An invitation is extended to all those involved in the field of animal production to apply for membership of the New Zealand Society of Animal Production at our website www.nzsap.org.nz

The New Zealand Society of Animal Production in publishing the conference proceedings is engaged in disseminating information, not rendering professional advice or services. The views expressed herein do not necessarily represent the views of the New Zealand Society of Animal Production and the New Zealand Society of Animal Production expressly disclaims any form of liability with respect to anything done or omitted to be done in reliance upon the contents of these proceedings.

This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License.

You are free to:

Share — copy and redistribute the material in any medium or format

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

NonCommercial — You may not use the material for commercial purposes.

NoDerivatives — If you remix, transform, or build upon the material, you may not distribute the modified material.

http://creativecommons.org.nz/licences/licences-explained/
INTRODUCTION

CF2000 grew from a need for sheep farmers to identify how they could lift the productivity and profitability of their flocks. It was recognised that greater use of monitoring was a key component of making progress, as this provides the solid information needed to base informed decisions. This has been well demonstrated on many of the Meat NZ/WoolPro Monitor Farms. While collecting information is the essential first step it is in the presentation of that information back to the farmer that CF2000 has been able to make most impact.

HOW CF2000 WORKS

A farmer member is sent data entry forms from the bureau servicing him. The farmer collects and fills in the monitoring and performance information required for that period. The forms are sent back to the bureau at the end of the period covered by the form. The bureau enters that data into a data entry package with a temporary database, and then emails that data to AgResearch once the entry is completed for the group. The AgResearch database uses a reporting programme to produce a set of reports for the members, which are printed and mailed in bulk to the bureau.

The bureau passes the reports to the farmer’s consultant who makes comments on the results prior to it being mailed back to the farmer. The CF2000 group also runs three member-only field days through the year. These help address any problems as well as being educational and motivational.

Monitoring

For many members monitoring of stock liveweights was either totally new (9 had to buy scales) or was something done occasionally and not recorded. Scales were commonly used as part of lamb drafting, but not for monitoring other sheep classes or not to the degree required as part of CF2000 membership.

During the first few meetings the reasons for collecting the various stock liveweights were explained well and as a result, compliance with form filling has not been a major issue. All the data collection forms are split between the core section, which should be regarded as compulsory, and an optional section from which a member can pick and choose monitoring measurements relevant to his or her property and management.

Benchmarking

By taking a farmer’s own results and benchmarking these against all the others in the group a farmer can see how he or she compares, anonymously, with the others in the group for a wide range of measurements. A combination of graphs and tables is used to show their results. The programme also does some analyses and derives various relationships and indices between bodyweights and performance, which are reported in the same way. For example, the scanning percentage to mating weight index, kilogram lamb/ewe/day pre-wean lamb growth rate, kilograms lamb weaned/kg ewe mated, hogget weight change over winter etc.

Advisory and information sharing

The reports that are generated may contain 2-5 pages of graphs. Before these are returned to the farmer the farmer’s consultant adds a commentary to aid understanding of the results and give some pointers for where action is needed. The CF2000 group field days feature the individuals that the database showed were very good performers for a particular subject to be focussed on, and also use stimulating outside speakers to help people stay motivated and keep challenging their targets. The field days have been very well supported by local veterinarians and AgResearch scientists who have helped deal with issues in their respective technical fields.

DATA COLLECTION

At present the CF2000 group collects its farmer data on three forms for the periods February to April, May to August, September to January. In future it is intended to split the September to January form into two periods: lamb-
ing results and weaning results. General data on land type and the breed of all stock is collected which will allow for more detailed benchmarking in the future. As new material is added it mostly goes into the optional section. The current list of data recorded by members is as follows:

**Core Monitoring**
This section is compulsory, and is the minimum level required for membership. It covers key measurements that highlight the strengths and weaknesses of a sheep farming system.

- **February – April Data Collection Form:**
  - Early March ewe lamb weight
  - Store lamb sales and purchase details
  - Mating weights and numbers of mixed age and two-tooth ewes plus mated hoggets
  - Mating dates

- **May-August Data Collection Form:**
  - May hogget winter weight and number
  - Lamb sales data (number, average weight, number on hand at 30 June)
  - Post weaning lamb growth calculation
  - Total kg greasy wool for year to 30 June (excluding slip)
  - Scanning results (scanning is not compulsory, but if done, results are collected here).
  - End of winter dry hogget average weight.

- **September to January Data Collection Form:**
  - Lambing percentage (hogget lambs separate)
  - Weaning information with option to use two different weaning dates - includes average ewe weaning weight, average lamb weaning weight, date weaned, number of ewes, number of lambs.
  - December rising two-tooth average weight (dry only – mated hoggets in optional section).

**Optional Monitoring**
This section is having new options added to it regularly to keep up with requirements of our motivated members. Members can choose which options they want.

- **February – April Data Collection Form:**
  - January ewe lamb weight
  - February works lamb growth rate
  - Flushing: mixed age and two-tooth body weights 3-4 weeks before recording of mating weights.
  - Autumn pasture cover – average cover in first week of April plus at two other dates of your choice.
  - Record of ram breeds used over different mobs.
  - Mating weight of two-tooths separated according to being wet/dry as a hogget.

- **May to August Data Collecting Form:**
  - Lamb grade analysis
  - Body weight and condition score at scanning – for two-tooths, mixed age, in lamb hoggets.
  - Pre-lamb body weight, condition score, and mob numbers for two-tooths, mixed age, and in lamb hoggets (done at vaccination time), and able to be done for twin and single scanned mobs either separately or together as a mixed line.
  - Collection of basic cattle data to allow per hectare reporting.
  - Separate two-tooth scanning results for those which were wet/dry as a hogget.

- **September to January Data Collection Form:**
  - Average pasture cover at the start of lambing and three weeks later.
  - Ewe numbers at tailing, number sold since mating, deaths or missing, number treated for bearings, deaths due to bearings.
  - Number of slink lambs, number of other known lamb deaths.
  - Lambing percentage for MA two-tooths and hoggets as separate lines.
  - Weaning information for scanned ewes – ewe and lamb weaning weights from single lines and twin lines, able to be collected either separately for two-tooths and MA or as a mixed line.
  - Weaning information from unscanned ewes separated into two-tooths and mixed age lines.

**RESULTS**

There has been almost universal steady improvement by members in all areas that the monitoring has showed needed improving. The overall picture is at this stage hard to quantify because it is complicated by the fact that South Otago and West Otago have had three excellent lambing seasons in a row, and ewes generally have been going to the ram in very good condition district wide.

Any issues, such as fertility genetics, take considerably longer than the 2-3 years most of our members have been involved before it has an effect on the whole flock. However, the lift being achieved in the performance of young stock as a result of management and/or genetic changes has started to show in the flocks that have made changes.

From visits to members and conversations at field days, it is evident that changes have been made involving a large amount of groundwork and there will be a snowballing effect in the progress made over the next 2-3 years.

Some of the changes have overcome large “cultural” hurdles. A good example of this is a third generation Romney farmer, who, when having his genetic fertility presented to him in this way, realised that not only was it time to give up selling Romney rams, but he also bought enough Coopworth rams to cover his flock. However, he does intend returning to an improved Romney over the first cross progeny.

Members have responded with a variety of changes to improve their flock fertility. These include long term measures such as breed or breeder changes (including many crossbreeding options), plus short-term actions such as use
of Androvax, or replacing part of the flock with better ewes.

We operate an information system which circulates details of members stock available for sale to the other members, which is a good way of ensuring stock from the top performing farms are available to members who want to make use of them. Often this stock does not make it to the traditional ewe fairs for a number of reasons including unsuitable timing, whereas this system gives the breeder the opportunity to sell them at a time which suits.

The rearing of hoggets, their priority as ewe lambs, prevention of weight loss over winter and ensuring adequate early spring feeding is an area where many members have responded to previous poor results very well. This has already shown up in improved two-tooth scanning percentages and has opened up the hogget lambing option as well. This year we had hogget mating in 34% of our members’ flocks. This varied from a small proportion to try it, through to mating the whole mob. The experiences of hogget lambing are being shared through the group and this management practice is sure to increase.

Focus groups

Two Discussion Groups have been formed for CF2000 members and plans are under way to start another. Feedback from members of these is very positive. They find that working in a group where they are all measuring and monitoring the same things and can talk and understand the same technical language is of much greater value than they get from other discussion groups.

Examples of graphs from CF2000 reports

Data shown in Figure 1 have resulted in many changes of breed and ram breeder as farmers have seen their genetic fertility potential expressed in this way. Care needs to be taken at the top end of the graph because of inconsistencies in identifying triplets. Not all farms scan for triplets, but some scanning operators find many of them in the course of looking for twins, and some farmers pay extra to find all of them.

Figure 2 shows the percentage of lambs identified by scanning, which did not survive to tailing. It is an interesting figure to match up with a farmer’s scanning percentage and lambing percentage, as the high scanning percentages do not necessarily have a high loss rate.

Figure 3 shows data from the optional section, where farmers have recorded weaning weights separately for twin mobs and single mobs.

FUTURE PLANS

By mid 1999, plans will be well advanced for an “on-line” service that will open up a range of new possibilities for involvement in the programme by farmers and by consultants servicing groups of farmers. It is expected that this development will greatly improve the service in terms of the feedback of information and speed with which reports are available to the members, and probably open up a whole new range of service packages as consultants are able to gain access to the system.

FIGURE 1: Mixed age scanning percentage to liveweight ratio. (The triangles point to the farmer’s position on the graph.)

FIGURE 2: Loss of potential lambs. (The triangles point to the farmer’s position on the graph.)

FIGURE 3: Weaning weights of lambs for combined MA plus two-tooth ewes but separated for twin or single lambs (The triangles point to the farmer’s position on the graph.)

[Graphs and tables are not transcribed here.]