

TRADITIONAL FLOCKS, Bloodlines, Registration

In December 1908 Karakuls were imported into the US for the Persian lamb fur market. These Karakuls were not a definite breed in the purebred sense, rather a sheep type, originating from isolated flocks in Central Asia. In 1951 over four decades later, a Breed Standard was presented through Lowry Hagerman's *The Karakul Handbook: Selecting and Breeding Karakuls for Fur Improvement*^[1] Just three years after publication the entire Persian lamb market collapsed. The Breed Standard was forgotten. Karakuls became isolated again; genetics were concentrated within regional areas resulting in variable physical appearances. Karakuls became locally adjusted sheep, developed over time through adaptation to their natural and cultural environments. Sometimes through breeder selection, although often not, as many were managed as Traditional Flocks—no maintenance of pedigree and frequently multi-sire mating. This is the definition of a landrace^s breed.^[7,8] Three to four decades later most of these flocks were found and identified as Foundation or Historic bloodlines. Many individual sheep were registered from these flocks.

Traditional Flocks have been central in the development of US Karakul Bloodlines. After two more decades of isolation and breeder selection the Alliance has currently located “a dedicated core of breeders working solely with Foundation bloodlines. These [new] bloodlines tend to be free from much outside breeding, and can be among the most genetically distinctive animals of the breed.”^[4] We are utilizing the Livestock Conservancy[±]^[5] definition for a Bloodline “subpopulations that have been isolated from one another for several generations (usually four or more) with the consequence that they are somewhat genetically distinct”. From that, Alliance Advisors have chosen a minimum of five years of isolation or line-breeding generations to define a unique Karakul bloodline. Called Multi-Bloodline Composites or MBC, they fall into two types--Isolated and Line-bred. Isolated flocks are Closed having no outside genetic influences. Line-bred flocks are Open bringing in a new ram every few years; yet genetics are similar enough to continue selective breeding on a color or specific farm line.

Traditionally-managed *isolated* flocks continue to be found, where registration is not a component of their operations, and by shepherds who wish to remain private. KSAR's continuing focus is to locate Karakul Traditional Flocks, in the US and Canada, some of which could be future validated Bloodlines for the breed (see website **Bloodlines** page). Shepherds who wish to work toward the goal of a Bloodline designation are advised to focus on isolation and/or line-breeding specific traits within their flocks for a minimum of five generations.

The staff of the Livestock Conservancy[±] and Dr. Phil Sponenberg^[3] have developed some guidelines for rescuing indigenous animal bloodlines and breeds. Together with their ideas and our own experience with the breed, we have developed procedures to define and evaluate breed-type, adaptable to include new Karakul sheep into the KSAR Open Registry. KSAR Advisors have established a protocol that assures the quality standard of Karakul breed type, as best as possible from a virtual inspection.

The unique combination of Central Asian characteristics make breed qualifying easier—the Persian lamb birth coat, a broadtail, refined ‘desert spirit’ head, and the unique sloped-rump topline. Sheep with all four traits are characterized as Karakul; no breed mis-identification is possible. Only Karakul sheep produce lustrous, patterned curls or smooth waves in newborn lambs; thus, the primary, perpetual focus on birth coats.

Karakul sheep are fundamentally independent, self-sufficient and low-maintenance. Flocks that remain reasonably isolated from others are typical of centuries-old Karakul shepherding systems. Called landrace^s^[7,8] or traditionally managed, these flocks are almost always defined by periods of multi-sire mating. Within these flocks the Alliance encourages true-to-type *selective* breeding for the four Karakul traits that define the breed.

Even if sire and dam are unknown, Karakuls *intended as breeding stock* should be considered for registration so they may genetically contribute to the KSAR Flock book. If registration is desired, it is within this framework that KSAR is available as the transition point for individual Karakul sheep progressing from isolated farms, ranches, and desert ranges into the Karakul Registry.

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Registration applications for individual un-pedigreed Karakul sheep, of any age, will be reviewed by Alliance Advisors using the time-tested method of visual observation for breed character evaluation. See KSAR's *Registry Policy* regarding requested photos. After evaluation and acceptance, the individual sheep will be assigned a KSAR registration number with a suffix, and identified by the flock into which they were born. Their unregistered sires and dams will carry the original Source Farm/Flock and Location as first identifiers in the Registry.

Until breed-specific DNA testing is available, the following guidelines are endorsed and supported by Alliance Advisors ^[6]

1. Ideally isolated or line-bred Karakul flocks should not be raised with other breeds. However, if other breeds are kept, they must be noted and *steps taken* to avoid inadvertent cross-breeding.
2. Traditional Flock recognition is by location of breeder. Karakuls entering the Alliance Registry with one or both unregistered parents will have the sire and/or dam listed as Breeder Name/Farm and City, State as their sheep Name/ ID, *without* the usual registration number. Ex: Anakus, Rice WA red 876 [eartag] is the registration number
3. A brief history of the flock is important for verifying source bloodlines and will be kept on record—including original animal sources and approximate dates of acquisition. Ideally, history of **Bloodlines** flocks are updated annually; most importantly after additions—gender, source, and year noted (**Flock Finder** page)
4. If shepherds have grouped sheep to maintain different bloodlines, the bloodlines should be noted and tracked.

For the KSAR Open Registry, to be registered as a Karakul the four criteria are: 1) have a Persian lamb birth coat, or be able to produce offspring with birth coats, showing reasonable degree and coverage of curl types as defined by CLTPD below 2) have a broadtail 3) have a within Breed Standard-type head and 4) have the unique sloped-rump topline. Persian lamb birth coats must be proven in sheep from Unknown flocks (Section D *Registry Policy*), or if a crossbreeding concern exists.

Basic standards: 1) Birth Coat—The Alliance has chosen five of the most important Persian lamb categories: **CURLS, LUSTER, TEXTURE, PATTERN, DEVELOPMENT** (CLTPD). To qualify, *at least two* of these must be represented; they do not have to be top-quality, but present. If a lamb fails to qualify due to lack of Persian lamb coat, or if an adult fails to produce progeny with acceptable birth coat qualities, the Alliance will recommend breeding to a Letter-quality rated Karakul, *3-Letters and above* (CLTPD), and submitting registrations for those progenies in the future. The Alliance is seeking the best birth coat qualities to maintain as an American Karakul genetic resource. ^[10] 2) "Tails may vary considerably but they should always be of the broadtail type...fatty development confined to the upper part...the lower tail a slender appendage"^[2] 3) refined Karakul heads 4) sloped-rump toplines are outlined in the Breed Standard

[§] About Landrace - Landrace^[7] is a term used to classify animals that have been raised or developed genetically isolated for fairly long periods of time. It is literally translated 'country-breed' from the German *Landrasse*. Geneticist Phillip Sponenberg of Virginia Tech University describes landrace creation "...when isolation, environmental pressures...and human selection plays a role, but for *end goals* (emphasis added), not as a result of careful selection."^[8] Per the Livestock Conservancy* "Landraces are by their very nature more variable....characterized by *biological* and *adaptational* consistency and not necessarily by uniformity of physical appearance."^[9]

References:

1. Hagerman, Lowry 1951. *The Karakul Handbook-Selecting and Breeding Karakuls for Fur Improvement*. Denver:Smith-Brooks 211 p
2. *ibid* p 36
3. Sponenberg, D. Phillip and Donald E. Bixby 2007. *Managing Breeds for a Secure Future: Strategies for Breeders and Breed Associations*. Pittsboro, NC: American Livestock Breeds Conservancy. [[±]2013 named The Livestock Conservancy-TLC]
4. *ibid* p 15
5. *ibid* p 34
6. Sponenberg, D. Phillip. 2014 March via email. *Landrace Registration Based on Herd/Flock Rather than Individuals*. White Paper.
7. "Landrace." Wikipedia. Accessed June 2, 2019. <https://en.wikipedia.org/wiki/Landrace>
8. *ibid* p 9-10
9. *ibid* p 13-14
10. The *Lamb Birth Coat Assessment* and *Barn Worksheet* documents are good first steps to learn about Persian lamb traits.