

# THE WOOL PRESS

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## EDITORIAL

Farmers Week has come and gone - for some in an alcoholic daze, for others in an alcoholic daze with new found knowledge, or as was pointed out old found knowledge represented. The trick to productivity in the Falklands is nutrition- this has been known since 1850! The key to nutrition is hard work and strategic supplementary feeding in the hard months through rotational grazing, feeding root crops, saving pastures, making and feeding hay or buying in feed or adding protein to better utilise pasture. The choice is yours! All are good choices but before spending you better look at the returns! Pull out the pen and paper and start to make a few calculations. Time to run a few trials - just like the DoA or maybe ask the DoA of the results before making the calculations. Calculating costs is easy – calculating benefits presents a little more of a challenge.

Don't think you are alone - work in Australia has shown the effect of ewe body score on lamb production. As you can tell me, the better the body score the more the lambs and if you're supplying lambs to the abattoir each lamb is worth money. The 5 critical areas of sheep production in Australia are nutrition, nutrition, nutrition, nutrition and nutrition! Sound familiar?

If you have had enough of sheep then start digging the spud patch. Maybe these photos should be put in your farmers hand book. The Falklands have been importing spuds for a hundred years so some of these diseases should be here. Have a look and let Shona know. The biosecurity protocols can then be changed accordingly.

If you have had enough of spud digging have a look at your wool clip and test out a few of Des Humphrey's tips. Most years there is a premium for micron. A few years ago there was such a premium that farmers were testing each fleece and classing according to micron to maximise profits. The Falklands has a wool coop with guru up to the minute information – make use if it, preferably before shearing!

Usually I would emphasize that any strange animal symptoms should be sent to the Veterinary Section. However on this occasion if you see something resembling this photograph please shoot it and bury it immediately for the benefit of all!

Best regards

**Vic Epstein**  
**Senior Veterinary Officer**

# FARMERS WEEK 2007

*By Siân Ferguson*

One of the busiest times of the year in the Department of Agriculture calendar has now passed and we can heave a sigh of relief now that Farmers Week is over!

As always, the week was packed full of events organised by the Rural Business Association, including the ever popular RBA Party on the Monday night and the Government House reception.

The DOA was fortunate enough to be able to bring Jim Gerrish to the Islands again (many of you will remember him from his workshops held in April and May this year) to work with DOA staff on managed grazing initiatives as well as to assist with presentations during Farmers Week.

Peter Johnson and Andrew Pollard from the DOA also conducted presentations during the departmental sessions, along with Zoë Luxton and Vic Epstein from the Veterinary Section.

On the next page is an outlined summary of what was discussed at the sessions, but a cd of all the presentations (including those of Jim Gerrish) is available free from the Department of Agriculture. Please phone 27355 or email [sferguson@doa.gov.fk](mailto:sferguson@doa.gov.fk) for a copy.

## Nutritional Requirements of a Ewe Flock

*Looking at the seasonal nutrition requirements of a ewe flock, what makes up nutrition and what happens when the nutritional requirements are not met.*

## Forage Resources of the Falklands

*Looking at what animals are eating during the different seasons of the year and the species intake in a set-stocked system*

## Annual Forage Cropping Options

*What the benefits of forage cropping are, different seasonal forage cropping options and costs versus return.*

## Protein Supplementation

*Looking at what it is, why animals need it and what can you do to increase protein at critical times of the year.*

## Yearly Profile of a Falklands Ewe Flock

*A review of different trials and farms in the Islands which examined ewes throughout the year, studying bodyweights and how it affects ovulation rates/ability to conceive, lambing percentages and death rates and what can be done to increase the productivity and cost effectiveness of ewe flocks.*

## Recipe Mix for Animal Feed Requirements

*A practical session looking at what animals eat versus what they need for a balanced and nutritional diet to allow them to perform at a productive and profitable level for farmers.*

## Managing Protein & Energy Balance in Ruminant Livestock

*What animals are ruminants, the make-up of a ruminant, how to keep ruminants functioning every day and the advantages of strip-grazing.*

#### Management of Native Camp for Improved Animal Performance

*Looking at whitegrass, how to change pasture composition, advantages and disadvantages of using fire, complete pasture re-seeding, the importance of pasture records, plant diversity and pasture stability, how you can change the pasture composition and how grazing management can make a difference.*

#### Stockpiled Winter Pasture

*What is stockpiling, what does it take to extend the winter grazing season, selecting the best pasture for stockpiling, the key components, how strip grazing increases utilisation efficiency and training your stock to find forage.*

#### Putting It All Into Place On Your Farm

*Setting the goals for your farm; strategic goals, lifestyle, financial, landscape and production systems. How to set specific, measurable, attainable, related and time-tabled goals and where to start.*

#### Trade Displays

*A small number of contractors and suppliers show-cased their businesses and what they had to offer. The DOA also prepared updates on the simulated grazing, wethers and pellet feeding trials.*

#### Animal Movement Certificates

*Why they are important and how to fill them out correctly. How stress in animals can affect productivity.*

#### Bovine Tuberculosis

*History of TB testing in the Falklands, why do we need to know. Farmers to inspect all home kills - DOA to set up training days, farmers to keep records of home kills and inspection.*

#### Senior Veterinary Officer

*Brucella ovis monitoring, disease monitoring, exotic disease and the importance of sending in anything unusual for testing.*

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## **ALLOCATING THE 2007/08 FIG ENVIRONMENTAL STUDIES BUDGET**

***By Helen Otley, Environmental Planning Officer***

Annually, the Falkland Islands Government provides a sum of approximately £60, 000 for environmental research, awareness raising, and conservation and management activities. The Environmental Committee is responsible for allocating the 'Environmental Studies Budget' (ESB) funds to owners and managers of land, non governmental organisations and international scientists that conduct research in the Falkland Islands.

This year will see a more strategic approach to allocation of the ESB, with a formal application and decision making process. There will be two funding rounds, scheduled for September and tentatively, February.

Projects eligible for ESB funding must assist in the management of the biodiversity of the Falkland Islands. Priority will be given to initiatives addressing the key three themes of the

draft 'Falkland Islands Biodiversity Strategy', which are environmental research, on-ground action and education.

### **Priority areas**

The Environmental Committee has prioritised the current biodiversity needs of the Falkland Islands and projects that address these are more likely to gain ESB funds. These are:

#### High priority

Implementation of Key species and habitat action plans (See Appendix 1 below)

Prevention and elimination of invasive species

Management of important bird and plant areas (See Appendix 1 below)

Baseline surveying where knowledge gaps exist (e.g. shallow marine environment, off-shore islands, lower plants)

Educational activities and materials

#### Medium priority

Implementation of less at risk species and habitat action plans (See Appendix 1 below)

Long-term environmental monitoring – particularly for climatic and oceanographic conditions

Management of national nature reserves (See Appendix 1 below)

Prevention/management of pollution

Livestock-raptor management

#### Low priority

Sectorial (cross-cutting theme) action plan activities e.g. eco-tourism, aquaculture, agriculture

Environmental data storage mechanisms

Maintenance of national herbarium and insectarium

### **Application process**

Applicants – landowners, land managers, scientists, individuals, institutions and organisations - are requested to submit a written outline of their project in relation to the area(s) of interest outlined above. Applications should be written in 10 point font and not exceed four A4 pages.

Proposals should be very clear on how projects contribute to conservation objectives. Where a project focuses on one site, a site management plan is desirable to identify security of long-term benefits.

There is no formal application form. However, applications must include information on:

- project objectives
- background/justification
- expected, possible project outputs and time scale
- any project progress to date
- justification of funds being sought
- list of items for funding
- time line for the use of funds
- total estimated cost of the project and details of any co-funding
- project proponents experience and track record in producing results

Where possible, some level of co-funding or in-kind costs (e.g. labour, equipment) is desirable. ESB funds can also be used as FIG co-funding when applying to funding bodies in the UK and internationally.

A contract will be signed between EPD and organisations and individuals receiving funds. The contract will specify an agreed activity timeline, a reporting process for outcomes, as well as arrangements regarding publicity and use of analysed/interpreted data. Local publicity is particularly encouraged.

Deadline for the first funding round is Friday 31<sup>st</sup> August 2007. Applicants are encouraged to discuss proposed projects with the EPD Environmental Officer prior to submission and she can also help draft your application.

**Decision-making process**

- Applications will be decided upon by the Environmental Committee based on:
- Relevance to the key themes and priority actions of the 'Falkland Islands Biodiversity Strategy'
- Urgency – the need to undertake the action immediately or in the medium or long term
- Capacity of the project/actions, project proponent and budget to meet stated objective(s).
- Possibility of sourcing funds elsewhere

**Appendix 1**

**1. Species and habitat action plans**

| Key                               | Less at risk                 |
|-----------------------------------|------------------------------|
| Mainland tussac                   | Endemic plants (13 species)  |
| Whitegrass-fachine acid grassland | Californian Club-rush stands |
| Fachine scrub                     | Endemic birds (2 species)    |
| Boxwood scrub                     | Pelagic cetaceans            |
| Five critically endangered plants | Coastal cetaceans            |
| Black-browed albatross            | Seals and sea lions          |
| Striated caracara                 | Southern giant petrel        |
| Southern rockhopper penguin       | Gentoo penguin               |
| Cobb's wren                       | Magellanic penguin           |
| Zebra trout                       | Falkland Fritillary          |
|                                   | Ruddy-headed goose           |
|                                   | White-chinned petrel         |

## Key Areas

IBA = Important Bird Area (Falklands Conservation 2006)

IPA = Important Plant Area, tentatively proposed by Falklands Conservation in 2002.

NNR = National Nature Reserve. Sea Lion Island and Bertha's Beach are proposed

| Site   | IBA | IPA | NNR                        |
|--|-----|-----|----------------------------|
| Beauchene Island                                 | √   |     | √                          |
| Beaver Island Group                              | √   |     |                            |
| Bird Island                                      | √   |     | √                          |
| Bleaker Island Group                             | √   |     | √ (north)                  |
| Elephant Cays Group                              | √   |     |                            |
| Hummock Island Group                             | √   |     | √ (Middle only)            |
| Jason Islands Group                              | √   |     | √ (except Steeple & Grand) |
| Keppel Island                                    | √   |     |                            |
| Kidney Island Group                              | √   |     | √                          |
| Lively Island Group                              | √   |     |                            |
| New Island Group                                 | √   |     | √ (south)                  |
| Passage Islands Group                            | √   |     |                            |
| Pebble Island Group                              | √   | √   |                            |
| Saunders Island                                  | √   | √   |                            |
| Sea Lion Island Group                            | √   | √   | √ (proposed)               |
| Speedwell Island Group                           | √   |     |                            |
| West Point Island Group                          | √   |     |                            |
| Bull Point (East Falklands)                      | √   | √   |                            |
| Hope Harbour (West Falklands)                    | √   |     |                            |
| Seal Bay (East Falkland)                         | √   |     |                            |
| Volunteer Point (East Falklands)                 | √   |     | √                          |
| Bertha's Beach (East Falklands)                  | √   |     | √ (proposed)               |
| Hill Cove Mountains                              | √   |     |                            |
| West Lagoons Pond, Hill Cove                     |     | √   |                            |
| Port Stephens and Albemarle Coast                |     | √   |                            |
| Hawk's Nest Ponds & Little Chartres Gully        |     | √   |                            |
| Long Mountain, East Bay, West Falklands          |     | √   | √                          |
| Cape Pembroke, East Falklands                    |     | √   | √                          |
| Big Pond, Cerritos, East Falklands               |     | √   |                            |
| Cape Dolphin, East Falklands                     |     |     | √                          |
| Moss Side, East Falklands                        |     |     | √                          |
| The Twins, Carcass Group                         |     |     | √                          |
| Low Island, Carcass Group                        |     |     | √                          |
| Narrows, Dunnose Head, West Falklands            |     |     | √                          |
| Sea Dog & Arch Islands, southwest West Falklands |     |     | √                          |

# POTATO DISEASE SURVEY RESULTS

*By Shona Strange*

The Department of Agriculture recently sent a small sample of potatoes to the United Kingdom for disease analysis. The analysis was performed by the Department of Agriculture and Rural Development Northern Ireland.

The samples shown on the next two pages were collected from a range of potato growers within the Islands.

From this analysis two diseases were found to be present in the Falkland Islands:

1. *Streptomyces scabies* (Common scab)
2. *Rhizoctonia solani* (Canker / Black scurf)

The purpose of this analysis was to establish what potato diseases exist in the Falklands. Based on information collected, the Department of Agriculture can set Phytosanitary Conditions for the Importation of Ware (Eating) and Seed (Planting) Potatoes into the Falkland Islands.

The United Kingdom Falkland Islands Trust through its consultant's contact with the Department of Agriculture and Rural Development Northern Ireland and the Agri-Food and BioSciences Institute has proposed to assist the Department of Agriculture with the above task of establishing Phytosanitary conditions for potato imports.

In order to establish if there are other major potato diseases in the Falklands, I would be grateful if you could send any unusual or suspected diseased tubers to the Department for further assessment.

If you see any potatoes that you think might be diseased, please contact me on email [sstrange@doa.gov.fk](mailto:sstrange@doa.gov.fk) or telephone 27355

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## AGRICULTURAL WORK EXPERIENCE

*By Louise Taylor*

Students from the FICS have been fortunate to enjoy some work-based learning from the Agriculture Department in recent weeks.

Late in June, some students took the opportunity to find out more about the Agriculture Department's embryo transfer programme. 13 pupils from across the year groups took a day trip to Saladero to watch the process take place – embryos removed from some ewes before lunch and the selected ones transferred to others afterwards. All the students agreed that this was a very worthwhile trip and appreciated the chance to take a look at some of the work of the agriculture department first-hand.

Students comment: "I think that the trip was good for people who are interested in farming and want to work for the Agriculture Department." "It was a very successful day and everyone enjoyed themselves." "Good day out from school." "It was really interesting."

This is the third year that FICS students have been able to take a look at this programme.

It's interesting to see how different students react – some like to take time-out for fresh air whilst others are keen to get stuck in and give hands-on help with the sheep! From a teacher's perspective, it's always nice to get a day away from the classroom, see something different and learn something new.

Each year I've seen the programme in action has been different, and I've enjoyed every trip. That said, I hope to hand over to someone new for next year so the experience is spread out amongst school staff. This trip was originally set up from a scientific point-of-view but clearly it gives students the chance to consider an agricultural career and decide whether they can really cope with some of the less-glamorous aspects.

I have discussed the possibility of an agricultural day-out where students would visit different farms on the East and see different types of "agriculture in action". Unfortunately, time has so far defeated me and I haven't managed to put the arrangements in place. Maybe next year .....

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## **2007 SHEEP AI & ET PROGRAMME**

*By Nyree Heathman*

The 2007 programme kicked off in the second week of May, after the arrival of Michylla Seal from AllStock (WA), and ran until the end of June.

This was the third year that Mic has visited the Islands to carry out the AI & ET work on behalf of the Department. This year 23 farms participated in the programme (including Saladero).

### **Embryo Transfer**

235 donors were flushed during the 2007 programme with the best programme producing an average of 9.18 embryos collected per donor flushed. The overall programme average was 7.24.

An overall programme average of 5.45 transferable embryos was achieved this year with a maximum of 8.00 transferable embryos per donor flushed.

1908 embryos were transferred into 1779 recipients at 8 different locations. This included both imported frozen embryos and locally frozen embryos, as well as the fresh embryos that were collected during May and June.

### **Artificial Insemination**

This season 2284 ewes were inseminated at 8 different properties. Both frozen and fresh semen was used for this work.

Although few ewes from this year's programme have so far been scanned, to date the results that we do have are looking good.

Farmers around the Islands have put a considerable amount of time and effort into this programme so let's hope that we get some decent weather at lambing time.

Finally many thanks to all those people who helped out with the programme in any way.

# SHOULD YOU CLASS EVERY CLIP IN THE SAME MANNER?

*By Des Humphrey*

Well I thought it was well overdue that I should drop a line to you all. With the wool market briefly showing some signs of improvement, lets all hope it maintains a viable level. Here is some food for thought about how you might put wools together to help maximise potential returns.

This information is based on hypothetical assumptions that the results will be mathematically about the mark. I would like you to apply the theories to your own situation.

What are the tell-tale signs that may influence your wool classing strategies?

Let's look at the following facts.

## Fact One

Occasionally you find that a particular micron is bringing a price higher in value in relation to wools around it. This premium can be calculated and expressed as a percentage. This becomes known as a micron premium.

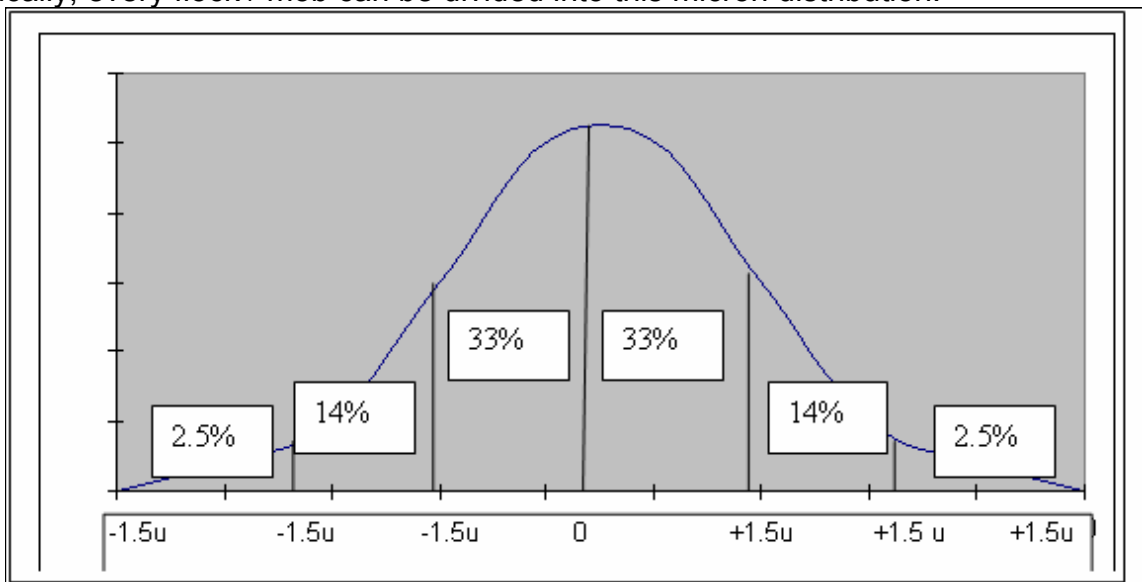
It is the percentage that a one micron finer wool brings over the broader micron.

Example:            A 25 micron wool = 660c clean  
                          A 26 micron wool = 600c clean  
  
                          There is a 60c premium paid for 25 micron wool  
  
                           $\frac{100}{60} \times \frac{60}{1} = 10\%$  micron premium

## Fact Two

In every flock of sheep you will have a range of at least ten microns – that is from the finest sheep to the broadest sheep. No matter how even you may think your wool is, genetics, feeding, management and of course the most important influence being mother nature, all contribute to this variation.

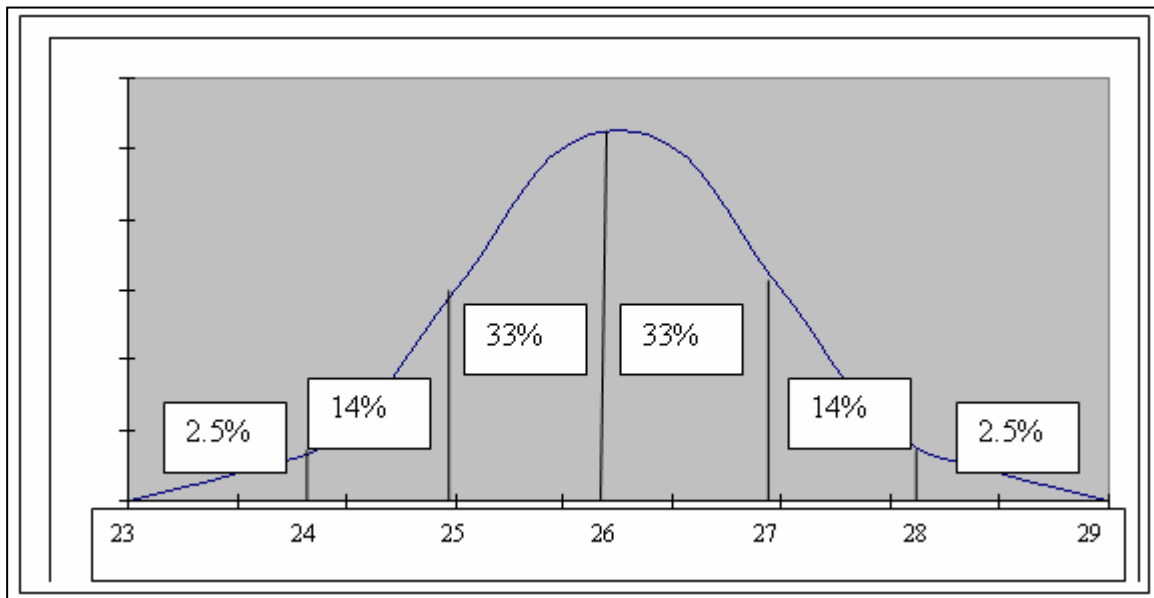
Statistically, every flock / mob can be divided into this micron distribution.



Note: I have slightly changed the % from the text book from 34% to 33%.

To make these figures into a more simplified interpretation, as there would only be a few animals at either side of the range, we ignore these animals and reduce the standard deviation from 1.5 micron back to 1 micron.

Here is what you might expect to get if the flock averaged 26 microns (this of course can be adapted to any micron average).



In other words, if this was a clip of 100 bales and we only included the main fleece wools, ignoring the "AA" wools, then hypothetically we could expect:

2.5 bales of 23.7 microns  
14 bales of 24.6 microns  
33 bales of 25.6 microns  
33 bales of 26.4 microns  
14 bales of 27.4 microns  
2.5 bales of 28.3 microns

Now this is in the perfect statistical world. If we had tested every fleece prior to classing, it would be very easy to identify this range.

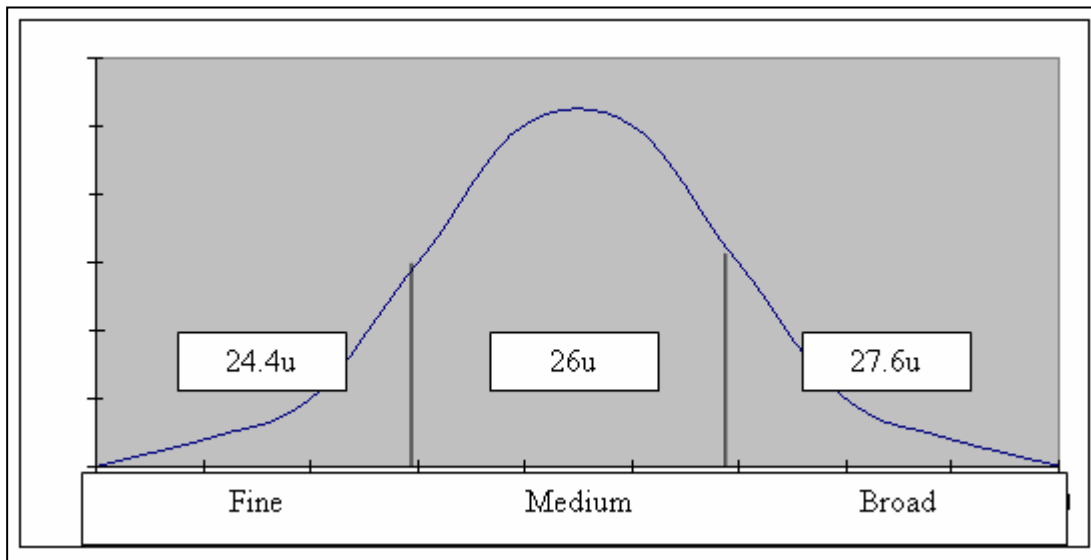
But when you are faced with decision making in a shearing shed relying only on visual, tactile and common senses as to what lines you would place a fleece into, is it possible to roughly estimate wools into micron ranges?

### Fact Three

If you are aware of the mob / clip average from the previous years' test results, seasonal conditions and ram source then no matter how good or bad a classer some one might be, if you intend making a fine, medium and broad line based on traditional classing strategies, the largest line will always be the middle line.

Two thirds of all the fleeces will automatically fall into this category resulting in a micron test, exactly around the clip average. Then it is just a simple task to identify the softer, positive type wools and finer crimping wools, resulting in 15% - 17% of the clip falling into a micron range of 1.5 microns finer than the middle line.

The opposite happens when you identify the broader, harder, flatter negative types.



#### Fact Four

The season average for 2006/7 saw the following clean prices obtained. I have included the micron premium for each.

| MICRON | CLEAN PRICE | DIFFERENCE | PREMIUM |
|--------|-------------|------------|---------|
| 23     | 830         |            |         |
|        |             | 60c        | 8%      |
| 24     | 770         |            |         |
|        |             | 110c       | 16%     |
| 25     | 660         |            |         |
|        |             | 60c        | 10%     |
| 26     | 600         |            |         |
|        |             | 80c        | 15%     |
| 27     | 520         |            |         |
|        |             | 45c        | 9%      |
| 28     | 475         |            |         |

**What classing strategies might we use to maximise the potential return, comparing a 25 micron flock, with a 26 micron flock?**

BASE PRICE

BASE PRICE

**For a 25 micron wool clip – 660c clean**

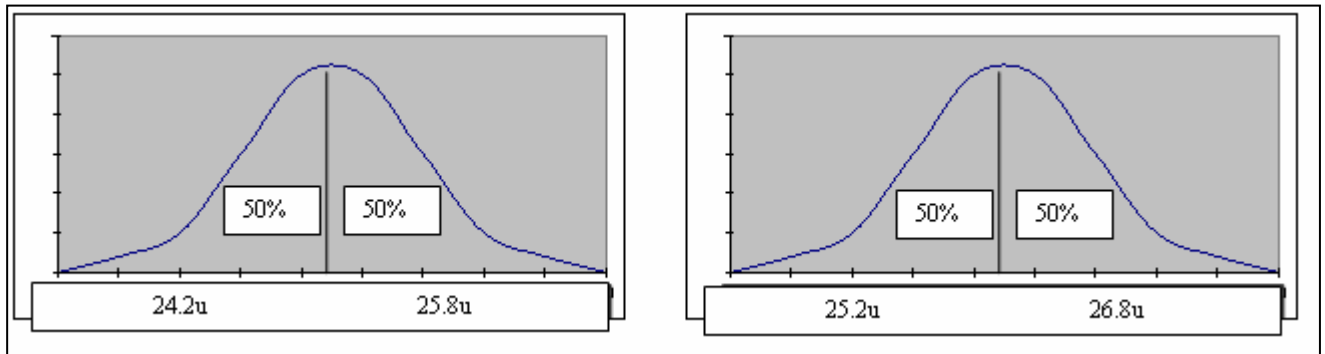
**For a 26 micron wool clip – 600c clean**

Compare 4 alternative hypothetical methods of classing these clips, using the 2006/7 clean price average:

**Option A – Divide the clip into two equal halves.**

**25 MICRON CLIP**

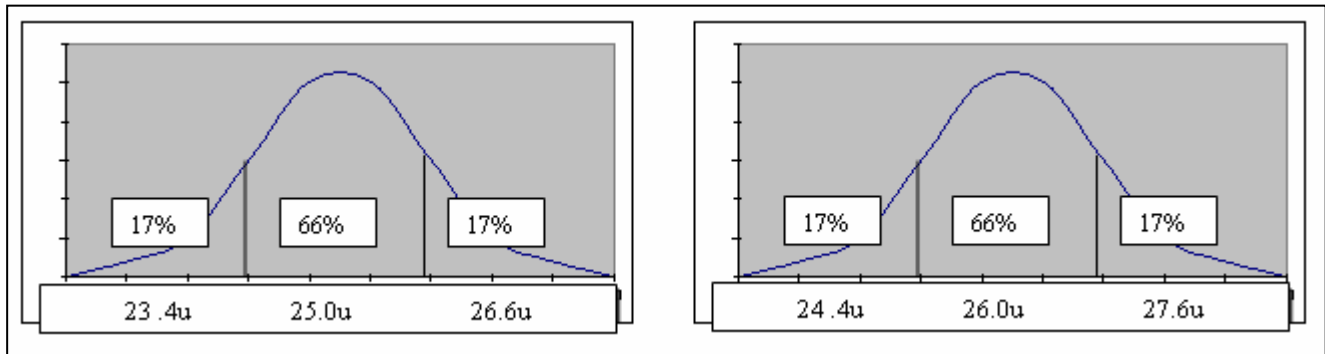
**26 MICRON CLIP**



24.2 u                      25.8 u  
 750c clean                610c clean  
 Average return of 680c clean

25.2 u                      26.8 u  
 650c clean                530c clean  
 Average return of 590c clean

**Option B – Normal Classing Practice – Fine, Middle, Broad**



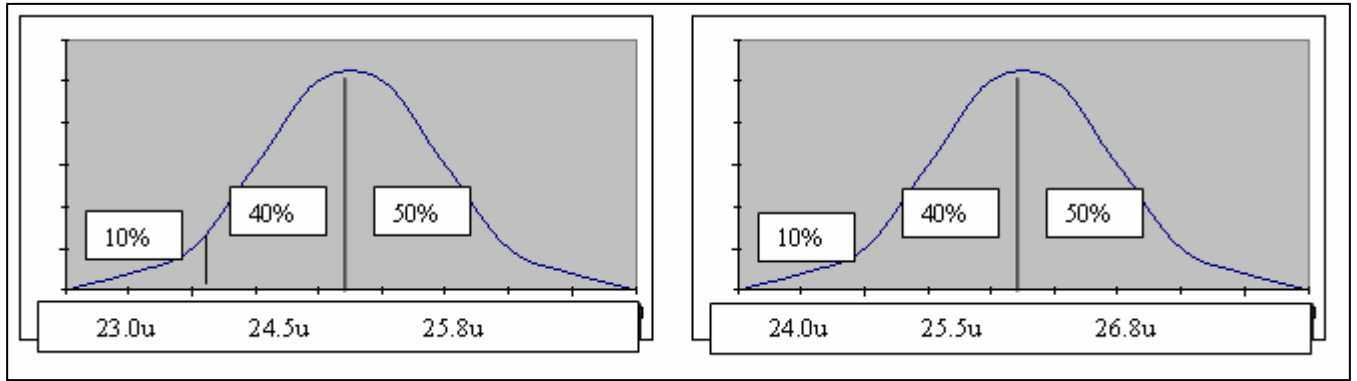
23.4u            25.0u            26.6u  
 810c clean    660c clean    535c clean  
 Average return of 664c clean

24.4u            26.0u            27.6u  
 720c clean    600c clean    485c clean  
 Average return of 600c clean

**For a 25 micron wool clip – 660c clean**

**For a 26 micron wool clip – 600c clean**

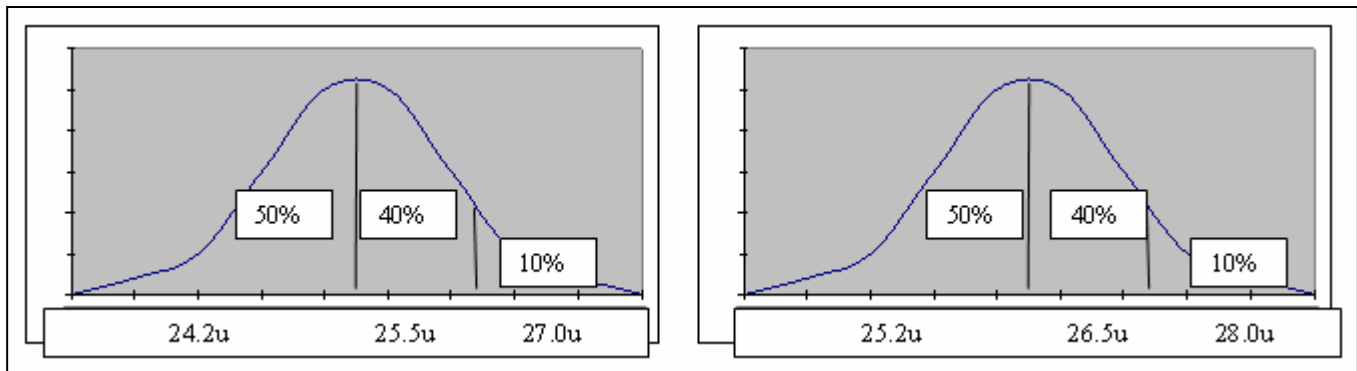
**Option C – Small Fine Line, Middle, Bulk Up Broad Edge**



23.0u      24.5u      25.8u  
 830c clean   720c clean   610c clean  
 Average return of 676c clean

24.0u      25.5u      26.8u  
 770c clean   630c clean   530c clean  
 Average return of 594c clean

**Option D – Bulk up the Fine Line, Middle, Broad**



24.2u      25.5u      27.0u  
 750c clean   630c clean   520c clean  
 Average return of 679c clean

25.2u      26.5u      28.0u  
 650c clean   560c clean   475c clean  
 Average return of 577c clean

**Conclusion:**

The difference in returns for the alternative methods comes about by identifying where the micron premium lie. (Refer back to Fact Four).

This occurs for the 25 micron clip in Option A & D – an overall return of 20c clean better than the base average. I would prefer Option D as it divides the clip into three lines, the classing and processing of these wools a little more reliable than Option A.

This comes about through identifying the largest line, and matching it to where there is a window of opportunity to be gained in a higher premium, in this case 16%.

But in the case of the 26 micron clip Option B gives the best return. But there is not a lot of difference in any of these strategies as the premium either side of 26 microns is about the same, + 16% and – 15%. Therefore, how you divide up the lines will not have a great influence on the overall average return.

All very interesting, a bit of smoke and mirror theory as one might say. I thought I would give you something to ponder about. Looks good on paper but can you put it into practice?

Lets hope the wool prices keep on improving.

## ***Notes from Department of Agriculture***

Please do not hesitate to contact DOA staff if you have any queries after reading the article by Des Humphrey. It is a very easy exercise to review you historical classing results in the manner shorn above.

If you consider the typical Falkland Islands classing strategy with separate lines for shearlings, A and B wool (or maybe B & C wool), with a small quantity of very broad wool in a BB or CC line, I do not believe that farmers differ much from Des's theoretical exercise.

Neil Judd.

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