A Guide to Classing & Preparation of Wool Clips 18.5u and finer
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1. New England Wool

New England Wool was established in 1990. Two like-minded Italian spinning and weaving enterprises developed a company in Australia dedicated purely to sourcing wool to suit their particular needs. New England Wool operates in both Australia and New Zealand and purchases approximately 30,000 bales of fine/superfine wool per annum on behalf of its Italian shareholders. The company employs three full time staff, two based in Sydney and one in Melbourne. New England Wool has consistently been the largest purchaser of spinner style wool in Australia and New Zealand.

New England Wool’s mission is to:

- Support and encourage the professional fine wool producer.
- Provide a superior and consistent raw product to the Italian shareholders.
- Establish and maintain strong communication links with growers and associated grower groups.
- Provide effective advice and feedback on the clip preparation requirements of customers.
- Report market trends and other relevant information to maximise returns for the wool producer.
- Supply a professional, cost effective export service for the Italian customers.

New England Wool has two shareholders/customers; Vitale Barberis Canonico and Successori Reda. Located in the Biella region of Northern Italy, these highly successful, family owned companies are widely accepted as leaders in the process of pure wool worsted fabric production. Their success is due to an emphasis on highly advanced spinning and weaving technology and quality raw materials.

A major part of their success is their passion for wool at all stages of the production and manufacturing process. This fascination with the wool fibre has led them to invest in wool producing properties in Australia (Barberis) and New Zealand (Reda). Their appreciation of the trials and tribulations of wool growing has allowed them to develop a great rapport with their suppliers. The recent purchase of a controlling share in the local Romagnano combing plant, is another example of their commitment to quality and the wool industry as a whole. Reda and Barberis have huge capital investment in wool and continue to reinvest funds to stay at the forefront of technology, quality and service.
2. Introduction to Classing and Preparation

It will be the responsibility of each grower/classer to decide the level of preparation and classing they wish to achieve and how best to achieve it. The ultimate aim of wool classing and preparation is to maximise the return to the grower by preparing a clip that best serves the requirements of the buyer.

New England Wool understands that it is difficult to prepare a classing guide that will suit every situation. This publication outlines the main criteria for preparing a fine wool clip most suitable for the needs of the New England Wool Italian clients.
3. Basic Concepts

Every line of wool should be as even as possible in respect to style, fineness, length, colour and strength. The extent to which preparation and classing are carried out however, should be considered flexible. It will vary according to the total number of sheep in the flock, style and fineness of wool within the flock, and the level of classing that the owner/classer wants to achieve.

Basic concepts include:

- The wool is sound when the staple does not break. Take a staple about the size in width of a pencil and pull it apart with force. If it breaks it cannot be considered sound. If the wool in any season is generally weak it is prudent to make separate lines for wool breaking in the middle of the staple, as opposed to wool that breaks at either the tip or the base. The discount for high mid-break wool can be significant due to the loss of length in the processed top. A flick test may not be adequate. Make sure staples are pulled from either end with force as occurs in the combing, spinning and weaving processes.

- The length of the staple can be measured with a ruler. If the classer is in doubt a ruler attached to the classing table can be a helpful tool. The aim is to make lines as even in length as possible.

- Every type of contamination and pigmented fibre should be removed from the clip. Crutching within one month of shearing is preferable.

- Individual fleece tests for fineness may be helpful, but common sense and experience should prevail.

- The importance of having professional and enthusiastic shed staff cannot be understated. Much of the classing process is achieved on the wool table. Discuss clearly with your shedhands what you want them to do and why. If an individual can understand the logic behind the request they will feel more comfortable performing the task.

- The branding of lines should be at the discretion of the owner/classer. The brand should reflect the type of wool contained in each line as accurately as possible and should give the buyer a clear understanding of how the clip has been divided up.

- The presser has a quality control role as he/she is the last to handle the wool before it is baled. Any discrepancies found by the presser should be advised to the classer. The presser must brand bales correctly and not produce overweight or underweight bales. Brokers advise that pressing and branding mistakes are a major issue in their stores.

- The mood within the woolshed should be always professional. Classing and preparation are the culmination of the work done over the preceding twelve months. Concentration on the job at hand should therefore be paramount.

- The classer must have a suitable number of shed staff to ensure the chosen level of classing and preparation is achieved without incurring excess labour costs. Adapt the number of staff in the shed to the quality of the sheep to be shorn.
4. Preparation for Shearing

The classer should know the consistency of all mobs to be shorn. He/she should visually check the sheep to be shorn for the day and be made aware of all side sampling and test results available. If side sample results are available drafting of sheep into micron groups before shearing can be helpful.

Classing of sheep before shearing should be encouraged. Separation of breeding families, ewes, wethers, hoggets and unhealthy or off-style groups allows a more even type to be delivered to the wool classer.

It is imperative that before shearing the sheep be dry with excess mud and faeces removed. Shedhands should be confident to identify stain correctly (scourable or non-scourable colour) and isolate within the shed if need be.

The shearing shed should always be clean, tidy and free from all contaminating substances. There should always be extra bins for rubbish, including cigarette butts.

There should be enough classing bins to cover the full program of classing. It is better having one more bin than one less.

The number of wool tables should be sufficient for adequate attention to each fleece. This requires assessment of the number of shearers, shearing speed, quality of the wool, and speed/quality of shedhands. The classer should aim to have a system whereby fleeces rarely need to be placed elsewhere before being thrown on the wool table from the board.

Only high quality nylon-packs should be used.
5. Wool Preparation

a. Wool on the Floor

During shearing, wool that ends up on the floor should be divided in the following manner:

- Very short fibres and wool that falls down from the table should go into the locks. Table and Board locks may be separated if sufficient quantity.
- Fibres longer than 40 mm can be combed and should not be left in the locks.
- Stained or heavily coloured fibres should be separated. Short crutch wool may contain stain and end up on the floor or stay attached to the thrown fleece. Care should be taken to identify and remove.
- Shanks should be isolated*. They could be included in a stained crutching line or similar.

*Shanks - very short wool from the hock/ fetlock of the sheep that may be felted and could contain medulated fibres.

b. Preparation of Bellies

The aim when preparing bellies is to make a product that is generally even in length, style and soundness. Best style, skirted bellies can bring substantial premiums at auction as they may be processed as fleece types. However, poor style, coloured and very tender bellies need not be skirted except for the removal of any cotted wool, hard briskets or stain.

Turning the bellies over after the initial skirting (shorn side up) will provide another visual check of the wool that needs to be removed.

In general, bellies could produce two lines:

- Best style, best length, sound, bright and skirted (SUP BLS).
- Average or lower style, generally sound, slight colour and lightly skirted (BLS).
5. Wool Preparation (cont)

The number of bellies lines will depend on the size and quality of the clip. At least two lines of bellies are recommended.

Very tender, inferior style, coloured bellies and belly skirtings could end up as follows:

- A separate line, if sufficient quantity.
- BPCS

c. On the Wool Table

A well thrown fleece is the perfect start for quality preparation.

![Throwing the fleece](image)

When the fleece is thrown onto the table all little pieces of frib, locks or faults clinging to the fleece should be removed. Major faults that are attached to the fleece should also be removed including:

- Fibres that are stained from water, urine and dermatitis. Wool that is slightly coloured (yet scourable) should not to be considered as stain. Pay particular attention to the removal of short crutch wool still attached to the fleece as it often contains urine stain.
5. Wool Preparation (cont)

- Cots and jowls. Wool that is slightly felted is not to be considered as cot, but be careful not to exaggerate.

- Skin pieces and any wool that is wet. Skin could be clipped away and wet wool dried at a later time. Wool can then be placed into appropriate lines for the type.

- Wigs and clean crutch wool still attached to the fleece. This wool may be too short for combing.

- Shanks still attached to the fleece. Be careful to identify shanks correctly so as not to remove good wool.

![Image of wool with labels: Shanks, Short crutch wool (check for stain), Removal of crutch wool and shanks, Seedy, cotted jowls]

**d. Skirting the Fleece**

The aim of skirting is to remove wool that is inferior to the bulk of the fleece but also to maximise the amount of high quality wool to be classed into straight fleece types. The amount to be removed will differ from fleece to fleece and from season to season.

An assessment of the strength and style of each fleece should be made by the woolroller or classer when the fleece hits the table and before any skirting begins. Based on this assessment the decision on the amount of preparation to be carried out on each fleece can be made. For example, tender and poor style fleeces only require light skirting with the rest of the fleece remaining intact.

The complete level of preparation outlined in this section is aimed at fleeces destined for the top lines in the clip and where the general style is of AWC Type 60 (MF4) or better.

- **First Skirting**

The first skirting should be done with the finger tips so as not to remove too much good wool. The wool roller will skirt away short frippy edges with uneven length (PCS). The first skirting should be 40 - 60mm and is a type that is keenly sought by the woollen production system.

Fibres slightly felted (but not cot) and very heavy sweaty edges may be downgraded to a lower line (BPCS).
5. Wool Preparation (cont)

- **Second Skirting**

All fibres which do not match the standard of the bulk of the fleece (with a length superior to 60 mm) should be removed. This should be done with the finger tips so as not to remove too much. This wool may also be divided by style and fineness e.g. SUP BKN or BKN. Use a brand that best describes the article. Much of this wool will come from the back leg area and from around the neck (see following section on Back Legs and Vegetable Matter). This line will have very little or no frib evident. Frib free, even length and stylish brokens can bring substantial premiums in the market. Be careful not to remove wool that should stay on the fleece, and avoid tender wool in this line. It is suggested that SUP BKN and BKN lines be offered for sale with additional measurement to maximise competition.

The classer must decide the best way for the first and second skirting to be removed. The woolroller may pass along the fleece twice, or remove in one pass all skirtings and then utilise a piece-picker.

There may be circumstances where the fleece only requires one skirting removal to achieve an acceptably even product. The classer must use his/her skill to make the best commercial decision on each fleece.

![First and second skirting](image)

- **Necks**

The aim should be to remove all wool from the neck area that differs in character and vegetable matter to the bulk of the fleece. Each fleece should be assessed individually.
5. Wool Preparation (cont)

- **Backs**

Backs should be taken out if they are different or inferior to the bulk of the fleece. Inferior wool could be dusty, short, tip damaged or uneven in crimp. An assessment should be made by the shedhands/classers as to the size of the back to be removed, if at all. If sufficient quantity exists Backs lines could be separated for fineness or style. Superior (spinner) fleece lines should have all backs and necks removed.

- **Back Legs**

Back legs may be removed if different in style, length or colour to the bulk of the fleece. They could make a separate line or be included in SUP BKN depending on quantities. If clumpy burr appears in this area it could be removed and a separate short fleece line made. This would only be the case if the burr content is significantly different to the bulk of the fleece.

- **Vegetable Matter**

If there is sufficient quantity, skirtings with marked differences in vegetable matter content should be kept separate. There are definite premiums for light fault skirtings (less than 2.5%). Clumpy, high VM skirtings left in otherwise light fault lines can result in disappointing test results and severe discounts.

- **Hoggets Skirting**

Backs, Necks and Skirtings from hoggets should not be combined with grown sheep lines. They are generally different in style and much finer.
6. Classing the Skirted Fleece

The skirted fleece should be classified by the wool classer according to its fineness (possibly with the help of a test if available), style, length and strength. Do not allow the micron test of an individual fleece compromise the assessment of strength, style and overall evenness. The main aim should be to make homogenous lines of fleece wool. This includes evenness in the visual crimp structure and frequency within the line. Separate fine crimping from broad crimping types.

- The exceptional fleeces for style and strength (within acceptable fineness parameters) will make a Top line. This will have been skirted with meticulous attention and have amazing regularity. There may be a number of these Top lines only separated due to fineness.

- Subsequent lines (3rd, 4th, 5th etc.) should be as even as possible (also within acceptable objective and visual fineness parameters). Invariably lower lines will become a compromise of characteristics as the style decreases and the quantity of wool diminishes.

- Fleeces shorter than the average length of main fleece lines should be isolated. These can be divided into two different fineness and style lots depending on the quantity available. It is not advisable to combine stylish short wool with the Backs line as they are generally different in style and may reduce the ultimate price at auction. Likewise, it is preferable that Backs and Necks not be combined due to differences in fineness, style, length and vegetable matter.

- Fleeces longer than the average main fleece lines should also be isolated if sufficient quantity exists to make a separate line.

- Hogget fleeces should be classed out separately to grown sheep lines due to differences in style, tip and fineness. The same concept of evenness applies for hogget wool types as for grown sheep lines.

- Cast lines include:
  - Tender fleeces (weaker than average of clip).
  - Off colour fleeces (more colour than average of clip).
  - Doggy and off style fleeces.

- Smaller clips may have to combine some types to make saleable lines of wool (see Combining Wool Types).
7. Combining Wool Types

Ideally, individual wool types should be classed out separately. The classer however must also strive to make saleable quantities of wool. Some combining of types may need to occur to achieve the best commercial result. This would especially be the case in smaller clips. Type combinations could be:

- Backs combined with Back Legs
- Back Legs combined with Super Brokens/Brokens
- Backs combined with lower style Short Fleeces
- Necks combined with Seedy Fleeces
- Board Locks combined with Table Locks
- Coloured Fleeces combined with Doggy and Off Style Fleeces.

The combining of wool types is flexible. The best wools to combine may differ from season to season. The classer must aim for lines as even as possible within the constraints of size and quality of the clip and prevailing market conditions.
The practice of rugging and housing sheep (protecting), is now common place. The financial returns will vary from season to season due to market demand.

It is important to remember that the rug does not change the actual wool fibre. The rugs may be utilised to minimise impurities within the fleece, including vegetable matter and dust penetration. The lack of impurities will improve the visual appearance of the fleece and may lead to significant improvements in yield and some aspects of style. The wool however will not change. The sheep to be protected should be selected primarily on desired quality wool attributes.

When classing fleeces from protected sheep it is imperative that lines are as even as possible in all aspects of fineness, crimp frequency and structure, strength, length and colour. Backs and Necks should be removed, even though the amount to be removed may be less than for paddock grown fleeces. The timing of the rug removal before shearing has a major influence on overall fleece colour. Advice should be sought from experienced growers to minimise the quantity of creamy wool.

Rugged or housed fleeces destined for top lines require the complete level of preparation outlined in this guide. Each fleece however, should be treated individually as occurs with the preparation of normal paddock grown fleeces.
9. New England Wool Premium Types

Following is a guide to the wool characteristics New England Wool expects to find in the premium wool types for their Italian customers.

- Colour - as white as possible.
- Crimp - tight and well defined.
- Length - regular and not over long (70 - 85mm).
- Resilience - elastic, full bodied and dense.
- Homogeneity - maximum evenness of colour, crimp, length and strength.
- Tip - not damaged and homogenous with rest of staple.
- Resistance - very sound, even if ultra fine (> 45 NKT as a guide).
- Vegetable Matter - little as possible in main fleece lines (< 1% vm).
- Handle - soft, not slippery or harsh.

10. Common Problems

- Weak fleeces left in otherwise sound lines. Remember that the NKT result is only an average. New England Wool requires every fleece to be sound.
- Jowls left in Broken lines. Sale lots containing jowls and cots are difficult to process and receive severe discounts, or no price.
- Micron is very important however, characteristics such as evenness of style, soundness and length should not be compromised.
- Nylon pack fragments appearing in the wool. Nylon is still a contaminating fibre as it may not accept the dye the same as wool fibres. Nylon packs should be shaken outside the shed to remove any loose fibres and care should be taken when handling bales to minimise any tearing of packs.
- Use of non-certified branding fluids for sheep or manipulation of branding fluids. Certified branding fluids are scourable if instructions for application are followed precisely. Do not add anything to the fluid as it may affect it's scourability.
- Rugged or “white” wool with a high yield does not guarantee a spinner type. Fleece lines should be as even as possible in all aspects including crimp frequency, length, strength and colour.
## Fleezes

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
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<tbody>
<tr>
<td><strong>Top Line/S</strong></td>
<td>Full skirting. Backs &amp; Necks removed.</td>
</tr>
<tr>
<td><strong>Second Fineness and/or Style</strong></td>
<td>Full skirting. Backs &amp; Necks removed.</td>
</tr>
<tr>
<td><strong>Third Fineness and/or Style (if quantity permits)</strong></td>
<td>Full skirting. Backs &amp; Necks removed, if required.</td>
</tr>
<tr>
<td><strong>Fourth Fineness and/or Style (if quantity permits)</strong></td>
<td>Full skirting. Backs &amp; Necks removed, if required.</td>
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<tr>
<td><strong>Short Fleezes (best style)</strong></td>
<td>Full skirting. Backs &amp; Necks removed, if required.</td>
</tr>
<tr>
<td><strong>Short Fleezes (lower style)</strong></td>
<td>Light skirting. Backs &amp; Necks removed, if required.</td>
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<tr>
<td><strong>Long Fleezes</strong></td>
<td>Light skirting. Backs &amp; Necks removed, if required.</td>
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<tr>
<td><strong>Top Hoggets (best style and bright) - may be more than one line separated by fineness.</strong></td>
<td>Light skirting. Backs &amp; Necks removed, if required.</td>
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<tr>
<td><strong>Second Hoggets (lower style and slight cream)</strong></td>
<td>Light skirting. Backs &amp; Necks removed, if required.</td>
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## Cast Fleezes

<table>
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<tr>
<td><strong>Tender Fleezes (weaker than average of clip)</strong></td>
<td>Very light skirting.</td>
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<tr>
<td><strong>Coloured Fleezes</strong></td>
<td>Very light skirting.</td>
</tr>
<tr>
<td><strong>Doggy /Off-Style Fleezes</strong></td>
<td>Very light skirting.</td>
</tr>
<tr>
<td><strong>Off-Style Hoggets</strong></td>
<td>Very light skirting.</td>
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<tr>
<td><strong>Necks</strong></td>
<td>Skirtings removed.</td>
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<tr>
<td><strong>Backs</strong></td>
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## Skirtings

<table>
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<tr>
<th>Description</th>
<th>Details</th>
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<tr>
<td><strong>Sup Bellies (best style, sound)</strong></td>
<td>Skirted, frib free.</td>
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<tr>
<td><strong>Bellies (lower style, generally sound)</strong></td>
<td>Very light skirting. Light frib evident</td>
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<tr>
<td><strong>BKN (second skirting, best style, sound)</strong></td>
<td>Frib free. (&gt;60mm)</td>
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<tr>
<td><strong>PCS (first skirting, short &amp; uneven length)</strong></td>
<td>Light frib evident. (40-60mm)</td>
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| **BPCS (inferior bellies, belly skirtings, slightly felted)** | Heavy frib evident. (<60mm) |}

N.B. These are not suggested brands. These lines are dependant on clip size, quality and season. It is not suggested that every clip will have or require this many lines. Some combining of types will be necessary to create saleable quantities of wool and minimise testing costs.
12. Classer’s Specification

The importance of a clear and concise Classer’s Specification should not be understated. The Classer’s Specification should allow your broker and potentially the buyer to understand the rationale behind the preparation of the clip. It should give the reader an appreciation of why each line was made. Comments do not have to be confined to the spaces given on the Classer’s Report. Do not be afraid to use more than one line, or more pages for the entire report to get the message across. Try to be neat, precise and legible.

A quality report will give your broker a clear indication of how best to lot the wool. It also provides a backup document to correct any branding or packing errors and provides the platform for advice on the preparation of the clip.

Growers/Classers should take the opportunity to refer back to their Classer’s Specification after the wool is sold. The final price received for each line should be analysed. This information can be used to make improvements or adjustments in classing of subsequent clips.

The Classer’s Specification should be completed in full including declarations. These declarations are an important part of maintaining the integrity of the Australian wool clip and should be answered with the utmost honesty and accuracy.

The current declarations are:

- Determination of Dark and Medulated Fibre Risk (DMFR). N.B. Dark fibre can come from urine stain as well as contact with exotic breeds.
- Chemical use.
### 12. Classer’s Specification (cont)

**Sample Classer’s Specification**

**New England Wool Pty Ltd**

<table>
<thead>
<tr>
<th>Classer’s Specification</th>
<th>Description</th>
<th>Office Use</th>
<th>N. of Bales</th>
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<tr>
<td>NE/wool</td>
<td>EXS P AAAAA</td>
<td>AHA 888</td>
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**Offering Instructions**

- Quality: Wool
- Weight: 1276
- Description: AHA 888
- Date: 1/12/03
- Location: P.O. Box 888
- Flock: AHA 888
- Number: 2

**Clipped Coat**

- NE/wool
- AHA 888
- EXS P AAAAA

**Classer’s Comments**

- Basix was removed
- Wool was sorted
- Wool was separated
- Wool was graded
- Wool was cleaned
- Wool was compressed

**Newcastle**

- Name: John Smith
- Phone: 1234567890
- Email: john.smith@newenglandwool.com

**Wool Pack Type**

- NZ Wool
- South; Australian Wool

**Total Bales**

- 12

**Available Sale**

- 8

**Beard**

- Yes

**Shearing Details**

- Date: 12/03/03
- Location: Newcastle
- Owner: Mr. John Smith

**New England Wool Pty Ltd**

- Address: P.O. Box 888
- Phone: 1234567890
- Email: john.smith@newenglandwool.com
13. Conclusion

New England Wool hope you find this booklet informative and helpful in the preparation of your clip. We believe that by following these guidelines a financial benefit due to increased competition will be realised. The benefit of practical demonstrations in shearing sheds, inspections of wool at wool stores, and attendance at wool auctions cannot be overstated. Andrew Blanch, Murray Bragg and Andrew Raeber are available and approachable to discuss your clip at the auctions and at various grower meetings in your area.

We invite you to enter our Ultimate Clip Competition which will give you direct feedback on your clip. It also puts you in contact with other professional fine wool growers to share and compare best practice. Details of the competition can be provided by your broker or found on our website www.newenglandwool.com. The website also contains links to the websites of Vitale Barberis Canonico and Successori Reda, and general wool market information.

New England Wool continues to work closely with the many suppliers it has built strong relationships with since its establishment in 1990. The Company has proven consistently that it will support those who support New England Wool.
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Cover photo: “Kelvin Grove” woolshed, Uralla, New South Wales