

The HeatWatch[®] system quietly goes about its business, helping a South Carolina couple get their cows bred.

Story & photos by Becky Mills



► William Rushton says nutrition is a key part of their breeding program. He prefers easy-fleshing cows.



►Linda Rushton enters the cow data on their computer so the HeatWatch system can do its job.





William and Linda Rushton are fully committed to using top artificial insemination (AI) sires in their Angus herd. But William's banking career and Linda's full-time job in a real estate office don't leave many daylight hours for their cattle, especially during their January-February breeding season. To add to the challenge, the Saluda, S.C., couple do all the work themselves.

"We tried visually checking heat the first couple of years we AI'ed but we didn't do a very good job," William says. He doesn't feel synchronization and time-breeding is the answer, either. "It is hard to synchronize them to come in heat when we're going to be here. There is nothing worse than having a bunch of cows in heat and having to go to work."

Their answer is the HeatWatch[®] system. Installed in 2001, transmitters glued to the females' tailheads record every mount. The transmitters send signals to a receiver mounted on an antenna on the Rushton's roof. The receiver then sends the signal to their office computer, letting them know how many times a cow or heifer has been mounted and when she is in heat.

"We probably have \$5,000 in the whole system, but it has paid for itself," William says. "It doesn't take many more AI calves to pay for itself, plus we're getting better conception rates and saving on semen costs."

The system does more than simply let them know when a female is in heat. It also stores her calving date, stores the date, time and sire code when they breed her, and lets them know when she is due to return to heat.

Even with the help of the system, William and Linda do their part. Linda enters all the data on each female when they calve. When they put the transmitter in the fabric pouch that holds it and attaches it to the female, Linda records both the transmitter number and cow number in the system. She also keeps a separate handwritten copy in case of computer failure. For the same reason she keeps the expected heat return date on a calendar.

Then, there is the chore of attaching the transmitters on the females. "We've had trouble this year getting them put on," William says. "We only have the weekends to do it, and the cow has to be dry for the transmitter to hold. We've had wet, cold weather this winter."

There is also the breeding itself, which is no small feat considering their work schedules. "There are a lot of 10:30 nights and 5:30 mornings," Linda says. "We have bred them at lunch. We do whatever it takes."

System designed for efficiency

The couple has designed their pastures and working facilities to get breeding chores done efficiently. "We have designated breeding pastures on either side of the house. We keep the cows in one and the heifers in the other. Both pastures feed to the corral behind the house," William explains. "We have it set up for our convenience so we can do it ourselves."

He adds, "We don't have time to go get them. They come to us."

Linda adds, "If they act up, they don't stay."

The couple makes getting the cows up even easier by taking the calves out of the process. William set up a creep gate so calves can go in their own little pasture. Normally, he has ryegrass planted in it, but this year it was too wet. However, he does provide the calves with their own hay bale and troughs. When he needs to get the cows up to breed, he calls the calves in their lot with a bucket of feed. "Then I don't have to fool with them."

Even with all their planning and calm cattle, William admits it can be hard to get breeding chores done and get to work on time. "What is really a push is if we have a cow and a heifer both ready to breed the same morning," he says.

Still, they make their system work. With William doing the actual AI and Linda assisting, they manage an almost unbelievable first-service conception rate of around 80%. He will breed the second time if necessary and occasionally will breed three

Details, details, details

While the HeatWatch system helps William and Linda Rushton tremendously with checking heat, that by no means is the only part of their successful artificial insemination (AI) program.

"Nutrition is the key," William says. "We keep the cows and heifers in good shape." He estimates the females are in a body condition score (BCS) of 6 (1 being emaciated and 9 being obese).

"We like an easy-fleshing cow," he comments.

Cows graze stockpiled fescue during and after calving. In addition, the yearling heifers are supplemented with 3 to 4 pounds (lb.) per head per day of soy hull and corn gluten pellets. When the Rushtons move them to the breeding pastures, the cows and heifers get high-quality ryegrass baleage.

University of Florida animal scientist Cliff Lamb says the Rushtons have their priorities straight. "Nutrition is the most important factor in reproductive management," he emphasizes. "Good nutrition allows the cows to cycle quicker after calving, it allows heifers to reach puberty sooner, and it gives them the best chance of getting pregnant."

With cows, Lamb says it is tough to get them in a BCS of 6 during those last 30 days before breeding. He notes, "It is more important that they calve in a BCS of a 5 or 6." With heifers, he says, "Even more important than their BCS, they need to be on an increasing, rather than a decreasing, plane of nutrition."

Herd health is another component of the Rushton's reproductive management program. The females are vaccinated annually with Fort Dodge's Triangle 9, which includes protection against infectious bovine rhinotracheitis (IBR), bovine viral diarrhea (BVD) Types I and II, parainfluenza-3 virus (PI₃), bovine respiratory synctial virus (BRSV) and five strains of leptospirosis (lepto).

Their herd is also certified brucellosis-free and they are at Level 4 testing for Johne's disease.

"We're careful about what we bring in here, too," William says. "We only buy our cleanup bulls from Yon Family Farms. They match our level of herd health."

times, but says, "We normally get tired and put in the cleanup bull." The bull doesn't see much action. In 2009, 32 out of 34 calves were AI-sired. After nine years, the South Carolina Angus breeders are enjoying seeing the results of the HeatWatch system and AI. "Every female we have is AI-sired," William says. "We have really seen an improvement in our herd."

"Our calves are a lot more uniform," Linda says. "We have upgraded our herd tremendously."

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Stick it to 'em

Obviously, the high-tech transmitters in the HeatWatch system aren't going to do much good if they are on the ground instead of a cow. William and Linda Rushton make every effort to ensure that doesn't happen.

Here are their tips for getting the transmitters to stay on for the duration of the breeding season:

► Start with a dry cow.

That has been easier said than done for the South Carolina



couple this year because of an extremely wet winter. At times they ended up visually checking heat until they could get the transmitters on the cows and heifers.

- Put the cow or heifer in the chute and brush off the dirt and extra hair.
- Place the patch containing the transmitter on the cow in the area it will go, then draw around it with a crayon to mark the spot.
- Clip the hair off to the length of a quarter of an inch.
- Apply the adhesive to the cow and spread it evenly, then put on the patch.
- Apply a pour-on dewormer to keep down lice and the accompanying scratching and rubbing.

"If there is anything in the pasture for them to rub on, they will rub off the patches," Linda adds. "So we keep the tree limbs trimmed in the two pastures we use for breeding."

"We lose maybe one transmitter a year," William says. "If we do lose one, it is usually around the hay ring in the mud."

He adds, "The best thing is to get them bred on the first service, then you don't have to worry about it."

Left: The Rushtons write the cow number and transmitter number on the material that holds the transmitter.