

LAMB BIRTH COAT ASSESSMENT

Karakul Shepherds know these sheep have numerous distinct features; historically, it is young lamb birth coats that make them so unique in the ovine world. Breeding for Persian lamb genetics, *the* Karakul heritage, is encouraged.

This document was developed as a guide for breeders to assess birth coats:

- 1) for breeding decisions
- 2) to assist with registration details
- 3) to help the Alliance track the best birth coat producers

It is a simple overview of *The Karakul Handbook* Chapter 5 which describes 12 categories of birth coats. The Alliance considers five to be most important in their description: **CURLS**, **LUSTER**, **TEXTURE**, **PATTERN**, **DEVELOPMENT**.

These five attributes establish a Letter-quality rating, with 5-Letters the highest possible—CLTPD

Ratings are voluntary, but highly encouraged. Alliance Advisors will be happy to offer an evaluation.

Submit birth coat photos to info@karakulshepherds.org SUBJ: Birth Coat Evaluation, for rating by 3 Advisors.

To place emphasis on these genetics, shown below, **top-quality** sub-categories are in **blue**, **undesirable** traits in **rust**

AGE at assessment: Time frame is important. The best evaluation usually comes at birth, after the lamb is dry, and within the first 6 days. Some curls and waves can be monitored for up to thirty days for Development.

1. CURLS TYPE: There are seven types of curl. They may blend from one type to another, sometimes be inter-mixed, or occur in different areas of the birth coat. For multiple curl types, please note coverage of the 2 or 3 most prominent 1st, 2nd, 3rd; curl presentation is written in 1-2-3 order.

Pipe Curls - Or pencil curls. The tip of the individual fiber points back down towards the coat surface. Collectively they form a circular pattern into a hollow tube or pipe.

May be long pipes (ribbed patterns) or short pipes (corrugated patterns). Example: ∞∞

Walnut Curls - AKA pea or rose curls, are *very short* random pipes, mixed with other curl types. These twists and swirls create an effect of shelled walnut halves placed on a table, viewed from above.

Many of the curls do not form a circle, but curve in many ways making beautiful patterns. Ex: ∞ξ∞

Waves - Waves are shallow, pressed to the skin; most often associated with moiré/watersilk patterns Ex: ~≈

Open Curl - Does not mean loose curl. It is a *lack* of curl in a group of fibers showing *plateau-like* formations. These are essentially areas of no curl, but with some depth. Example: ΓΓ

Flat Curl - This is also a *lack* of curl, *flatter* than open curl. The fibers lie more or less parallel to the skin surface, with no depth. Ex: CCCC

Corkscrew - These are overdeveloped curls, appearing as ringlets. The fiber emerges from the follicle forming a circle at right angles to the skin. Instead of pointing downward as in the pipe curl, the tip curves upward again and forms one or more circles parallel to the skin.

Nappy - These are small corkscrew curls that are tight and kinky.

Also important,

CURL SIZE: The diameter of curl formations.

Small - about 3/16"

Medium - about 1/4"

Large - about 5/16"

CURL DEPTH: Depth in a curl is the distance from the skin surface, giving any birth coat its third dimension.

Deep ∞∞ - The curl is in the form of an oval with the long axis at right angles to the skin.

Normal ∞∞ - The depth of the curl is approximately the same as its width.

Pressed ∞~ - When the long axis of the curl is parallel to the surface, depth is subnormal.

2. LUSTER:

Luster is a matter of light reflection of two kinds—one coming from the individual fiber and the other from the curl locks and the birth coat as a whole. High luster is an incredible shine, apparent even away from sunlight.

The individual fibers in the birth coat should be formed into smooth-lying locks and the pattern *set up* to allow the fibers to group themselves; the birth coat surface reflects light better.

True Karakul fiber has smooth scalation, making it capable of reflecting a high degree of light, much like a mirror.

A wooly fiber has rough and uneven scales, does not reflect much light and catches much dirt.

The contrast in fibers is like the difference between a mirror mosaic and a shingled roof.

Can be **High Good Average Low**

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3. TEXTURE: The effect caused by fiber size, not density (another category); smaller diameter is the most silky. Stroke the lamb's coat from rump to head, as Proper curl direction is *rear to front*.

Choose one; if the feeling falls between two, adjoin terms, e.g. silky/strong

Silky - Small fibers in diameter; the birth coat feels very soft. Lambs can feel slippery.

Strong - Fibers a bit larger in diameter; coat has a feel of strength and often lacks a metallic luster present in the silky/soft coat.

Coarse - Fibers are large and the birth coat feels a bit rough, although it may have luster.

Harsh - Very large fibers; the birth coat feels almost wiry and fibers lack pliability; it may or may not have luster and may have kemp.

Wooly - Fibers are of small diameter, crimpy, and soft, but lack curl forming ability and have no luster.

4. PATTERN: The arrangement of curls that reveals the general style of the birth coat.

For multiple pattern types, note coverage of the 2 most prominent 1st, 2nd

Geographic - Pattern resembling a relief map of mountainous country with plateaus, valleys and hills.

Moiré - Also called watersilk; a shallow, wavy pattern, often very lustrous.

Curly become tighter and more distinct up to 10 days, sometimes 2+weeks.

Ribbed - Long pipe curls are (more or less) parallel lines at right angles to the center, along the ribs

Corrugated - Shorter pipe curls that are quite uniform in length, frequently stacked along the spine

Horseshoe - Pipe curls formed in a semi-circle over the back with the open end towards neck or tail

Monotonous - Lacks any definite pattern, uninteresting.

Slight - Small in amount or extent.

5. DEVELOPMENT: The number of days it takes curls to uncoil is stage of development, which defines birth coat maturity and fiber length. Broadtail curls, waves can be monitored for up to 30 days for Development.

Broadtail - Very short fibers take 10+days before curls open, sometimes longer; curls, waves get more distinct a week or more after birth, then remain for another 3- 6+days; watersilks/moirés; Very short stage

Persian Broadtail - 5 to 8 days before curls open; Short or shallow stage

Persian (or Persian Lamb) - 2 to 4 days curls start to open; Normal stage

Half Persian - Over-developed curls; curls are starting to or have already opened; Fairly long fiber

Caracul - Usually continuous corkscrew curls; a term for crossbred lamb birth coats; Very long fiber

~~~~~**Two other important birth coat attributes**~~~~~

**6. CARRY:** This is the extent to which the main pattern(s) cover the birth coat. Some birth coats 'run out', others will change in texture from place to place; *usually* indicative of fleece type changes on adults.

Excellent - Pattern(s) cover the whole birth coat including sides, neck and thighs, with same texture.

Good - Patterns cover much of the coat, but one or more areas 'run out' or have different textures.

Poor - Main pattern covers only a portion, usually the spine, changes dramatically or disappears.

**7. DENSITY:** Density is the number of fibers per unit of surface. The higher the count, the less space between fibers and (frequently, but not always) the finer the coat. Density is determined by feel and touch.

High (thick) - The birth coat feels firm and springy.

Average - Soft but springy.

Low (thin) - Soft and shallow.

Discussions and photo plates can be found in *The Karakul Handbook*, Lowry Hagerman 1951, available for purchase through the Alliance.