



FAQ on Upgrading and Recording Katahdins

If I have a purebred Katahdin that has no papers, can I get him/her inspected and then registered?

No. If registration or recordation papers on the animal or its parents cannot be located or were never issued, for registry purposes the animal is treated the same as if it were a different breed. This is only fair, because the purpose of a registry is to record and report the pedigree of animals as a service to inform breeders of lineage and purity. No matter how much a sheep “looks” like a purebred Katahdin, without registration papers, its ancestry is unclear and it has less breeding value than a registered animal. However, such sheep—especially ewes—can be valuable to use in upgrading programs because they already have hair coats and perhaps other easy-care qualities for which Katahdins are noted. Many breeders are grading-up by starting with a base of commercial Katahdin ewes and recording lambs from each generation.

KHSI has an “open flock book.” What does this mean?

Since its establishment in 1985, KHSI has had an open flock book. This means that percentage-blood Katahdins can be recorded in the KHSI registry, and registered Katahdins can be generated through the use of registered rams or ewes mated to non-registered animals. In the most common upgrading and recordation method, a registered Katahdin ram is bred to any group of ewes and the offspring are recorded in succeeding generations at $\frac{1}{2}$ (50%), $\frac{3}{4}$ (75%) and $\frac{7}{8}$ (87.5%). To become a registered animal, the 87.5% or greater animal requires a hair coat inspection.

Why does KHSI Maintain an open flock book as a breed policy and philosophy?

Upgrading benefits the breed through the introduction of new gene combinations, the incorporation of heterosis (hybrid vigor) and opportunity for expansion in breed numbers by recruiting commercial flocks to enter the registry. Closed flock books have the disadvantage that, over time, the gene pool continually narrows, as many animals born into the registry are never bred. Over many years, this can result in an overly constrained genetic base, where it’s hard to avoid some level of line- or inbreeding with any given pairing. By continually bringing in a small percentage of novel genetics, we achieve the maintenance genetic diversity in the registry. The greater the genetic diversity within a population, the greater the selection potential for performance improvement.

The challenge presented by an open flock book is some degree of decreased uniformity and predictability in the breed population. Breeders especially benefit from the open flock book by being able to use good, productive ewes to make economical and efficient progress toward development of a flock of hair sheep that is recognized by the KHSI Registry. The founders of the Katahdin breed, and its curators today, continue to believe in the power of maintaining an open flock book as one of the keys to a successful production breed.

I have a flock of commercial woolled ewes. What general issues should I keep in mind in using Katahdin rams to “breed the wool off” and record offspring?

Select rams whose performance and conformation reflects what you are aiming for in your eventual high-percentage Katahdin ewe flock. Using rams with clean-shedding “A” coats are advised, in order to reduce non-shedding wool in offspring. Breeders in upgrading programs should also be mindful of preserving and enhancing Katahdin signature traits for reproductive efficiency, such as fertility, prolificacy, mothering ability and parasite resistance. Prioritization of genetic resistance to scrapie (QR or RR at Codon 171) should also be a consideration, particularly with blackface ewes. To record animals takes advance planning. Some information

must be collected at lambing and lambs need to be tagged or tattooed for accurate identification shortly after being born. For recordation, the registry will require a birth date and type of birth (i.e. single, twin, triplet), as well as the registration and tag numbers of the ram used and the tag numbers of the ewes.

How many generations does it take to upgrade from a non-registered animal (an animal without a paper) to a registered animal?

It takes at least three generations of mating to registered Katahdin rams to create a fully registered Katahdin, provided that the upgraded animal is inspected with an A or B hair coat as a yearling.

What is the difference between a Certificate of Registration and Certificate of Recordation?

A fully registered Katahdin has a white Certificate of Registration paper. A recorded animal has a blue Certificate of Recordation paper. In the case of 7/8 (87.5 %) animals, they can be recorded as lambs if desired; and then inspected for registration as yearlings, at which time they can receive a white registration paper if inspected with an A or B coat.

Can a breeder record animals that are less than 50% Katahdin?

The KHSI registry does allow this. Recording percentage animals with less than 50% Katahdin has less value, if the primary breeding objectives are to obtain fully registered Katahdins. Typically, grading-up involves the use of a fully registered Katahdin ram on ewes that are unrecorded or recorded at ½ (50%), ¾ (75%) or 7/8 (87.5%). A 25% animal, for example, is much more difficult to use in moving toward registered stock—usually stalling or slowing the process—than are animals of higher recordation status percentages.

If I use a 75% recorded Katahdin ram lamb and breed him to registered Katahdin ewes, will the offspring be registerable?

The offspring can be initially recorded at 87.5%; and following a hair coat inspection by a KHSI certified inspector, the offspring can be fully registered. This is just the same as if a registered ram had been bred to 75% recorded ewes. If the 75% ram is bred to 75% ewes, the offspring can be recorded as 75%.

I have 50% recorded Katahdin ewes and want to use my high-performing 75% Katahdin recorded ram. Is this a good idea? What would the offspring be recorded as?

This can be a way to use or introduce desirable genetics. However, it does make the process more complicated and lengthens the time to move toward fully registerable Katahdins. For example, a 75% ram mated to 50% ewes results in 62.5% offspring (instead of 75% offspring if a registered ram had been used). If mated to a registered ram, such 62.5% ewes can produce 81.5% offspring, which are still one generation away from registerable 87.5% animals, even if a registered ram is bred to them.

I know a breeder who has excellent rams of another breed and I would like to use one on my registered Katahdin ewes to improve a particular trait in my flock. Is this allowed in recordation?

Yes, KHSI recordation policy does allow the use of a ram of another breed. In the case of registered Katahdin ewes bred to such a ram, the crossbred lambs can be recorded as 50%. A 50% son bred back to registered ewes results in 75% offspring.

Are there considerations for hair coat inspections for fall-born lambs?

Sheep can be hair coat inspected any time between March 1st and September 30th of their yearling year, given that they were born prior to November 1st of the prior year. Or, sheep can be inspected in subsequent years, when they are two+ years old. Note that that many fall-born lambs will need to wait until their second summer to be adequately shed for inspection.

Does the poll type matter, and can a horned animal be upgraded?

The hair coat inspection program previously required that the poll type be noted on the form. But polled vs

scurred vs horned had no impact on the register-ability of a sheep, since the breed standard allows for all types (horns are allowed, but not preferred). In 2020, the board voted to eliminate the need to record poll type, because evaluating it can be subjective, and the data wasn't being used.

Does a ram's dam need to be inspected before her son can be upgraded?

No. Historically, the KHSI upgrade program required that a ram's dam had to be inspected as an A coat before the ram could be inspected and upgraded. This requirement was eliminated in 2020, as it added unnecessary complexity to the process.

When does an animal need inspection and how do I request inspection?

Katahdins of 7/8 Katahdin blood (87.5%) are eligible for registration upon inspection in their yearling year, if the previous generations have been recorded. Sheep must be classified as a coat type A or B to be registerable; if they are classified as coat type "C," they can be identified in the flock book as recorded. Inspections are requested through the KHSI Operations office by May 15 of each year and are conducted between March 1st and September 30th of that year. The KHSI inspector verifies the animal's identity, checks it for any gross defects, and classifies the coat type. The owner submits the papers to the registry office with a fee payment for a permanent registration certificate.

How much does inspection cost?

The owner must reimburse for the inspector's mileage driven to and from the inspection location. This is coordinated through the KHSI Operations office. (Inspector reports mileage to KHSI Operations. Owner pays KHSI for the mileage, and KHSI reimburses the inspector.) KHSI Operations makes every effort to locate an inspector to perform the inspection in the year requested.

What if there is no inspector near me?

If an inspector cannot be located or there isn't one within reasonable driving distance, it's possible to have an online inspection performed by submitting a video of the sheep to be inspected. This process is practical for up to about a dozen sheep. Contact KHSI Operations for more information on this process.

My friend/neighbor is an inspector. Can I just make arrangements directly with them to do the inspection at our convenience?

No. You must schedule the inspection through the KHSI Operations office. The reason for this is to first confirm that the inspector is up to date on their certification. And, also to walk you through the requirements to make sure your sheep are eligible for upgrading. The Operations Office "catches" a lot of cases where the sheep can't be upgraded for some reason, or the inspector's certification is out of date. We want to save you and the inspector from time wasted doing the inspection if it won't result in upgrade-able sheep!

Can I brush, bathe or groom my sheep prior to the inspection?

Animals that are to be inspected **must be in a natural state** to demonstrate their innate shedding ability. They are not to be brushed, combed, clipped, trimmed, plucked, or sheared at all/

What kind of identification is needed on the sheep for the inspection?

To be eligible for inspection, all animals must be identified clearly. Identifications (tags, tattoo) must match exactly those on the Registration or Recordation certificates or the animal Registration form. (OK if the ID spans more than one tag.) Please keep your sheep identifications up-to-date! Individual imprinted replacement ear tags may be ordered from most mail order tag suppliers. Blank tags need a high-quality ear tag marking pen with permanent ink. Your sheep cannot be inspected if their identification does not exactly match the Registration/ Recordation certificate. Note that if you have a long Flock ID on the registration form, it's not necessary for this to appear on the tag/tattoo; but the numeric identification must match.

What is the definition of an A, B or C Coat?

An “A” coat has no unshed wooly fibers. A “B” coat, essentially, has less than 1/8th of the body’s surface area containing unshed wooly fibers. A “C” coat has more than 1/8th of the body surface area covered in unshed wool.

What is an “AA” Coat?

This was a historical designation for a sheep that, in addition to being an A coat, had no wooly fibers extending beyond the hair coat. This inspection was done in winter. KHSI has discontinued inspecting for, or tracking this coat type designation.

How do I become a Certified KHSI Hair Coat Inspector?

Katahdin breeders can become inspectors with two years (24 months) of KHSI voting membership and passage of an inspector training class. Dues payment must be current. The term of initial certification is three years. Certification can be renewed at that point, or earlier, by re-examination. “Permanent” inspector certification requires one certification renewal plus continuous KHSI membership. Inspectors assist KHSI by inspecting other flocks and are entitled to inspect their own animals as well. Only animals that are 75% or greater according to the KHSI Registry flock book can have hair coat type recorded in the registry.

My sheep are pretty wild, can the inspector do the inspection from a distance in my pasture?

No. It is the owner’s responsibility to have the animals needing inspection confined in a pen or enclosure that enables the inspector to handle the sheep to verify animal identification (tag/tattoo) and to carefully inspect coat type from all sides.

If I am a Certified Hair Coat Inspector, can I inspect my own sheep?

Yes, you can. You need not schedule an inspection with KHSI Operations in this case.

Glossary of Terms

Note – There are multiple uses of these terms. We in KHSI use definition 1 in each case. But put in the second definition to note other common uses. Many breeders use Registered, Purebred and Full blood interchangeably. Others distinguish between a Registered and a full-blood.

- **Commercial**- A sheep that is not registered. A commercial Katahdin usually refers to a sheep that is of 100% Katahdin ancestry but is not registered. A second definition includes sheep that are either unregistered Katahdins or crossbred Katahdin.
- **Registered** – A Registered Katahdin is listed in the KHSI flock book as 100% Katahdin. The KHSI Certificate of Registration is white.
- **Recorded**- A Recorded Katahdin is an animal that is listed as a percentage animal by the KHSI Registry & Flock Book. Note: A Recorded Katahdin may have all Katahdin ancestry, but if both parents aren’t registered, it cannot be registered as a 100% Katahdin. It may be Recorded with the KHSI Registry. Or a Recorded Katahdin may be the offspring of, e.g. a Registered Katahdin and a Registered Suffolk and be Recorded at 50% Katahdin. The KHSI Certificate of Recordation is blue. The percentage according to the KHSI Registry is listed on the Certificate.
- **Grade** – Used in two manners. Some use this to designate a commercial Katahdin that is not Registered. Others use it to designate a crossbred Katahdin.
- **Crossbred**- Has parents of two or more breeds. Typically, animals that are 7/8 or greater blood of one breed are not considered crossbred, but of that breed. Some breeds of livestock designate animals with less than 15/16 or 31/32 are crossbred.

- **Purebred**- Used in two manners. KHSI will use the 1st definition. 1) Designates an animal that is of one breed. 2) Some Breed Registries and breeders reserve the “purebred’ designation for only those animals that are Registered and 100%.
- **Full-blood**- Used in two manners. KHSI will use the 1st definition. 1) Designates an animal that is of one breed. 2) Some Breed Registries and breeders reserve the “full-blood” designation for only those animals that are Registered and 100%.
- **Percentage** – Used in two manners. A percentage Katahdin may refer to either 1) a Katahdin that is grading up to 100% in the KHSI Registry or 2) a cross-bred Katahdin that may be in a grading-up program.
- **“Up-grading” versus “grading-up”** – Up-grading will be used in this document to indicate that the breeding goal is to bringing in genetics from another breed or composite to improve a genetic parameter in their Katahdin flock or the breed. A breeder who used highly parasite resistant Florida Native ram on his/her Katahdins and then selected only those offspring with superior parasite resistance to record and eventually register is “up-grading”. A breeder who starts with a flock of commercial Katahdins or registered/commercial ewes of another breed and sequentially breeds them and their offspring to Registered Katahdin rams and eventually registering the 7/8 (87.5%) offspring is grading up.