INFORMATION FOLDER

SECTION 10

F L E E C E T E S T I N G

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Fleece Testing

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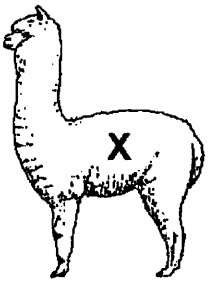
Fleece testing is an objective measurement of various fleece characteristics that will allow comparison between different animals.

It is important to keep records of each alpaca's test results so that you can use this information in your breeding decisions and for entering into tools such as the genetic evaluation program called AGE (**A**cross -herd **G**enetic **E**valuation).

Mid-side Sample

It is recommended that a mid-side sample be taken at shearing time. Fleece taken from the mid-side of an alpaca is representative of the average fleece results across the body, so it is the area of the animal that the sample should come from.

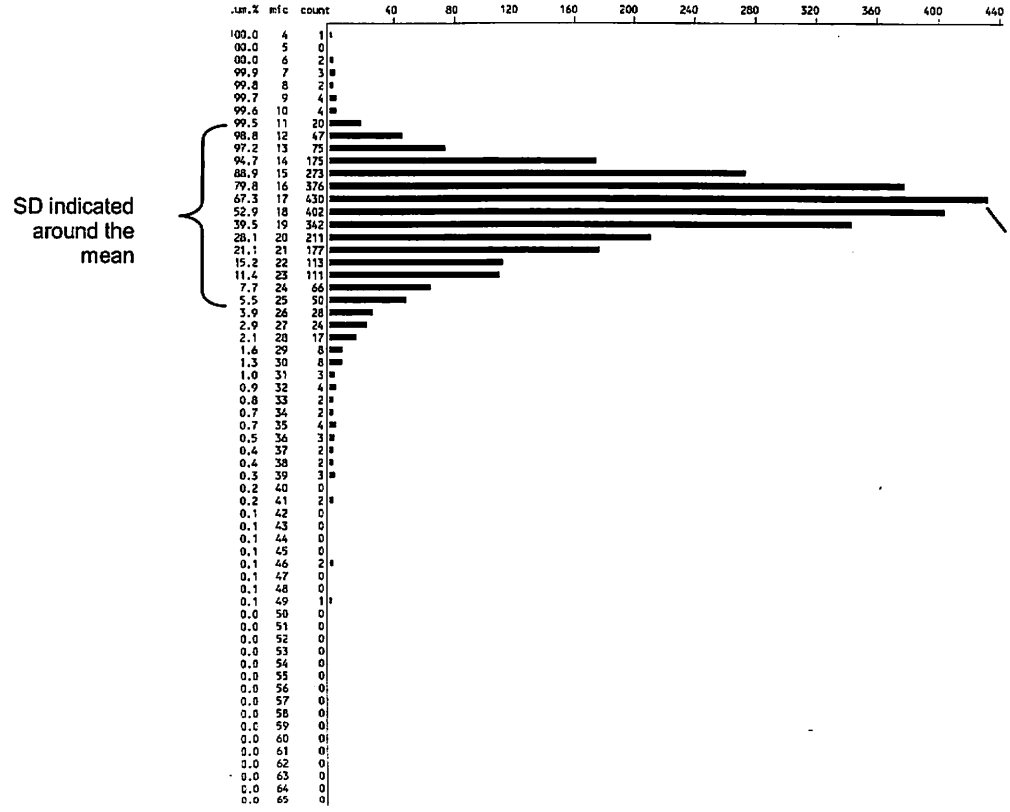


Identify the mid-side approximately midway between the back bone and the belly and midway between the forequarter and the rump. Roughly where the **X** is shown in this diagram. Shear a handful of fibre and seal it in a bag, preferably a paper bag and identify the sample with a unique name or number.

The sample can then be sent into one of the analysis companies within NZ.

Histogram

A graphical representation of the frequency of fibre diameters in the sample. The peak shows the **Mean Fibre Diameter** and the **Standard Deviation** is shown in the spread of the bottom of the graph.



Mean Fibre Diameter (MFD)

Commonly referred to as "micron", is the overall average fibre diameter. Measured in micron (µm)

Standard Deviation (SD)

The standard deviation measures (in micron µm) how wide the spread is, of individual fibre diameters, around the mean (MFD). 66% of fibres fall within this range.

The lower the SD the more uniform and desirable the fleece is.

Coefficient of Variation (CV)

The coefficient of variation is the SD expressed as a percentage of the MFD. The SD is multiplied by 100 and divided by the MFD.

Comfort Factor (CF)

The comfort factor is the percentage of fibres under 30 micron.

Length (Len)

The staple length of the sample.

Curvature Fibre curvature is related to the crimp frequency of the fibre. It is measured in degrees per millimetre (Dg/mm) and is the amount of bend or curve over 1mm length.