

Matchmaking 101: How to get the most from your breeding pairs

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Wouldn't it be great if we as parents could choose who our children married? You'd probably avoid choosing someone who looks great on the outside but has little to offer otherwise. Most likely, you would prefer someone who possesses qualities that are important to you: healthy, good genes, good with kids, performs well at their job, and is generally free from reproductive problems and behavioral issues. Probably you'd choose someone who will compliment and balance the partnership.

Deciding breeding pairs for your flock begins with making similar choices that hopefully will result in a healthy, balanced lamb crop. The first step is to identify your overall goals for your flock. Start with conceptualizing the "ideal" sheep, one that is regarded as a model of excellence. And secondly, select for traits that will help you achieve those goals.

Setting goals is not that difficult once you have identified the "ideal". Some goals are long-term, such as "increase lamb crop percentage", and others are short-term, such as "increase scrapie resistance". Making these goals more specific allows you to evaluate whether you have achieved your goals. For instance: "we will increase scrapie resistance by only retaining breeding animals that are QR or RR" or "we will increase lamb crop percentage by 5% each year". Flock productivity goals may include increasing the prolificacy of breeding ewes, culling ewes that lack good mothering skills, improving parasite resistance, or increasing wean weight averages, etc.

When selecting for particular traits, be mindful that balance is the key. For instance, if you select only for higher wean weights, you'll probably end up with a lot of fast growing singles. On the other hand, if you select only for prolificacy, you may be spending a good deal of your time in the barn feeding bottle lambs. But if you look for balance in both traits, you will likely have ewes that have twins or triplets and raise all of them to a healthy, above average weight at weaning. The fastest way to improve your flock is to choose traits that have a higher degree of heritability. Likewise, positive changes occur more quickly if you focus on only 2 or 3 traits to improve

rather than 5 or more.

Choose traits that will help you achieve your goals. If your goal is to maintain a low input system (i.e. decreased labor and expense), then you may want to select for improved mothering, parasite resistance, or faster growth on forage. If your goal is producing heavier market lambs, then muscling, fast growth and early maturity would help you achieve those goals. Be sure your goals are realistic. It's difficult to raise grass fed lambs on a 5 acre pasture and it's just as hard to get market lambs to 120 lbs in 120 days without feeding buckets of grain.

When you've decided on your ideal and what traits you want to focus on, choose your breeding stock carefully. Look to buy breeding stock that is raised in a management system that is similar to your own. There's nothing more disheartening than spending a lot of money buying that big, beautiful, grain-fed sire only to watch him wither away on pasture. Similarly, if parasite resistance is a goal, then buying breeding rams and replacement ewes from a breeder that deworms regularly (whether they need it or not), or buying from a flock that does not identify which sheep need deworming, is probably *not* going to improve the parasite resistance of your flock.

Avoid selecting for traits that have little or no effect on productivity and performance, for instance:

Black hooves: Although black hooves may need trimming less often, foot rot knows no color!

Codon: Some of the best sheep are QR. Selecting a ram only because he is RR may bring in several traits that do not meet your goals. If you don't know the codon status of your ewe flock, you may prefer to use an RR sire so that all of the offspring will have resistance.

Color: Do I really need to say this? Okay, good sheep come in all colors.

Mature size: Who cares how much a ram weighs at 16 months old, 24 months, or beyond. What matters is how fast they grow to market weight. Market weight is usually attained at 4 to 8 months of age, longer if grass fed: A 300 lb ram has little bearing on how fast his lambs will grow. In addition, selecting for heavy, wide, and large frames is inefficient, expensive,

and can result in lambing problems. Heavily feeding a ram lamb so that he reaches 250 pounds as a yearling is not genetic. Early growth and maternal milk are genetic!

I usually start thinking of mating pairs about 6 months before breeding, not long after lambing. I make note of what worked and what didn't work from the previous breeding decisions. I jot down which lambs had scurs, less than desirable coats, higher than expected fecal egg counts, mothering behavior, defects, growth etc. The more information you have at hand, the better prepared you will be. I also rely heavily on my EBV's (estimated breeding values). EBV's are scientifically based predictions that can significantly improve the accuracy of your breeding decisions. Dr. Charles Parker once told me: "breed the best to the best, it's the only way to get better", and he's right.

Using EBV's also helps balance your breeding pairs. For instance, a highly prolific ewe whose lambs are slow growers might be better paired with a sire that has high growth EBV's and moderate prolificacy. The daughters derived from that pairing would likely be slightly less prolific than their dam but have faster growing lambs. Even if you don't have EBV's to help with breeding choices, you still can make significant improvements by purchasing sires and replacement ewes from breeders who do. Sires who have a high "pounds of lamb weaned per ewe lambing" EBV can significantly improve your flock. This EBV index incorporates "wean weight, maternal milk, number of lambs born & raised" into one composite index and is used to predict the overall productivity of the offspring. Remember, the ram contributes 50% of his genes to the whole lamb crop. Using a sire with well balanced EBV's is the easiest and fastest method of affecting positive change.

Now you're ready to sit down and make some important decisions. Keep your goals in mind and select your breeding pairs based on those traits that will get you closer to your ideal. Remember, as parents, we always hope that our children will do better than us. By using excellent sires with superior genetics and breeding the best to the best, you can be assured that your next lamb crop will be better than your last.