

ALPACA BREED STANDARD

By Cameron Holt
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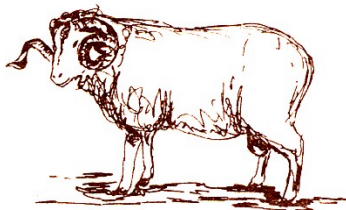
BREED STANDARD

Does the alpaca industry have a breed standard and do they need one? The answer is yes, yes. A “breed standard” is a blueprint that guides breeders in their breeding program and shows the characteristics that breeders need when evaluating alpacas for breeding, purchasing and showing. Judges use this standard when evaluating alpacas in the judging ring. Not having a breed standard is like going on a orienteering venture with no map to guide them to you to the end result.

Breed standards have been around from the inception of animal breeding. Cattle, horses, dogs, sheep etc. and even rats, have a breed standard. So who decides on this standard? It is a combination of;

- economic values of the breed,**
- breed associations and**
- demands from buyers for a specific type of animal.**

It should be inclusive of all the stakeholders. Breeds evolve and change will happen.



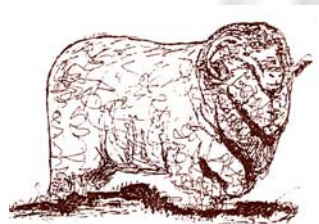
(Day 84)

A good example is the Australian Merino. The Merino moved from the Spanish Merino (left) through to the wrinkly Vermont (imported the USA) (right),



(Day 84)

from



(Day84)

to the current traditional merino with large neck folds (left).

A new type of merino “breed” has made it on the current scene. This is the long stapled shaggy looking ‘SRS’ merino. This merino is more plain bodied and is known for its high fleece production and fineness.

Another evolution was the dividing of the merino into superfine, fine, medium, strong and extra strong groups within the breed of merino. These groups are sometimes called Saxon (superfine, fine) Peppin (medium) South Australian (strong, extra strong). The breed standard for all these is similar but they differ for fineness, length and body size. The fore mentioned “SRS” type is outside these groups. This may happen to the alpaca in time.

If we study the alpaca herd in South America around 90% of the world’s alpacas are found in Indian herds (Safley 2001). These alpacas range from a primitive

unimproved alpaca type to those of a more developed alpaca type as seen in Australia, USA, Britain etc. The Peru Co-ops such as Rural Alianza, Sollocata, Don Julio Barreda etc have breeding programs, which select and breed towards a standard of a more advanced alpaca.

The main alpaca producing areas outside South America, Australia and the USA have seen an evolution already like the merino but in a much shorter time frame. The alpaca has gone from an unimproved type to an advanced level in under 20 years of breeding.



(photo 1)

In photo 1 the 1988 Australian Huacaya import shows an abundance of guard hair throughout the entire fleece.



(photo 2)

In photo 2 another 1988 import (Huacaya), alpaca with poor conformation (note the bone structure). Lack of overall

coverage is also noticed.



(photo 3)
Mecklem)



(photo 4,

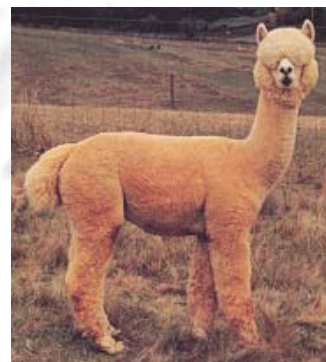
Photo 3 and 4 shows gains made to the Huacaya in the mid 90s.



(photo 5, Condon)

(photo 6, Mecklem)

Photos 5 and 6 show the top of the range on our standards today.



There are a number of fibre types found in both the Huacaya and Suri groups, which are accepted within the current "Breed Standard."

ALPACA BREED STANDARD (general)

Whilst the breed standard is evolving it should be inclusive of basic characteristics that do not discriminate against the majority of animals within the herds. These herds are still varied to some degree but a base genetic standard must be in place to form a foundation to move on from, letting the economic forces lead the way.

The standard is in two parts “Huacaya and Suri” and each are divided into conformation and fibre.

HUACAYA and SURI (Conformation)

Overview

The ideal Alpaca is a tall graceful animal showing a squared off appearance with an upright stance. The legs should be strong, carrying a graceful well-proportioned frame. The neck and legs should be two thirds of the length of the back and should be well covered with fibre from head to toe.

HEAD

The head has a strong appearance with the huacaya having a well formed medium length square muzzle whilst the suri has a more tapering shape to the muzzle. The eyes are oval in shape being set well apart and alert. They protrude slightly from their sockets and give the appearance of being large and round. The eyes can be of various shades with approximately 90% of them being black. Dark colours are more desirable. The ears for the huacaya should be of medium length with a soft covering of short hair whilst the suris is approx 2 cm longer. When in an alert stance the ears should stand erect with a bayonet-shaped pointing slightly forward. The jaws should fit well together with the lower incisors meeting the upper dental pad. The nose has two well defined nostrils.

Faults

- Under or overshot lower jaw
- Gopher ears
- Fused ears
- Banana shaped ears (llama)
- Forward set ears
- Wry face
- Roman nose
- Narrow head
- Long muzzle
- Muffled face

NECK

The neck of the Huacaya is long straight and upright and blends smoothly into the line of the backbone.

Faults

Neck too long or too short (should be two thirds of the length of the back)
Bent or "U" shaped neck

BODY

The chest of the alpaca should be broad and deep with well sprung ribs and being deep through the girth. The backline is slightly convex. The tail has a tucked in appearance due to the angulation of the pelvis which is more vertical than that of the llama. The tail should be straight and cover the genitalia. The rump should be broad with good space between the pin bones. The height of the pin bones should equal that of the shoulders.

Faults

Narrow hind quarters
Prominent wither
Roach back
Sway back
Overlong straight back
Narrow chest
A bent or kinked tail that cannot be manually straightened

LEGS

The forelegs should be strong and straight when viewed from the front and the hind legs should be parallel and straight when viewed from behind. The pasterns should be upright and firm with the feet containing two well formed toes pointing forward. Each toe carries a strong toenail and the sole of the foot is covered with a padded membrane.

Faults

Cow hock
Sickle hock
Knock knees
Dropped or cocked pasterns
Splay legs
Polydactylism (more than 2 toes on each foot)
Syndactylism (fusion of the 2 toes on the same foot)
Subluxing patellae

HEIGHT AND WEIGHT

A mature alpaca should have a height at the wither of approximately 85 - 90 centimetres with a minimum weight of 60 kilograms.

Faults

Small frame less than 85 centimetres
Oversized (showing llama characteristics)

GENITALIA (male)

The scrotum should be well attached and is set underneath the tail. Although relatively small this carries the testicles which should be even in size. In a mature male alpaca the testicles when fully developed should be 4 centimetres in length and 2.5 centimetres in width.

Faults

Cryptorchidism
Ectopic testicles
Too soft or too hard
One or both testicles abnormally small for the age of the alpaca.
Testes of uneven size

(Female)

The vaginal opening should be well covered by the tail and should be vertical and not too small.

Faults

Opening too small
Hermaphroditism

Both male and female should show 4 teats and in the case of the female all should be working.

GAIT

Alpacas should exhibit a free flowing even stride with two distinct tracks.

Faults

Winging
Arcing
Rope walking

COVERAGE

(Huacaya)

The Huacaya should have a soft, dense fleece which grows perpendicular to the skin (similar to a merino or polwarth sheep). The fibre should grow down the legs maintaining consistency of character and fineness. The neck wool should exhibit similar quality of fibre but will be shorter in length. The head cover should grow up over the top knot and also on the cheek area of the face. Although this wool is short some evidence of crimping should be seen. There should be minimal "guard hair" throughout the main fleece growing area.

(Suri)

The Suri should grow a very lustrous silky dense fibre which hangs vertical to the body (similar to that of a mohair goat). Although the face is open it may be covered with short fine lustrous fibre. The top knot area of a suri grows fibre which hangs down similar to a fringe over the forehead, falling down onto the face. The style/character in the fleece should be maintained from the forehead all the way down through the body to the lower leg. There will be an increase in micron in the apron area.

FIBRE

Huacaya

The most important fleece characteristics are as follows

Fineness and Handle is probably the most important characteristic. It is the thickness of the fibre expressed in microns. Handle refers to the degree of softness of fibre to the touch.

The softness occurs due to the scale structure of the fibre (low protrusion of scale height when compared to that of a merino) and the evenness of the fibre diameter within each staple of the fleece. Fineness is important from a processing point of view and generally the finer the fibre the greater the price per measurement of weight. Finer fibres are also desirable in processing when fine lightweight garments are required.

Density. This is the number of fibres that are grown in the skin and are measured by the number of fibres per square millimeter. The greater the number of fibres per square millimeter the denser the fleece. Density adds to fleece weight

Character is the evenness of the crimp or wave and is said to denote good breeding. Character is not the length of the crimp/depth but is how consistent and even the crimp is expressed from tip to butt and all throughout the fleece. It applies equally to those high crimped frequencies as it does to the low crimped frequencies. Character does not determine fineness of crimp. The term character does mean the regularity/evenness of the crimp. A deep well defined crimp is desirable in a Huacaya fleece. This can be an indicator of uniformity of the fibres within the staple and suggests that the follicles are well aligned in the skin.

Staple length. A Huacaya fleece should grow a uniform fleece over the blanket area. The length over a twelve month period on good pasture **should have a minimum as described below.** A general rule is that finer fibres tend to be shorter in length than coarser fibres over this growth period.

<20 microns	75mm (3")
21/25 "	75 (3")
26/30 "	85 (3.5")
30>	95 (3.75")
OVERLONG	150mm (6")

Length is a major contributor to total fleece production.

Lack of Guard Hair. The blanket area should be relatively free of the coarse microned medullated guard hair.

Brightness/Lustre. This is the amount of light which is reflected from the fibre. Huacaya fibre should exhibit a bright sheen. Fibres exhibiting this characteristic are able to enhance the dye in the finished product.

Faults

Coarse micron
Harsh fibre
Chalkiness
Excessive guard hair
Short staple (for 12 months growth)

Undesirable traits

Lack of density
Lack of coverage
Lack of brightness/sheen
Short staple (for 12 months growth)
Cotting
Lack of character throughout the staple

SURI

The most important fleece characteristics are as follows

Lustre, is probably the most important characteristic. This is the amount of light which is reflected from the fibre. Suri fibre should exhibit a high lustre (sometimes referred to as the pearliness in the fleece). The Suri fibre has a longer scale than that of the Huacaya thus reflecting a higher lustre. Fibres exhibiting this lustre characteristic are able to enhance the dye in the finished product.

Fineness and Handle. It is the thickness of the fibre expressed in microns. Handle refers to the degree of softness of fibre to the touch.

The softness occurs due to the scale structure of the fibre, (The longer scale adds to the silky feel of good suri fibre) and the evenness of the fibre diameter within each staple of the fleece. Fineness is important from a processing point of view and generally the finer the fibre the greater the price per measurement of weight. Finer fibres are also desirable in processing when fine lightweight garments are required.

Density. This is the number of fibres that are grown in the skin and are measured by the number of fibres per square millimeter. The greater the number of fibres per square millimeter the denser the fleece. Density adds to fleece weight

Style. This covers the lock type and the definition (architecture) of that lock. The lock structure may be penciled, twisted with wave, curled or may have a board lock with a large flattish wave. They should carry their style from tip to skin. The locks should show independence.

Staple length. A suri fleece should grow a uniform fleece over the blanket area. The length over a twelve month period on good pasture **should have a minimum as described below.**

<20 microns	80mm (3.25")
21/25 "	85 (3.5")
26/30 "	100 (4")
30>	110 (4.25")
OVERLONG	175 (7")

Length is a major contributor to total fleece production.

Lack of Guard Hair. The blanket area should be relatively free of the coarse microned guard hair.

Brightness/Lustre. This is the amount of light which is reflected from the fibre. Huacaya fibre should exhibit a bright sheen. Fibres exhibiting this characteristic are able to enhance the dye in the finished product.

Faults

Coarse fibre
Harsh fibre
Chalkiness
Excessive guard hair (throughout the blanket area)

Undesirable traits

Lack of density
Lack of coverage
Lack of lustre
Short staple (for 12 months growth)
Cotting
Lack of style throughout the lock

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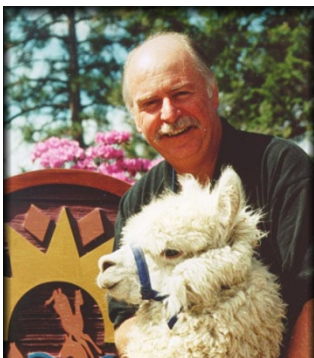
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Cameron, who has had some 40 years in the fibre industry as a wool broker, judge, educator and also in his semi retirement continues with alpaca research. He is currently judging for the Australian Alpaca Association and in his role as Senior Fleece Judge and trainer for AOBA, has been involved in the training of their judges as well as judging. Cameron, a leading alpaca fibre expert, continues his educational clinics and lectures throughout the world.