89.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southland moist</td>
<td>203.1</td>
<td>189.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All regions</td>
<td>109.2</td>
<td>67.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* average per run (tonnes)

The amount of lime applied fell by 54 per cent (to 15 tonnes per run), but the use of other fertilisers (such as DAP and other N fertilisers) increased by 62 per cent to an average of 5.4 tonnes per run.

Maintenance superphosphate fell, on average, from 13.1 kg/su to 7.6 kg/su which is considerably less than the amount considered desirable for sustained pastoral production.

Acknowledgement

The contribution of the many participants to the survey is gratefully acknowledged.
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