Department of Agriculture

Farm Management Handbook

Livestock & Wool Section

(Colour code: Red)

GUIDE TO CLIP PREPARATION

INTRODUCTION

This is the third edition of the "Falkland Islands Guide to Clip Preparation". It was first published in October 1992 with the first review taken in 2005. The first edition was prepared by Colin Smith, Peter Marriott, the Department of Agriculture, Falkland farmers and shearers with information from Australian and New Zealand "Codes of practice for clip preparation", wool exporters, merchants, brokers, classers, and processors.

The first review of the booklet was prompted by the introduction of an accredited owner classer scheme in the Falklands Islands wool industry. The implementation of this scheme demonstrates that wool preparation standards in the Falklands are equal to, or better than world's best practice. This second review follows from critique from stencil holders and DoA staff concerning certain anomalies between the "Guide" and the QFW Checklist.

In the short term this may not equate to better wool returns but will ensure the Falklands is known world-wide for the production of a quality product that is accurately prepared and described.

The aim of this guide is to clarify the role of everyone involved in the shearing and wool preparation process. In addition the guide is a brief reference for the requirements of quality wool preparation. For more details on wool preparation, processing and characteristics of wool in general, refer to the "Falkland Islands Wool Classing Workshops Participants Handbook March/April 2005".

If the recommendations contained in the "Falkland Islands Guide to Clip Preparation" are followed, the Islands clip will be consistently prepared to a world class standard that meets the needs of the processors and at the same time maximises possible wool returns to the farmer. All involved in the presentation, marketing and processing of the clip will benefit. The key issue in a quality assurance scheme is that wool in a bale is precisely the same as described on the bale and on the accompanying classers specification.

OBJECTIVES:

- Ensure that all involved in the Falkland Islands wool industry are aware of the minimum standards for wool preparation.
- Make all those working in the shearing shed aware of their basic responsibilities and what is expected from others in the shed.
- To provide both the buyer and manufacturer with parcels of wool they can handle confidently, knowing they are uniform and meet the standards required for processing into quality yarns and textiles.

PART 1: RESPONSIBILITIES

To achieve the objectives of this booklet, it is necessary that all involved in the preparation of a clip know what is expected of them and what they can expect of others.

Farmer's or Manager's Responsibilities

- 1. To ensure the safety and welfare of all personnel and all animals;
 - A First Aid kit is kept in the woolshed,
- 2. To make clear arrangements with the shearing contractor in respect to;
 - Wool handling requirements and number of shed staff needed,
 - Who is responsible for providing particular shed staff, (classer, shed hands, presser, penner up and shearers),
 - Full details of the classes and number of sheep to be shorn,
 - Contract shearing staff travel to and from the farm, washing facilities, board and lodgings.
- 3. To ensure that the shed is prepared for shearing, this means providing;
 - Working areas of sufficient size, that are tidy and clear of all contaminants,
 - Approved lighting installed in all wool handling and shearing areas in good working condition,
 - Adequate bins/containers **all clearly marked** and permanently for dags, urine stain, black wool, skin pieces and rubbish,
 - Sufficient approved packs, clips, branding inks and stencils,
 - Recording book,
 - Drafting pens and counting-out pens free of dust and mud,
 - RUBBISH BINS FOR ALL REFUSE CLEARLY MARKED,
 - Polypropylene string, cans, cigarette butts, clothing, bale hooks, wire tools and cleaning rags not left lying around the shed,
 - Articles or products not associated with shearing removed from the shed,
 - No cats are allowed in the shed, no dogs allowed in the woolhandling area.
- 4. To present the sheep in good order for continuous shearing. The sheep must be;
 - DRY Damp or wet wool should not be shorn,
 - DRAFTED Sheep should be drafted to separate; breeds (wool or meat), wool length due to time of previous shearing, black/coloured sheep. Black and coloured sheep should not be in the flock. Black and coloured sheep must be shorn last after all other shearing has been completed.
- 5. Discuss the wool handling requirements with the classers, rousies, table hands and presser. Everyone must ensure the wool is COMPLETELEY free of nonwool contamination. Nothing must go into a bale but wool: no dividers, paper, cigarette ends, clothing, nor string.
- 6. Provide the classer with full information at the start of shearing, including:
 - 1. Age and sex of sheep to be shorn,
 - 2. Number of various flocks and their order of shearing,
 - 3. Size of each flock,

- 4. Variations between flocks if any,
- 5. Previous seasons specifications and test results.
- 7. Ensure all wool bales are presented using approved materials and identification marks.
- 8. Complete and sign with the classer a clearly worded classer specification immediately shearing is completed, or as the agent or merchant requests. Any specific lotting, testing or selling instructions should be included.

Contractor's Responsibilities

- 1. To arrange and provide:
 - The agreed number of competent shearers,
 - The agreed number of competent wool handlers and rousies,
- 2. To ensure:
 - Key wool handling personnel do not change during the shearing and that a consistent standard of staff is maintained,
 - Liaise with the farmer or manager at all times.

Shearer's Responsibilities

- 1. Ensure shearing equipment is clean,
- 2. Avoid injury and minimise stress to the sheep,
- 3. Avoid second cutting and prevent contamination of wool,
- 4. Remove the complete fleece from each sheep,
- 5. Separate the belly wool from the fleece,
- 6. If unable to remove black spots, make the rousie aware of the black wool/spots in the fleece,
- 7. Ensure shed staff are aware of any discharging boils on sheep and keep gear clean to minimise spread of boils (For organic farms, lodine is perfectly acceptable).

Rousie's Responsibilities

- 1. Place shorn belly wool in the appropriate bin, removing pizzle stain if required by farmer/classer and any wether hoggett scrotal remains, in particular, the rubber ring that may still be there,
- 2. Keep the shearing board clear of fleeces and swept of locks (second cuts, crutch wools etc),
- 3. Pick up and throw fleeces correctly at a 45-degree angle onto the wool table, so that locks fall aside and fleeces are spread evenly for accurate skirting,
- 4. Remove dags and black wool during shearing,
- 5. Place all faults and oddments in appropriate containers,
- 6. Colour mark sheep as required. This should be done on the sheep's head as raddle does not scour/wash out fully.

Table-Hand's Responsibilities

- 1. Remove and discard any remaining dags,
- 2. Remove all stains from fleeces (blood, urine stain, and pen stain),

- 3. Remove black wool, unscourable brands, skin pieces and contaminants from fleeces,
- 4. Remove the minimal amount of short, cotted neck wool containing kemps and vegetable matter,
- 5. Remove remaining locks and bits of belly wool from fleece,
- 6. Avoid the removal of good fleece wool by removing faults using fingers,
- 7. Place oddments in appropriate containers and bins,
- 8. Keep woolroom floor swept and free of locks.

Classer's Responsibilities

Before commencement;

- 1. The classer should discuss the clip with the farmer and consider all relevant details;
 - Last year's lines and measurement details,
 - Number of sheep and flock composition,
 - Possible differences between flocks, e.g. age or fibre length,
 - Any recently bought in lines or changes in breeding strategy,
 - Formulate lines appropriate for the season with particular emphasis on understanding of any changes from the previous year.
- Each wool bin should be marked with its description before the start of shearing. Separate bins for stained pieces (STN PCS), black/coloured (BLACK) and skin pieces (SKN PCS) should be provided and kept clear of main line bins,
- 3. A clearly marked bin is provided for rubbish, ie dags, vegetable matter etc.

During the season;

- 4. The classer should set up and class to the minimum number of lines required to present the clip for sale,
- 5. The classer should SUPERVISE AND MONITOR ALL ASPECTS OF WOOL HANDLING, pressing and recording of bales, ensuring that:-
 - The shed equipment is arranged to give the best possible workflow,
 - Agreed wool handling procedures set out to each individual before shearing begins are followed consistently by the wool handling team, so that each fleece is carefully prepared,
 - Contamination of lines by foreign objects is prevented,
 - The pieces bin is checked on a regular basis to ensure that sound fleece wool is not being removed with inferior pieces,
 - Wool is classed consistently to standards appropriate for the particular clip, taking into account variations of flock and environmental effects.
- 6. Wool from mature sheep generally low in dust/peat content, free or nearly free of vegetable matter and of sound strength is classed as A, B or C,
- 7. Dusty/peaty or inferior fleeces should be classed AA, BB, CC,
- 8. Ensure the presser records the bale number and its contents correctly in the bale book and the branding of bales is done accurately and clearly,
- 9. Classers' specifications are prepared and presented to the farmer/manager.

Presser's Responsibilities

- 1. Master the safe and efficient operation of wool press,
- 2. Maintain a tidy work area and avoid any contamination,

- 3. Inspect wool packs for any loose material, which must be removed and placed in rubbish bins,
- 4. Organise the pressing of fleeces and oddments to avoid unnecessary mixed bin bales,
- 5. Dividers are not to be used,
- 6. Undertake careful and accurate packaging, branding and recording. Bales should be clearly marked on two sides and two ends, with farm brand, bale number and description. Bale numbers shall not be duplicated under any one farm brand in any one season.

It cannot be stressed enough the importance of having the three bale brands on **both** sides and on **both** ends with the increased use of coring and the use of containers for shipping bales. It is both frustrating and time wasting to have to pull bale stacks apart to determine exactly what they are.

PART 2 – PREPARATION

Sets out minimum preparation standards that need to be followed to ensure that clips meet the requirements of the customer.

SKIRTING

The object of skirting a fleece is to remove any inferior wool that could cause discounting of the whole fleece line. Check the pieces bin on a regular basis to ensure that sound fleece wool is not being removed with inferior pieces.



CLASSING

The aim is to produce lines of wool that have uniform quality, fibre diameter, fibre length and colour. To achieve this, faults should be kept separate. (See Glossary for definitions). Listed below are wools and faults that may be present and should be removed from each fleece:

Sheep age/sex

- HOG: Hogget wool.
- SHER: Shearling wool.

Some smaller farms may not have enough hogget or shearling wool to class into separate lines. If this is the case comment should be made on the classer's specification as to the uniformity of the line.

- E: Ewe wool (main flock)
- W: Wether wool (main flock)

Ewe and Wether wool is all classed. Classing extent depends on wool variation and quantity.

Main Fleece Lines

Within each line it is important to ensure the fibre diameter, length, strength, style, character, condition, colour and vegetable matter are consistent throughout the line of wool.

Bale Brand

Description

- A Fine line, approximately 2 microns finer than the next branding line. Generally must be mature wool (not from sheep shorn for the first time), soft, of good character, length, strength and colour.
- **B** Middle line wool, approximately 2 microns broader than the fine line, showing good character, length, strength and colour.
- **C** Broad line. May only be required in large clips, where there is a significant quantity of coarser, harsher wool types.
- NOTE: On farms with a wide variation of sheep breeds or types, further main lines (i.e. D; E; etc.) can be added.

Other Fleece Lines

- **AA** Off type wools with similar micron to the main fleece line; but having excessive colour, peat, tender, short or overlength staple.
- **BB** Wools showing similar traits to the above line, but distinctly broader. Should also include the very coarse edge.

- **CC** Wools showing similar traits to the above but distinctly broader.
- **AA COTT** All severely cotted fleeces or part fleeces.
- MIX FLC All fleeces from which black or pigmented staples have been removed. Depending on the quantity two lines could be made fine and broad: A MIX FLC and B MIX FLC
- **BLACK** All fleeces showing distinctly pigmented regions. These fleeces should be directly placed into the designated black bin or butt. These should not be skirted, and the bellies should not be separated.
- **D/F** All fleeces with two years growth or more. These fleeces should not be skirted and the bellies should not be separated.
- **NKS** Necks wool that is shorter than the fleece with thick vegetable matter and/or cotts that cannot be easily pulled apart.
- **A HOGGETS** Fine line, soft handling, good style, good length and sound.
- **B HOGGETS** Broader line, 2-3 microns broader than the above. Should still be good style, good length and sound.
- **AA HOGGETS** All short, tender, discoloured hogget wool.

<u>Skirtings</u>

- **A PCS** All pieces free of stain, good length.
- **STN PCS** All stained wool from the crutch area, pizzle wool from wethers/rams, raddle stain etc.
- A BLS Bellies that have had all stain removed.
- **BLS** Bellies with urine stain not removed.
- LOX All second cuts and board locks, eye wigs, jowls, kempy top knots and socks, if accidentally removed.
- **SKN PCS** Should be kept separate from all lines and dumped.

QUALITY FALKLAND WOOL AND OWNER CLASSER BRANDING

1. Farms with a QFW accreditation and a certified Owner Classer.

Wool is classed by an accredited classer and the Owner Classer QFW stencil is applied to all bales of wool produced on the farm. An Owner Classer specification is completed for all wool.

2. Farms with no QFW accreditation but a certified Owner Classer

The owner classer can apply the Owner Classer stencil to all bales classed by them and complete the Owner Classer specification for all wool. The number on the stencil relates to a particular owner classer.

3. Farms with QFW accreditation but no Owner Classer.

It is recommended to apply QFW stencilling to all bales on the farm.

4. Other Farms

Any farms not involved in QFW or the Owner Classer scheme will continue to brand their bales as best suits their farm.

PART 3: FALKLAND ISLANDS WOOL GLOSSARY

BELLIES (BLS): Wool off stomach area, often poor colour. Stained brisket (frib) wool and pizzle wool may be removed into STN PCS.

BLACK (BLACK): Fleece wool containing black, brown and other coloured fibres. Coloured fibres of any description must be removed from white wool. Coloured sheep must NOT be shorn with white sheep, but done separately, and with the shed being thoroughly cleaned afterwards to avoid contamination.

FLEECE WOOLS: Fleece wools should be of good length, free of vegetable matter and without stain.





CAMP WOOL (CAMP): Wool plucked from dead sheep. Roots of fibres contain variable amounts of thin papery skin tissue. Has a cold feel and may smell.

DOUBLE FLEEC (D/F): Very long wool from 18 months to several years growth. Too long for normal processing.

CLIP: All wool from the farm.

COTTS (COT): Fibres entangled between staples so fleeces cannot be freely opened by hand. High fibre breakage in processing. Common around the neck region.

CRUTCHINGS (CRT): Wool from under the tail and udder area, shorn from ewes pre-tupping or pre-lambing. Remove stain from crutchings and place in STN PCS. Crutchings are much shorter than fleece wool and should therefore be kept separate.

DAGS (DAG): Wool heavily contaminated with dung should be kept separate during shearing. Afterwards, dung can be removed and discarded whilst lightly stained wool can be added to the STN PCS.

EWE (E): Wool shorn from ewes.

EYE CLIPS (E/C): Very short, fine, crimped, soft wool, usually containing kempy fibres that do not dye. Put eye clips in with the locks, rather than the necks.

A PIECES (A PCS): Fleece skirtings free of stain, good length. Slightly shorter than equivalent fleece wool, of poor colour or with vegetable matter. The quantity of wool skirted from in and around the fore and back legs can vary a great deal – keep to a minimum to enable fleece improvement.

FLOCK: Sheep of the same breed that have run together under similar environmental conditions since the previous shearing.

HAIRY BRITCH WOOL.: This can be removed and placed in a (separate) pieces line, since it contains medullated fibres which dye badly.

HOGGET WOOL (HOG): Wool from sheep shorn for the first time at about 14 months of age. This wool has a pointed curly lamb tip which may be weathered. Wool long for micron and tests finer than the crimp suggests.

LINE: Classed wool assessed to be of similar average characteristics.

LOCKS (LOX) Very short pieces, second cuts, eye wigs, topknots, jowls and socks (containing medullated fibres), if accidentally removed, which fall through the wool table or are swept off the floor.

NECKS (NKS): Neck collars should be removed only if the wool is shorter than the fleece, is cotted (matted fibres) or contains vegetable matter. Necks should not include full-length wool from the shoulder.

PEN STAIN: Dung/faeces stain contamination of wool. No daggy sheep should be penned with clean sheep and sheep straight off feed should be kept in a bare

paddock or loosely yarded for 24 hours, before they are close penned for shearing. Pen stained wool must be removed to the STN PCS.

SAND (SND): Wool containing sand. Bale separately if severe.

Core Sampling in the Wool Warehouse

As most of you know, the D.o.A, supervises core sampling in the Falkland Islands for the New Zealand Wool Testing Authority (NZWTA).

The process has been modified since the 2008/9 season with the aid of the FIDC funded semi-automatic core/grab machine. Farmers wishing to core sample their bales in the islands now have the option to put their bales through the coring machine or use the laborious manual method.

The processes for both options are:

1: Machine core or core and grab: contact Rodney Lee of Falklands Wool Cooperative.

2: Manual coring:

Once you have decided to have some or all of your bales sampled, phone the DoA to inform us of your decision. We will then need to know when your bales will be in the wool warehouse, how many bales, how many you require to be sampled and the break up of Lots.

You will need to send us a copy of your bale specifications beforehand so we can sort out Lots to be core sampled with you, if not already done by yourselves, or if you have not done this before and are unsure of the process. To have a copy of the bale specs on hand on the day of sampling is necessary as any problems arising i.e. duplicated numbers, different descriptions on the bale to the specs etc can be discussed and sorted out with you on the day.

Once we have all of the above information we can set a date to meet at the wool warehouse and do the core sampling.

Requirements:

The DoA provides a person accredited to supervise the entire sampling operation plus associated paperwork.

The farmer is required to provide a minimum of two (more if there are 50+ bales to be sampled) fit and reasonably strong individuals to move bales and do the coring (coring is a lot more strenuous than you might think – ask someone who's had a go!). One person must be an experienced forklift driver. Please remember to bring your own bale hooks and something to drink as the work is strenuous and the wool warehouse tends to get very hot in good weather.

The coring operation itself runs like this: the scales are set up and tested for accuracy; the relevant paperwork is checked and laid out ready for use. The bales for a Lot are identified and brought to the scales, either by rolling or with the forklift. Each bale is rolled onto the scales where its' weight and Lot No are written on to it, also the bale No and weight is recorded on the paperwork. Once all bales in that Lot are weighed and recorded then they are cored.

With a tool, designed for the job, a circular hole is cut out of the tops or butts, or both ends if required, of each bale. This is to reduce contamination of the sample. Then the core tube, which is a two foot steel tube with a very sharp replaceable tip, is pushed into the bale right to the handle. It is then removed, and the sample is pushed down the tube, with another special tool, and into the sample bag which is affixed to the tube handle.

Once the required amounts of cores have been taken from each and every bale in that Lot the sample bag is removed from the handle. A card describing all Lot details, bales No's, weights, farm name etc is placed in it, sealed and all samples go to the D.0.A for the rest of the paperwork to be finalised. All samples are then parcelled up following precise guidelines and sent to NZWTA for testing.

Within two weeks we receive an e-mail of your test results, which will be forwarded straight away to you, likewise with the core test certificates which usually arrive a week later.

If you would like to discuss any aspect of core sampling or require more information, please do not hesitate to contact Lucy Ellis on Tel: 27355 Fax: 27352 E-mail: <u>lellis@doa.gov.fk</u>

Wool Warehouse FIPASS Standard Operating Procedures

For machine coring, please contact Rodney Lee of the Falkland Wool Co-operative.

For manual coring, please see below:

D.o.A Responsibilities:

- ✤ To ensure the D.o.A forklift is in safe working order
- ✤ All D.o.A employees using the forklift have a ticket of competency
- Ensure the test weights are moved in a safe and correct manner
- Ensure that staff activities do not cause harm to other persons using the facility
- * Encourage and emphasise spatial awareness of all core sampling participants
- Strongly advise against the attendance of persons of 16 years and under for the duration of the core sampling operation
- To bring to the attention of the FIPASS manager of any defects/problems within the wool warehouse occasioned during core sampling
- To identify which vessel/s, if it is indeed a vessel, adversely affects the bale scales and advise farmers as on those days it/they are alongside no coring will take place
- Set out clear procedures for the activity of the forklift around the bale scales and coring activity to minimise the possibility of bales being moved and falling onto someone and minimise the risk of someone being hit/run over by the forklift

Farmer Responsibilities:

- To notify D.o.A staff at least 48 hours in advance (but preferably 5 working days) of their intention to core sample
- All individuals involved in the coring have a reasonable level of strength and fitness
- ✤ To provide an adequate number of fit and healthy persons for the coring procedure
- To contact Byron McKay and F.I.C to ascertain if there will be any ship loading/unloading or bale handling activity on the days of coring and if there is, advise the D.o.A as there will be no coring until all ship activity has finished
- Sook the forklift for that days coring activity with the Falklands Wool Co-operative
- ✤ When convenient, to obtain a ticket of competency for the forklift

General Responsibilities:

- Encourage all users of the D.o.A forklift to obtain a ticket of competency
- Encourage safe use of **all** vehicles in and around wool warehouse
- Ensure/encourage safe and careful handling of the bale scales and test weights
- If any damage/defect occurs to the forklift, the D.o.A is informed as soon as possible
- Encourage safe handling of bales, either with the forklift or manually





FLEECE MEASUREMENT SERVICE REQUEST

NAME: Pacific Basin Exports Ltd	PROPERTY NAME:	
ADDRESS:	PHONE:	
	FAX:	
	EMAIL:	
CHARGES TO:		
TOTAL NUMBER OF SAMPLES SUBMITTED: TEST RESULTS REQUIRED BY:	MA	ATURE RAMS
TESTIN	<u>G REQUIREMENTS</u>	
Service Requirements		
Fibre Diameter & SD, CVD, Fibre >30 gm		YES/NO
Fibre Diameter & Washing Yield		YES/NO
<u>Report Requirements</u> – All results will be sorte	d into sheep number order unle	ess otherwise specified.
Fibre Curvature		YES/NO
Medulation (OFDA only)		YES/NO
Fibre Diameter Order		YES/NO
Yield Order		
Histogram of Individual Fibre Diameter (Additional Charge per Histogram)		YES/NO
E-mail of Data		YES/NO
Formatted Disk Supplied		YES/NO
,		

All testing will be done on Laserscan unless another instrument is requested. If you require an alternative instrument please advise. OFDA/Airflow.

DISPATCH

Please forward this form with samples to Napier Laboratory or your nearest NZWTA Branch.

Signature _____

NZWTA USE	ONLY			TEST NO:	
Advice Date	Tickets Printed	Tickets Sent	Kenmor Advised	Client Code	Samples Received
				729	
Sent to Lab	Date Received	Number. of Samples	Number Batches	Date Issued	

FLEECE MEASUREMENT TEST REQUEST

Date: _____

Farm: _____

Farm Representative Signature: _____

Number of Samples submitted for testing:

1 – Yield and micron

2 – Micron only

BEFORE YOU COMMENCE SAMPLING, PLEASE CONTACT THE DEPARTMENT OF AGRICULTURE FOR SOME BARCODE RECORD CARDS TO RECORD TAG NUMBERS AND GREASY FLEECE WEIGHTS. (THESE ARE TO BE USED INSTEAD OF THE RECORD CARDS USED IN PREVIOUS YEARS.)

Samples to be billed to:

i — FIP	
ii – Private	

PLEASE NOTE THAT WOOL SAMPLES ARE BEING SENT TO NEW ZEALAND WOOL TESTING LABORATORY FOR THE 2008/2009 SEASON.

For Department of Agriculture use only:	
Date received:	
Date sent to NZWTA:	
Results Back:	
Invoiced:	

Mid-side Samples for testing - NZWTA Batch:

Page

Farm:_____

Flock:

Test Required:

Number of Samples:

Greasy Tag No. Barcode No. Age Sex Fleece Other Info Weight

BODY CONDITION SCORING OF SHEEP OR CATTLE

Body condition scoring provides an assessment of the nutritional status of an animal, flock or herd. It provides information on how nutritious the diet has been in the last month or two. For this purpose, it is more useful than weighing an animal because an animal may be heavy but in poor condition, or vice versa. This information can be used for management purposes such as deciding on stock movements, supplementary feeding etc.

A system that is most easily used to condition score animals is that based on a scale of 1 to 5. The 5 scores are as seen below. Initially a person may score their animals using whole numbers as below. Upon becoming familiar with this, the person may choose to progress to half or quarter scores.



ORGANIC ACCREDITATION

Background

The Falkland Islands has a very extensive rangeland grazing system, often involving the use of little or no artificial inputs as they are difficult and expensive to freight here. Many of the farms basically use organic production systems for these pragmatic reasons, also some may also do it for ethical reasons. Whatever the case unless these businesses are audited and certificated, it is difficult to market such products as organic and achieve the premium they deserve.

The Falkland Island Government, through DOA, has a Memorandum of Understanding with the Biological Farmers of Australia (BFA) to use their Australian Certified Organic (ACO) standards. These standards are available on line or in hard copy from DOA. <u>www.bfa.com.au</u>



Even though the products will be certified with Australian standards, these are recognised internationally for export, and the product is still very much a Falkland Island product.

In Conversion

Farm businesses apply (we can help you with this) and fill out some background information. The business then needs to develop an Organic Management Plan. This plan details how the farm will run, what is allowable and not and needs to based upon the ACO Standards. It is not onerous and once again we can help and provide a template etc. Annual audits by ACO accredited auditors (DOA) are done and after three years the farm is fully accredited.

Accredited Farms

Accredited farms should be able to sell fully accredited organic wool or meat for export. It is hoped that the current premiums for such products will remain or increase over time making the effort a profitable one.

Costs

Costs by the BFA are set in Australian Dollars so vary with exchange rates but are approximately

- One off application fee £250
- Annual fee of £120
- A levy of 1% of the sale of organic produce.

These costs are very competitive with other schemes around the world offering similar accreditation.

Of course if you are considering organic systems there may also be a cost in foregoing the use of some products like fertilizers or drenches, and a list of allowable inputs can be found in the Standards. We are also happy to help people to evaluate the loss of such inputs or to mage flocks or herds in such a way to minimise effects from issues like internal parasites. The use of some trace elements and vaccines is allowable in consultation with DOA.

Outlook for Organics

The Organic food industry is the fasted growing food sector in the world economy and it is often hard to source organic meat products on the world market. Organic clothing is also growing rapidly with cotton, silk, hemp, linen and of course wool being natural fibres and the added appeal of also being organic is attracting a lot of major buyers.

People are interested in organic products for a number of reasons and are often prepared to pay a premium to get them with enough of a premium to flow down to the supplier of the raw product.

Organic products have received premiums of between 0-30% for the comparable quality of non organic product. Whist premiums are notoriously hard to predict a level of 10-15% would make organics quite a profitable method of value adding agricultural products in the Falkland Islands.

DoA Contact - Lucy Ellis

Quality Falkland Wool Checklist/Self-Audit Form (Example)

(Please tick off each condition as they are checked) **Pre-Shearing**

Sheep yards and sheep holding areas must be:

Free of all wool contaminating materials and objects that may affect animal welfare

Woolshed

Gates, pens and grating in good condition. All woolshed equipment is clean and in safe working order.

Sheep shearing and wool handling areas are clean and of sufficient size.

Approved lighting installed in all wool handling and shearing areas and in good working condition.

Polypropylene, sisal and hemp in the form of rope, string, twine, bags or fabric for any purpose not present in the woolshed or yards.

Ropes used for shearing machine pull cords, presses, gates etc. in good condition, not frayed. Made of an approved material. (i.e. not polypropylene, sisal or hemp)

Sufficient wool bins provided and clearly labelled (Solid partition between fleece and oddments).

Bench or rack provided for stencilling equipment. Lipped shelves for shearers stand.

Bins for rubbish, stain and skin pieces are supplied, clearly marked and regularly emptied.

Adequate hooks are fitted for clothes and towels, away from the wool handling area.

No hay, straw, grain or machinery is to be stored in the wool shed during the shearing season.

Where possible birds should be kept out of the woolshed.

All articles or products not essential for shearing and wool preparation must be removed. The area where bales are to be stored must be clean and dry.

Where smoking is permitted, ashtrays must be provided away from the woolhandling areas.

The Guide to Clip Preparation and Quality Falkland Wool checklists must be displayed during shearing.

A First Aid Kit containing basic essentials provided.

During Shearing

All loose wool is packed away. Wool scrapers only, may be used during shearing.

Sheep are drafted and presented for shearing in a logical sequence. Excessively daggy sheep crutched to present all sheep free from dag and urine stain.

Sheep are dry and well emptied out before shedding. If catching pens are used as night pens they must be cleaned prior to the commencement of shearing.

Black or coloured sheep are not to be shorn until main shearing is complete.

Owner, shearing contractor, classer and woolhandlers understand the requirements laid down in this document and are able to implement best practice throughout the working day.

Quality Falkland Wool Checklist/Self-Audit Form (Example)

(Please tick off each condition as they are checked)

The shearing and wool handling requirements are made clear to the person ultimately responsible. Previous wool test results are supplied if requested. Sox must not be removed at main shearing.

Clean footwear to be worn in the wool handling area at all times.

No dogs or cats are allowed in the wool handling area.

One woolhandler for every 35 sheep shorn per hour e.g. 105 sheep shorn = 3 woolhandlers.

There are an adequate number of skilled woolhandlers to contain the stain on the shearing board at all times.

Table/Woolhandlers must be sufficiently skilled to ensure that all missed/remaining urine and faeces stain is removed prior to the fleece being classed and prepare each fleece to accepted wool classing standards.

School leavers or those new to wool handling have received adequate training and understand the requirements of high quality wool preparation. Note: Wool preparation training courses and on-farm advice are available from the DoA.

Fleeces should be thrown on to the table immediately after leaving the board or placed on another holding table, **but not on the floor**.

When a **black spot** is found it must be removed on the board. If the fleece contains a **large number of black fibres**, stain and dag must still be removed. The fleece must be rolled on the board and stored away from all white fleeces and oddments.

An adequate number of approved packs or bins are supplied for oddments and are clearly labelled.

Only **new polyethylene or nylon packs** are to be used. Capless packs must be secured with a minimum of 3 clips on the inner flaps and 4 on the outer flaps. Packs must be shaken out prior to use.

Bales are **clearly labelled**, **branded** and correctly pressed as per F.I. Guide to Clip Preparation. Approved branding fluids and pens must be used.

Specifications signed, stamped and dated by the person ultimately responsible for the preparation of the clip. Note: The QFW logo should be placed on all bales produced to the QFW standards.

This is to certify thathas self-audited and fulfilled all of the criteria set down in the above checklist. This permits the use of the **QFW** logo on wool produced from this farm.

I hereby agree to implement all the requirements set down in this self-audit checklist.

I am also aware random checks will be carried out from time to time by an officer of the Department of Agriculture.

Owner/Manager/Classer

Date

Note: The Department of Agriculture reserves the right to prohibit the use of the QFW logo at any time.

QFW - EXAMPLE

Shed Inspection Report;

Farm Name:	Date:
Inspector:	
No. of Shearers	
No. of Rousies	
No. of Tables	
No. of Table-hands	
No. of Sheep shorn per day(ave.)	
Highest daily tally	

Any previous recommendations - Yes	Carried out -
- No	Not carried out –

Faults:

- •
- •
- •
- •
- •
- •
- •

Remarks / General Impression:

- •
- •
- •
- •
- •
- •
- •
- -
- •

Recommendations to rectify faults before.....

Passed	Farmer: Signed
Not Passed	Inspector: Signed

AN INTRODUCTION TO THE QUALITY ASSURANCE SCHEME FOR FALKLAND ISLANDS WOOL

Background

Processing mills around the world expect to process wool with complete confidence and assurance. This requires wool to meet guarantees for maximum dark coloured fibre (BCF) content, freedom from contamination plus numerous of other standards.

The Quality Falkland Wool (QFW) assurance scheme's objective is to introduce and maintain, **BCF and contamination risk reduction** measures.

The aim of QFW is to set attainable and maintainable standards, which when fully complied with will result in the highest level of preparation and will limit the risk of obtaining BCF readings above 5 bcf / 100 grams. In conjunction with this, the aim is to eliminate contamination from foreign matter.

Farms that are accredited will use the QFW stencil on bales of wool that they feel have been prepared under the guidelines. The wool specification will be QFW stamped, signed and dated by the person ultimately responsible for the clip. This will clearly indicate that this wool has been prepared and handled using **'Best Practices'**.

Leading wool producing countries have found that woolgrowers who are members of a recognised quality assurance scheme may receive a premium for their wool, however, in difficult trading years the 'mark' can make the difference between selling and not selling.

The Way Forward

The scheme is VOLUNTARY. The booklet and papers are a guide for you to check your work practices and procedures. Once your woolshed complies with the standards, you can apply for an inspection. This is carried out by the Department of Agriculture's (DoA) Wool Advisor and is known as the **pre-shearing audit**.

The prime responsibility then lies with the farm owner/manager to put in place all the correct practices during shearing and woolhandling. Annual, random checks will be carried out by an officer of the DoA to ensure that standards are being maintained. Wool not prepared under the recognised standards will be prohibited from carrying the QFW stencil.

The scheme's goal is that ultimately all Falkland Islands farms will be preparing their wool using these standards.

Standards Required

The standards required in the Quality Assurance Scheme concern the handling and preparation of the wool clip, but also include the work place. Before applying for

accreditation there is a list of points to check and have correct concerning the yards, pens and woolshed. These are laid out within the "Pre-Shearing Audit".

The "Falkland Islands Guide to Clip Preparation", compiled by the DoA and published in 1992, contains the required standards to be met for shearing, woolhandling and classing. If you require a copy of this booklet please contact the DoA. The booklet provides clarification for the requirements laid down for "Prior to and during shearing".

Crutching of ewes and wethers is advisable as it:

- Reduces the risk of dark coloured fibres entering the shed.
- Reduces the risk of dark coloured fibre contamination on the wool table by removing the crutch wool on the board.
- Ensures that any dark coloured fibres present on the wool table are removed by quality skirting assisted by correct lighting.
- Eliminate dark coloured fibre contamination after classing due to correct storage of fleeces.

Further Information

The people involved with this project are the Rural Business Association, working with staff at the DoA and in collaboration with Falkland Wool Growers Ltd and Falkland Wool Marketing.

Please contact the DoA for further information on 27355.

Planning to pregnancy scan your ewes?

Cost per ewe:

• 7 pence per sheep

Facilities needed:

- Pens and race a temporary race made out of pens/gates is fine. For optimum flow of sheep have the panels before the scanning crate solid or covered so the sheep cannot see the scanner.
- A continuous supply of hot and cold water access to a working kettle is fine for the hot water supply.
- A reliable power supply.
- Sufficient workforce 1 person to work the crate/drafting gates, 1-2 people to push sheep up the race and fill pens and 1 person to write tag numbers etc if required.

Other information:

- Ideally ewes need to be off food and water overnight/twelve hours before scanning. Accurate scanning with a full rumen is both difficult and hard work.
- Having the ewes half bellied make the job much quicker and easier

Naturally mated ewes:

- A short joining period of 34 (2 cycles) is advisable. This will mean that all pregnancies from the joining period can be accurately detected from 45 days after the rams were taken off. Added benefits of a short joining period are:
 - 1. a short and concise lambing period
 - 2. a shorter time period needed to be spent shepherding
 - 3. all lambs will be nearer in age for weaning/lamb marking
- Longer joining periods may mean that 2 scanning sessions are needed to accurately detect all pregnancies which will obviously be more costly and time consuming.

AI ewes and Cover Rams

- Any ewes that don't conceive at AI should cycle and be fertile again 17 days after the AI attempt, therefore to ensure a concise lambing period put your cover rams out 2 weeks after the AI day for 35 days (2 cycles).
- It is important to have raddle or harnesses on your rams. Marked ewes can be assumed to be cycling and not to have conceived via AI so if they are scanned pregnant it can be noted that this is probably to the cover ram rather than the AI.
- Scanning should occur between 70-90 days after the AI date.

Location

• Ideally we would scan in a shearing shed so there is easy access to water and power and the ewes can be brought in the day before and fasted overnight. However we can scan outside as we have a frame and tent for the scanner, we just need to know if we need to bring it. We also have portable pens so if need be we can scan right there, in your ewe camp, thus less gathering and moving of your ewes.

The benefits of scanning

- Identifying multiples/pregnant/not-pregnant thus allowing you to use pasture and budget for feed accordingly for what the ewes require as opposed to wasting feed on dry ewes.
- Estimating conception rates and thus lambing percentage to enable you to forecast meat or wool income.
- Able to remove any ewes that continually do not get in lamb.

HOW TO BOOK YOUR SCANNING

Contact Lucy Ellis (27355 / <u>lellis@doa.gov.fk</u>) or Zoë Luxton (27366 / <u>zluxton@doa.gov.fk</u>). We will need to know the date of Ai/rams in/rams off.



Farm Management Handbook Update

Department of Agriculture Falkland Islands Government

November 2010

PRE-LAMB SHEARING

Don't pre-lamb shear within 4 weeks of lambing. If you decide to pre-lamb shear then effective shelter MUST be available. The ewes MUST be well fed because if they are hungry they may choose to graze rather than shelter with their lambs. Newly shorn sheep require up to 40% more feed for 3 weeks or more after shearing to sustain body temperature and maintain body condition. Maintenance requirements may be increased for 6 to 8 weeks post shearing. The use of cover or snow combs is strongly recommended.

Appendix A

Sheep traits affecting costs and returns for a

Sheep traits affecting costs and returns for a meat producing enterprise

speciality wo	ool producing enterprise	Sheep	traits anecting cos	is and returns for a meat producing enterprise
Product	Traits affecting returns	Product	Traits affecting ret	turns
Wool	Fleece weight	Prime lamb hogget	Liveweight and ca	rcass characteristics of lamb/hogget at sale
	clean			growth rate
	greasy			rate of maturity
	yield			feed conversion efficiency
				maternal ability of dam
	Fibre diameter		Number of lambs/	hoggets for sale
	length		reproductive rate	•
	strength		fertility	- seasonality of the ewe
	colour		prolificacy	- ovulation rate
				- embryo survival
Excess young	Reroductive weight			
stock	ewe fertility		lamb survival	- maternal performance
	prolificacy			- milk production
	lamb survival			- mothering ability
	body weight			- lamb growth
				- lamb birthweight
Cast-for-age	Survival at older ages	Mutton	Liveweight and co	ndition of animals at sale
	Body Weight		mature size	
Cost	Traits affecting costs		Number of ewes for	or sale
Feed	Mature body sizes		reproductive was	stage
			survival rate of m	nature animals
Health products	Mature body sizes	Cost	Traits affecting co	sts
Labour costs	Ease of care - adaptabilty	Slaughter Stock		
	to environment	Feed	Food consumptior	1
	- disease		Rate of maturity	
	resistance			
		Health products	Resistance/resilie	nce to internal parasites
			Disease resistanc	e
		Breeding stock		
		Feed	Mature size	
Sources Australian Ch	and a Mart Landback	Health products	Resistance/resilie	nce to internal parasites
Source: Australian Sr	ιθέρ & ννοοί Πατιαρούκ	Management	Ease of lambing	
Published by Inkata F	Press Melbourne 1991.	management	Maternal ability	

Appendix **B**

Heritability ranges

Heritability is the extent to which a trait is passed on from one generation to the next. It is generally higher for production traits like live weight and fleece characteristics than reproductive traits like number of lambs weaned. Below are listed ranges of heritability estimates for some selected traits. This is also be expressed as a % for example greasy fleece weight 0.3 - 0.4 equals 30 - 40%. The higher the heritability the more that genes will determine the offsprings production capability.

Number of	lambs born		0.05-0.20	
Number of	lambs weaned		0.05-0.15	
Weaning w	eight		0.10-0.35	
10-month (H	nogget) weight		0.20-0.50	
Hogget fert	ility		0.05-0.15	
Greasy flee	ce weight		0.3-0.4	
Staple leng	th		0.35-0.45	
Mean fibre	diameter		0.40-0.65	
Crimps per	cm		0.30-0.50	
Medullation	l		0.40-0.70	
Greasy cold	our		0.10-0.30	
Face-cover	score		0.20-0.40	
Live animal	scans			
	EMD	(eye muscle depth)	0.15-0.35	
	EMW	(eye msucle width)	0.10-0.35	
	FDM	(fat depth over eye muscle)	0.10-0.35	
Carcass traits				
	Fat depth	(over eye muscle)	0.25-0.40	
	EMA	(eye muscle area)	0.25-0.60	
	Lean wt		0.20-0.40	
	Fat wt		0.20-0.40	

Glossary

Generation Interval (GI) - The average age of the parents when the offspring are born.

For example if ewes are joined at 2.5 and then kept for 5 lambings they will be 3, 4, 5, 6, 7

when their lambs are born. This would equate to a generation interval of 5. The same can be calculated for rams so using the same example if they were joined for 4 years they will be 3, 4, 5, & 6 when their lambs are born equalling a generation interval of 4.5. Overall the flock GI is the average of the rams and ewes and would equal 4.75. If the rams and ewes were joined at 18 months and kept for mating for the same amount of time the GI would be reduced to 3.75. This will have a major effect on the genetic response of economically important traits.

If the rams and ewes were kept for mating at older ages then the GI will go up and therefore decrease the rate of genetic response to breeding objectives.

Source: A guide to genetic improvement in sheep. Edited by K G Geenty Published by Sheep Improvement Limited New Zealand. June 2000

HORSE COLOURS

Source: 1992 Wool Press Article by Dae Peck

FALKLAND NAME	ENGLISH NAME
Alazan	Chestnut
Alazan Dorado	Golden Chestnut
Tostado	Liver Chestnut
Ruano	Roan
Colorado Requemado	Dark Bay
Colorado	Bay
Doradillo	Light Bay
Zaino	Brown Bay
Zaino Colorado	Blood Bay
Zaino Negro	Dark Brown
Zaino Pangare	Mealy Bay
Oscuro	Black
Tordillo	Grey
Tordillo Plateado	Silver Grey
Tordillo Rodado	Dappled Grey
Tordillo Sabino	Grey with White Specks
Tordillo Safranado	Grey with White Specks
Rosillo	Strawberry Roan
Rosillo Colorado	Red Roan
Rosillo Rubio	Chestnut Roan
Rosillo Gateado	Striped Roan
Moro	Blue Roan
Bayo	Dun
Bayo Naranjado	Orange Dun
Bayo Blanco	Light Dun or Claybank (U.S.)
Bayo Ruano	Palomino
Bayo Gateado	Striped Dun
Cebruno	Mouse Coloured
Overo	Pinto; Paint
Manchado	Mottled Skewbald
Tobiano Colorado	Skewbald
Tobiano Negro	Piebald
Overo Rosado	Chestnut and White
Overo Azulejo	Blue and White
Malacara	White Faced
Pampa	White Cheeks and Forehead
Picazo	Black and White legs and face

All names ending in 'ado' are cut short to 'ao' making Colorado into Colorao; Tostado into Tostao and so on.