Culling Practices in Leicester Longwools

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Questions always seem to come up concerning culling in rare breeds, and especially in Leicester Longwools. Culling is an essential component of breed management, and has a role in all breeds. Unless done carefully, though, it can damage rare breeds beyond their capacity to survive as the useful entities they are. All breeds need to have some culling, but in all breeds that culling must be wise in order to not jeopardize the breed’s future genetic structure and viability.

Culling serves various purposes in breed maintenance, and all of these are related to the removal of animals from the reproducing population. Culling, essentially, is the downside of selection. Selection sounds so wonderfully positive, because certain animals are recruited for reproducing the next generation. Culling is the other side of that coin, and represents those animals that are not destined to reproduce the breed. Reasons for culling vary, and can usually be split into two main categories: low production potential, or deviation from the breed standard. These two are very different, and breeders need to reflect on those differences in order to use culling most effectively for breed improvement, survival, and conservation.

In all breeds it is important to breed “to the standard,” and to work to assure that the animals produced do indeed meet that standard. However, the standard can become a very harsh dictator, and in some cases can impede breed survival if breeders impose culling levels that are too high. Depending on the specific factor that is used to cull animals, the breed standard can itself become a huge problem in breed survival. Some points in a breed standard are more important than others (usually these relate to soundness and production) and others have less importance (usually these are the details of appearance that contribute to “breed type” and set one breed off as unique from other related breeds).

The differences in importance of characters in the breed standard are not trivial, and if each character is used as an independent and absolute “veto” of an animal’s future in the breed, then many breeds will have so few animals remaining that they will cease to be viable as genetic units. This means that breeders need to be wise in using the breed standard as a tool for culling. The breed standard is a useful tool, but needs to be used constructively and usefully.

One approach to using the breed standard as a tool in culling animals is to mimic “card grading” as a process for evaluating animals. In card grading, each animal is compared to the breed standard, rather than comparing the animals to one another. This is a useful alternative to competitive showing, and the same procedure can be useful in individual flocks and herds of animals as young candidates for inclusion in the breeding population are considered.

Card grading has been done on several occasions by Leicester Longwool sheep breeders, and the results are interesting and useful for all breeds. The top “blue card” animals are obvious choices for retention into the breeding population. Likewise, the “red card” animals usually are good choices, despite having a weakness or two in meeting the ideal breed standard. The “yellow card” animals are a very fascinating group, because some of these have a single signficant flaw, while others are more generally more moderately weak in several different characteristics. The “single signficant flaw” animals are actually pretty useful in the breed, because they can be mated to animals that are strong in whatever one characteristic is weak, and the other strengths in the “yellow card” animal can therefore benefit the breed. The key here is that these “single signficant flaw” animals may indeed have a role, and an important one at that, in the breed’s future despite their flaw. The key is that they must be used wisely. If the breed standard is used as a sequence of absolutes to require culling, then these animals would be removed and their positive contribution would be lost.

The “overall weak animals” have less to offer a breed, and if used at all must be used carefully, although certainly could be mated to uniformly strong animals to improve the next generation. At the bottom of the heap are “white card” animals, which deviate from breed standard in signficant ways. Some of these still only have one very serious flaw, and even in this case such animals might have a role in the breed’s future, but only with wise and limited use.

The key point is to not let a single flaw eliminate an animal from having a useful and important role in the genetic structure of the breed. Flawed animals must be used carefully and wisely, but that is the point of good conservation breeding in the first place! To remove such animals not only removes their flaw, but also removes all of their good points. In many cases animals with even a significant flaw have produced offspring that have more ideally met the breed standard and have been able to contribute positively to a breed’s secure future.

The other major division of characteristics includes production characters, and these also need to be the basis for culling decisions in order to keep animals productive and economically rewarding to their owners. Even in this case, though, a straight-line approach may not serve breed future very well, such that a low-performer may indeed be important to the breed for reasons of rarity of bloodline or other compelling factors.

All of this may sound like a free pass to use all sorts of defective animals in conservation breeding. That is most certainly not the case! Any animal with a structural or breed-type defect should only be used for very a specific and narrow goal. That goal is usually to produce a few offspring that do not have the defect but that retain the other genetic benefits that the animal brings to the breed. Too many breeders confuse substandard or defective animals with other animals that are truly superior, and that “head in the sand” approach leads to no improvement in the weaknesses that these animals have. A delicate balance has to be reached, and breeders of all breeds should develop their ability to see and appreciate true and valid superiority in their animals.

Culling is the tool that keeps breeds productive and distinctive, and should never be discontinued in any breed. Culling provides for animals that are useful and the fact that they meet the breed standard is a hallmark of that usefulness. It is important, though, to never throw out the baby with the bathwater, and that is easy to do if culling becomes automatic and thoughtless. The key is to use breeding decisions to constantly move in a direction of improvement in terms of both production and adherence to the breed standard. Culling is a great tool in that endeavor, but will never completely replace the positive side of issue. That positive side is the creative and wise pairing up of animals to produce that next generation that is better than the parents.