

ELECTROLYTES AND BREEDING

hen we moved to Tennessee four years ago, it was our intention to do everything just right on our little sheep farm. We researched and planned, revised and reworked everything in our breeding program so that things would progress efficiently. We were young and ambitious, but sometimes our hopes and dreams for the future got in the way of actual progress. At the end of our first year solely artificially inseminating our ewes in the heat of a Tennessee summer we found ourselves at about 35% conception, and struggled even after that to naturally breed the remainder until late into the fall. The expectations of how we thought our first year "on our own" would be certainly fell short.

But somehow, even those tough times pale in comparison to the exhilaration that comes when new baby lambs hit the ground. So, like many other sheep producers will tell you, we started to plot our next year's breeding season about five days into lambing. However, this time we decided to go back to the basics, and focus on providing our sheep the best in animal health. We set out with a mantra that reaching high conception rates during the heat of summer starts with a yearround dedication to optimal animal health. Instead of looking at the breeding season as a period of 30-60 days, we shifted our focus to a much broader range—focusing

on the total picture of health, hydration, and nutrition. The facets we implemented moving into our next AI breeding season are as follows:

- Stay up-to-date on general *upkeep:* Sixty to ninety days prior to breeding we bring the ewes in and get them sheared, while also trimming feet, worming, as well as give them a dose of penicillin. Typically we also run them through a foot bath and address any other health concerns that may be present. The ewes are out on pasture with a 15% protein tub. and we run BlueLite powder through their water at all times to give them an added boost during the fluctuations in temperature.
- Implement BlueLite Pellets prior to, during, and after breeding: We began utilizing a daily electrolyte plus energy when I went to work for TechMix, which is a company that focuses on hydration in the dairy, beef, and swine worlds. Through my training and research, I began to see how vital it was to be supplementing these animals with an
- electrolyte and added energy. especially in times of high heat and high stress. There is plenty of research on how BlueLite positively effects dry matter intake, reproductive efficiency, and decreases time sick animals are down in larger livestock- but the same principles hold true in smaller ruminant livestock such as sheep and goats. For optimal results, feed pelleted BlueLite thirty days prior to and fifteen days post breeding. We feed this as a top dress at a rate of 2oz/head/day atop of whole corn fed at 1lb/head/ day. The amount of whole corn can be promoted if ewes appear thin. At the actual AI date, our veterinarian of choice to breed our ewes has continually said that our sheep were among the most "toned up" of any he had seen the entire year.
- Create a stress-free summer and AI experience: With the exception of bringing in ewes to sheer them, as well as routine happenings surrounding synchronization including administration of hormonal stimulants and implanting Cidrs,

we try at all costs to leave the sheep alone. We do not move, transport, or work them unless necessary. As stated before, we also keep BlueLite powder in their water at all times to ensure that in times of heat fluctuation and added stress, they are getting a necessary boost to keep them on the right track.

 Focus on making good business decisions for your operation: Perhaps one of the biggest shifts has been in the mindset of how and why to breed. This is a second job, and family business for us, so if the sheep are creating added stress or financial burden it makes all other areas of our life difficult. After that first year, we decided to never use frozen semen, only fresh in the future, and committed ourselves to a stance that if the semen arrived and it was not of the best quality, we would already have a Plan B, and sometimes Plan C in place to ensure no decisions were

being made on the fly. This came in especially handy this summer, when we experienced fertility problems with one of our best bucks, but because of prior planning were still able to have a seamless and successful AI date. I am sure you will see below how that decision has impacted our confirmed bred numbers this year.

The results of our much-needed changes to our breeding program speak for themselves. As I previously mentioned, we only successfully bred 35% of ewes via AI our first year. Whereas our second year, that number jumped to nearly 85% confirmed bred after our initial AI, and this year we hit an extraordinary 95% conception. We run no clean up bucks until after we pull thirty-day bloodwork to confirm pregnancy, so those numbers are an accurate portrayal of how these changes have impacted our breeding program. Now we may never hit that number again, but it is nice area to brag on when the industry standard for sheep bred via artificial insemination hovers right around 60%. We have learned a lot in

the past few years, and as they say nothing compares to experience. We live and we learn, and hopefully we grow and we get better. I like to think that sometimes we take a beat from human medicine where when my wife and I were trying to have a baby, the doctors kept it simple: eat right, drink lots of water, take your vitamins, and don't stress too much. Yep, I think that pretty much covers it.

Justin Hull is from the West Coast where his family has been in the sheep business for over a century. With a passion for livestock and agriculture Justin pursued a Graduate and Master's degree at Oregon State University in Agriculture Education, and earned many top honors judging competitively at the Jr. and Sr. College level. After teaching high school agriculture for many years in Central Oregon, he then managed a 1500 head sheep operation in Iowa before settling his wife, son Patyon, and daughter Harper in middle Tenessee. Justin works as Sales Rep for Tech Mix Inc—a company that specializes in heat stress and animal rehydration—and enjoys managing and marketing their club lamb business Hull Club Lambs.

