10 tips for getting more cows pregnant

by Steve Faber

"GETTING COWS pregnant" sounds like a simple goal, but it's a lot tougher than we may like to admit. Every dairy I visit is looking for ways to increase pregnancies and reduce open cows, and is interested in any ideas I have.

Putting semen in the cow in the right place at the right time is only part of the process, and it isn't even the start of it. The challenge actually begins much earlier, and after conception has occurred hanging on to that pregnancy until a fetus takes hold and starts growing becomes another challenge.

Everything that happens at the dairy relates to pregnancies, and many dairy producers don't think about it. But every dairyman does know there's one thing that will keep him in business: pregnant cows. So isn't the fact of the matter that everything on the dairy ought to focus on what leads to pregnancies, since that's the only time we make any money?

1. Take herd health seriously.

Being healthy makes it easier for a cow to show heat, conceive, and carry a calf to term. Disease or infection, even if they're subclinical, makes things much tougher.

Do you have a good vaccination program? It's all about preventive medicine, which is no different from my health or your health. If you haven't got that in place then you're not going to have a healthy cow, you're not going to have a tract that's ready for semen, and you're not going to have a healthy calf.

This means you need to rely on a good veterinarian to prevent both clinical disease and subclinical disease as much as possible. We don't get pregnant cows just because we breed them. It's all part of a plan and all the ingredients have to be there. You can't make it happen if you don't have a healthy cow with a healthy tract.

2. Cow comfort counts.

What I think we really miss the boat on is we don't think enough like our cows do. "Would I want to live here? Does this dairy give me a clean and dry place to lay? Is it crowded? Am I cooled and do I have shade? How is the footing here; do I have to worry about slipping?

What about when cows are in the wash pen or the drip pen? When we have cows cranking out BTUs to beat the band because of all the high-energy feed we put through them to produce milk, when we put a bunch of them all together we really need to take cooling into serious consideration. If you put a cow in a holding pen for 30 minutes to an hour, how long does it take her body core to get hot? How long does it stay hot? It's fine when they're out in the corral and have lots of square feet of space and a little breeze, but when you put them in there they have none of it.

Let's not only think about cooling cows in the wash pen and drip pen, but also on the way out. If we can splash them with another gallon or two of water on the way out it really helps them feel refreshed and ready to take on the day.

And when do you breed cows? Is it just before they go to the parlor or just after they get back? You're going to lock them up for that, too, which is another stress we need to think about.

3. Reduce crowding and improve footing.

If you want cows to show fewer heats then overfill groups and make things sloppy, that will work every time.

The worst place to crowd is the closeup pen. How would you like to be a cow with a good size barrel that has to squeeze into a 5-in-10' panel stanchion? With just two feet of space it isn't going to happen. And if you've just had a calf and are a little bit on the "don't touch me" side, then you don't even want someone sliding in beside you in a 4-in-10' panel.

As far as I'm concerned, 70 or 80 percent capacity in both pre- and post-calving groups is exactly where we need to be. And I don't mean be at 70 percent most of the year and 130 percent sometimes because you have to. Keep those pens below capacity all the time. Keep cows feeling relaxed. Give them plenty of access to feed and water. How would you feel in this kind of environment versus a crowded one?

4. Watch body condition.

Thin cows don't show as many heats and aren't as receptive to semen as cows that are in good flesh. Dairying is a long-term investment business and this is one area where that investment is so important.

Mid-lactation is where you want to start putting weight back on the cow and getting her back into shape so when she drys off she's in the physical condition you need her to be for calving. If you don't do that the last three or four months of lactation then it isn't going to be there when she calves.

You aren't going to be able to take a cow that is thin and hasn't had proper nutrition along the way, that maybe had some calving problems and is under the metabolic stress of recovering and starting to milk again, and be able to get her pregnant right away.

Reproduction is one reason why not everyone has cows, because not everyone can pull all the pieces together and make it work. We can't take shortcuts and expect them to work and we can't constantly push, crowd and stress cows and still expect to get good conception.

Diets we feed these cows have to be correct, not only the right ingredients, but also the right balance of forage and grain. They need to have enough calories and also enough "chew." Is she eating right up until the day she calves like we want? She's going to switch diets, but if there's a residual ingredient in there that keeps her chewing and ruminating it makes the transition easier. Suddenly switching her from straw to candy is a bad idea because she'll go off feed and may have all kinds of metabolic problems afterward.

5. Make calving and the transition period easier.

Let's go back to cow comfort again. Do cows have a nice place to lie down? When they lie down to calve do they have other cows crowding around them? Do we need to have individual maternity pens? No. Would they be nice? Sure.

What a cow needs is a big enough area where she can go off and be by herself and nest a bit. But when she does will she have to lie in a wet spot or on concrete? When was the last time that area got fresh bedding? Do we maintain those pens daily so we keep the population of bugs down that are out there?

What we don't want is for cows to get mastitis. I've seen it in my own cows; mastitis will kill a pregnancy and it will prevent a pregnancy. As far as I'm concerned it's one of the worst things that can happen during this critical time. It can add two or three more cycles for sure, and in some cases you'll never get a pregnancy at all.

When those cows go off to be by themselves, is somebody watching to see if things proceed OK? Do they know what they're looking for? Do they know what to do if she needs help? I think those tips and protocols need to be written down and posted in the calving area so people know what to do.

One of the things I see is, too many dairies pull more calves than they need to. They see the process start and they want to get in there and speed it up. In doing so they can sometimes do more harm than good. Calving is a process; as long as things are proceeding let it happen. We're there to aid, not to do.

Does helping cows too much negtively affect them? Absolutely. Walking behind fresh cows I see it all time; cows that are torn up a little bit or have some metritis and drainage. They almost always take longer to breed back, and some never do.

6. Catch feet problems early.

The connection between hoof health and cows showing heat is certainly a no-brainer, but do we really spend enough time watching cows walk? A good hoof trimmer will notice when cows limp even just a little, but the dairyman usually won't see it.

Part of the problem is we have a tendency to say, "There are bigger things to worry about today", but in reality you need to catch those cows and get them straightened out early. If you wait until she's really limping then you've lost her. Do you think she's going show heat? No. I don't care if you chalk her and she's in raging heat; she's not going to ride and she's sure not going to let anybody ride her.

Clean and dry is a big, important part of this. How much time do cows spend in mud or manure or on wet surfaces? Does the herd have foot warts? How good is footing on the dairy? Does it have a footbath and is it really a footbath, or is it just a little manure lagoon they have to walk through?

7. Consider increasing voluntary waiting period.

I do a lot of analysis of breeding programs and records, and I know guys want to kind of push things. When they see a good heat at 50, 45 or even 40 days they really want to breed her. Walking by a really good heat is something you almost can't do; you want to stop and take another look.

Let's say at 45 days a cow has a nice heat and you say, "I've got to breed her." The fact is if she has a good heat now, the next one will be just as good as long as we don't mismanage her and let her get sick or we overcrowd her. By waiting, she flushes that uterus again and is that much better prepared to conceive. Another good thing by waiting is we get 20 more days of 80-pound milk on the other end of her lactation.

Let's also remember that it's one thing to get a cow bred, but is she going to keep that embryo? Passing up that first heat gives her 21 more days to put on body condition and strengthen her immune system that may help her hang on to that embryo after we breed her and get her pregnant.

I think a 70-day voluntary waiting period is optimum. Nowadays with the way our herds milk and the way they're managed, if you have all the ingredients for them to milk that's what they want to do. If you want to back up to 60 days I'm not going to argue a whole lot. But we have no business breeding cows in the 40 to 50 days range.

We have the tools today to make sure that cows see semen before 90 days. If you have any cows over 100 days that haven't seen semen then you missed the boat, not them. There's no reason to let them slip by that long.

8. Spend more time on quality heat detection.

You should always be looking for both primary and secondary signs of heat. Depending upon your herd size and protocols, there are several ways to do this. Visual observation always has to be one of them. It would be nice to just sit and watch cows for heat but let's face it, in today's busy world even if you had two extra guys who weren't assigned to anything else it still wouldn't happen.

In our part of the country there's a lot of chalking, and some people use heatmount detectors. The important thing is you must know what you're seeing and how to read them. I see everything from chalking every three days to cows that are so greased up you can't see any more hair and they'd have to be ridden 40 times to take it off.

Whether it's your vet or the A.I guys, use you best resource to help understand what the right amount of chalk is and what constitutes a rub-off. Some heifers and smaller cows are timid, so what wouldn't look like a rub-off for a big old cow does for them.

Then there are the secondary signs to watch for. Is the vulva swollen a little bit? Is there some moistness or maybe even a discharge? Is she rubbed-up over the top or on her flanks? In a free stall barn you'll see more of that, but not in good corral conditions. When you come along and chalk that tailhead does she flinch a little bit? If she does it tells you it's tender and someone has probably mounted her a few times.

All these little signs come into play. It's a little bit different for every herd and it's certainly different between breeds. There's a lot of sameness but there's a lot of subtle differences, too. Having your best breeding guys walk with your repro consultant when they go through your herd so they can get tips about what they're seeing is a really good idea. All of the A.I. companies have those people and as far as I know they're happy to help.

9. Use higher conception sires.

I hear guys talking about Sire Conception Rate a lot. Once they get this tool in their chest they use it all the time. Producers need to realize that SCRs are all over the map, from a high of about +5 down to about -10. We always say zero is about dot-on as far as breed average goes, and one point either way doesn't mean much. But 2s, 3s and 4s really start to be something.

It's interesting when young sires come out and guys start using them; word spreads like wildfire if one of them really starts settling cows. I have a lot of guys who won't use a bull at all if they're minus or even zero. Two or more is where they want them.

The main semen selection criteria for many dairies is price, but come on, you get what you pay for. Yes you sometimes get bargains, but if you have sire conception rate, good type traits, good milk, good health traits . . . every time you add another positive ingredient it's going to cost more.

The point is, have you ever had too many good cows and do you have 200 years to get to the herd you want? You don't have to go out and buy the very best bulls to improve your herd, but buying the cheapest ones is going to take you a long time to get anywhere. Type and milk are still the two most expensive traits that affect semen cost by far, but conception rate really isn't very expensive.

10. Take semen handling and hygiene more seriously.

I think I've seen about everything from slimy thaw boxes to boxes that look like quarries because of the limestone built up in them. A lot of guys are getting better, wearing gloves like milkers do and using tweezers to pull straws out of the jug and put in to thaw.

But I also see bare fingers that I know were just wiped off on coveralls after they were on a dirty cow or were checking a discharge. Those same fingers are going to go in the thaw water and get that stick of semen, handle it, and snip it open. Hopefully they're not going to get a bit of bacteria or manure on it, but they're sure taking a chance that I wouldn't.

Cleanliness has always prevented more problems than everything else will, and it's the simplest ingredient in the world. I've seen dirty A.I. guns and gun warmers so filthy that there must be stuff growing inside. A lot of this comes down to is the breeder overloaded with work? Does he have too much to do? If he's stressed and is trying to go too fast I can guarantee you the cow is not going to benefit.

Most guys who breed a lot of cows don't ever injure them, but stop and think about it: How many other people have been in her since she had a calf? Did she have any calving problems? Was she treated or palpated for anything? We know she was checked at least once by the vet to see if she's clean. We hope no one brought in any bugs or nicked something in there, because that's going to make it more difficult for her to get pregnant. How often do we really need to be in there anyway? During those first 10 days fresh we can take temperatures and do lots of visuals without being in there every day.

When you breed a cow are you clean? Is the vulva clean? Is the gun clean? Do you carry three guns or 10; how viable is the semen in that last one?

Conclusions:

Getting a cow pregnant isn't an event, it's a process. It's one that easily takes 100 days or more, from the dry pen to calving and transition, and through whatever your voluntary waiting period is until you identify her in heat and put semen in her.

Reproduction is one reason why not everyone has cows, because not everyone can pull all the pieces together and make it work. We can't take shortcuts and expect them to work and we can't constantly push, crowd and stress cows and still expect to get good conception.

We're always worried about the cow that's going to get too fat or get out there to 150 or even 250 days, but we have the tools to keep cows from getting there. Maybe if she hasn't seen semen by 90 days we give her a little prostaglandin and make it happen. At least then we'll know she'll see semen, because she sure as heck can't get pregnant if she doesn't see any.

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Sexed semen vs. regular: When does it pay to use it?

ACCORDING TO Victor Cabrera, assistant professor and extension specialist in dairy management at the University of Wisconsin-Madison, the answer tends to be an easy one and is often dependent upon just one huge herd performance aspect at each dairy – conception rate.

In his presentation at the Dairy Cattle Reproduction Council's annual meeting in November in Boise, Idaho, Cabrera said sexed semen use in heifers at high conception rate herds (83 percent and above) virtually always makes sense, but it tends to rarely be profitable in low (34 percent and less) conception rate herds.

Victor Cabrera

For herds with average conception rate the answer is less clear, and depends greatly upon two other factors: What is the current market value of heifers; and the price difference between conventional and sexed semen used at the dairy.

In general, though, using sexed semen for the first two breedings tends to be more profitable than conventional semen.

"The single most important factor in this decision is current or expected conception rate," said Cabrera, "and the biggest variable is the value of heifer calves. In situations where heifers are expensive and conception rate is high, five or more A.I. breedings with sexed semen is likely justified. But if heifers are inexpensive, especially if conception rate is low, it may not be wise to use sexed semen at all."

He added that there are other important factors that each dairy must also consider when making a sexed versus conventional decision, which he could not incorporate into his financial computer model. These include decreased biosecurity risks, the possibility of faster genetic progress, and herd expansion opportunities.