Ewes of most sheep breeds “come into season”, meaning they start to cycle as the days get shorter. That is called “seasonal breeding.” Some breeds are stronger seasonal than others. The ones that are stronger seasonal start cycling in August and, if not bred, cycle through December or January. Other breeds that are not as strongly seasonal may start cycling in July and, if not bred, cycle through February. A few sheep breeds like White Dorper will breed “out-of-season.” That means their estrus is not induced by shortening days and these sheep cycle throughout the entire year.

A cycle lasts about 14 to 21 days, with the average being 17 to 19 days. That means a ewe ovulates every 17 to 19 days on average.

Gestation in sheep is about 5 months or 143 to 147 days. Personally, I calculate with the first lambs to arrive after 143 days while most start falling after 145 days.

I am often asked, “When should I start the breeding season?” The “answer” I routinely give is, “When do you want your lambing season to start?” Then count 145 days backwards and you have the date when you want the rams joining the flock. Most farmers have their lambing season scheduled for the spring. However, sheep that breed out-of-season or have a long breeding season allow also for winter or even fall lambing.

There are three components for a successful breeding season: The ewes, the rams, and the feed and environment before and during breeding season.

**Ewes:** Since all ewes in any given flock come into estrus within three weeks, the majority of breeding takes place during that time. Some ewes will “return to season” or “return to service.” The definition for these terms is that a ewe was bred but didn’t get pregnant. Thus, she will cycle again and return to season, meaning she will ovulate and be bred again. Over ninety percent of a flock of adult ewes should be impregnated after the first cycle. A few may return to season and be bred a second time. That holds especially true for those ewes that were still in estrus when the rams joined the flock but were in reality just past their ovulation and didn’t get pregnant despite of being bred. However, if a ewe returns to season for a second time, meaning she will be bred a third time, it is usually an indication that there is something wrong with the reproductive system of this ewe and she may become a candidate for culling. (Keep in mind that I am talking about adult ewes only at this point and that this rule does not apply for first-time breeders.)

I always expose my female lambs to the ram the same year they were born. This practice is disputed by some. The argument is that this will stunt the growth of a ewe and she should be bred at 1½ years of age. While it is true that the growth is stunted when the ewe lamb is being bred at the age of about 7 to 9 months, I experienced that the same ewe does catch up with growth at 3 years of age and is in the end just as big. The advantage of early breeding is that additional lamb in the first year. Some female lambs do not get pregnant the year they were born. That is just as good and makes no difference to me. It is not a sign of reproductive problems. Also, those that do breed the first year may not do so during the first three weeks after adding the ram to the flock in the fall and may only breed weeks or even months later in the midst of winter.

Ewes must be in good body condition just before and during breeding. Obviously, a ewe that is too skinny may not become pregnant or will carry fewer lambs. Keep in mind that a ewe that is too fat constitutes just as much of a problem as a ewe that is too thin.

I deworm my ewes shortly before breeding season. Parasite-free sheep or sheep with a low parasite load are more likely to have twins. The hoofs should also be in good condition. Overly long hoofs that are prone to breaking at the tip are cut and limping ewes need of course to be treated.

**Rams:** The first step of preparing the rams for breeding season is cutting their hoofs well in advance of that season. In case there is a problem or in case I cut off too much, there is time for the foot to heal. It is a mistake, in my opinion, to start cutting hoofs the day before breeding season is supposed to start. I also deworm the rams before breeding.

The ram should be in good body condition. A too skinny ram will not have the condition. A ram too fat may have to gain condition first by losing weight and valuable time may be wasted.

Many articles have been written about how many ewes a ram can breed during a breeding season. In my opinion, the numbers of 30 to 50 that are most often published are far too low. A ram breeding so few ewes during a breeding season

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**Breeding Season for Sheep**

—Ulf Kintzel
would be considered a “lazy breeder” by me or something may be wrong with him. For many years I expected an adult ram to breed no fewer than 100 ewes during breeding season and I have never been disappointed. The ram lambs I sell often begin breeding at the age of 7 to 8 months and can impregnate two or three dozen of ewes and more.

Experienced rams should remain calm during breeding. They should not fight and should attempt to service the next ewe in season after one has been bred. Nothing bothers me more than a ram that excites himself, breeds the same ewe several times, while half a dozen ewes in season stand right next to the ram, but are not being serviced. Since I have three children that often run around in my flock and since I have gotten hit by rams, I have no tolerance for aggressive rams.

I use a marking harness to track the breeding. One can choose from several different harnesses that are on the market. Some lower priced nylon harnesses work but tend to move out of position easily. I prefer the “Cross Your Heart” harness that Premier offers. It is a bit more expensive but stays in position far better. There are five, or sometimes six, different colored crayons available for these harnesses. Marking crayons also come in three different temperature versions which are warm, mild, and cold. When the breeding season starts I use a lighter color such as yellow. After one cycle, usually after 17 to 19 days, I change the color, using a darker color such as blue. The darker color will cover the lighter color should some sheep return to season. After two cycles I usually remove the harness. It is over time hard on the ram to wear it, and it may cause sore spots on the legs if worn too long. After I have removed the harness I usually paint the chest of one ram with a twist stick marker to be able to identify late breeders or sheep that continue to return to season.

If you have a larger flock, the need to split the flock into several groups during breeding season arises. This is the best way to avoid inbreeding and to plan breeding by having certain rams breed certain ewes. Different colored crayons for the marking harness should be used for different rams. I usually don’t separate my flock into different groups far beyond one cycle since most sheep will be bred within one cycle. Depending on how critical inbreeding may be, I may leave only one ram in with the flock for the remainder of the breeding season after the separate groups have been put back together.

I strongly recommend writing down all details, like beginning of breeding season and what colors were used on what days and for what rams. You may think you will remember, but I will almost guarantee that you won’t. I frequently hear from people whose lambing season was early in the winter when the weather is not favorable. Breeding season was simply determined by the ram getting out of his pen and in with the flock. Make sure you have a secure pen for your ram(s). Once the ewes come into season, the ram(s) will try hard to get out of their pen or paddock.

Feed and Environment: There are several factors that can influence the ovulation rate for better or for worse. FLUSHING is an old method to increase the ovulation rate. It is simply done by offering better quality feed, i.e. better pasture or an increased amount of grain, two to three weeks before breeding. “Mother Nature” then tells the sheep’s reproductive organs that times are good to raise more young and the ovulation rate increases. There are many ways to stress a ewe and thus reduce the ovulation rate or cause early abortion, all of which one should try to avoid. Stress can be caused by heat, pain, thirst, parasites, fear, and other factors. I suggest offering shade in the pasture if the temperatures are still reaching 80 degrees or more. Fresh drinking water and minerals should be available at all times. Limping sheep should be treated. I mentioned before that the ewes should be dewormed. The use of a herding dog should be reduced to a
minimum. Sheep that have manure on their rear should be clipped.

It is widely publicized that one should avoid red clover while sheep are being bred. Red clover contains an estrogen-like substance. It is said that this substance called phytoestrogen lowers the conception rate. I have pastured paddocks with high contents of red clover during breeding season and have found that the effect is nonexistent or insignificant. In East Germany, where I come from, we pastured sheep frequently for months on pure stands of red clover. I recall a field trial that found no significant effects of red clover on the conception rate of sheep. Should I err and red clover does have a negative effect I will find out in the not so distant future. If that happens I will report my findings. For now I would claim that one shouldn’t worry about red clover being pastured while the sheep are being bred.

Ulf Kintzel is a native of Germany and has now been a shepherd for 25 years. He has lived in the U.S. since 1995. In 2006 he moved from New Jersey to Rushville in the Finger Lakes area in upstate New York, where he owns and operates White Clover Sheep Farm. He breeds and raises grass-fed White Dorper sheep without any grain feeding. His website address is www.whitecloversheepfarm.com. He can be reached by e-mail at ulf@whitecloversheepfarm.com or by phone at 585-554-3313.