

SUMMER 2021

NEWS

ICE CREAM SOCIAL - AUGUST 19, 2021

Please join us as we CELEBRATE our clients that are a part of the Ag Vet family. Ice cream and desserts will be served as we gather at the grove for a fun evening. We look forward to seeing you.

Time: 6 PM to 9:30 PM

Location: Cowrageous Picnic Grove
535 Rexmont Road, Lebanon PA 17042

Dairy Producers Meeting - SAVE THE DATE

Thursday, February 24, 2022

Location: Shady Maple Banquet and Conference Center

**More information to come*

NEW SERVICE AVAILABLE

The harvesting of milk from our cattle happens at least twice daily, every day, on virtually all of our dairy farms. However, most of our clients are juggling an endless array of items, and the servicing of this equipment often falls near the bottom of their to-do list. Based on this, Ag Vets is excited to promote one of our newest service offerings. Moving forward, **our practice is prepared to perform whole herd SCC/mastitis investigative work including milk equipment diagnostics.** From assessing the milking routine, pulsator analysis, vacuum pressure diagnostics (pump to teat end), as well as the more traditional microbiology and husbandry consultations already offered, we are prepared to help you meet your milk quality goals. Further, we are happy to set up clients with routine equipment analysis to ensure your farm is getting the best out of its milking equipment as well as its personnel. We hope to provide a data-driven, unbiased approach that allows you to make the best decisions when consulting with your milking equipment dealers and service professionals.

Call us today if you are interested in obtaining more information.



VETERINARIANS

BRIAN REED, DVM, MBA
DOUG SCIPIONI, VMD
ERICK STOLTZFUS, DVM
W SCOTT TILLMAN, DVM

CINDY FOULKE, DVM
EDWARD FUHRMAN, DVM
JAMES SHISSLER, VMD
TERI COON, DVM
TIMOTHY TRAYER, DVM

SUPPORT TEAM

FLO ZIMMERMAN
COMMUNICATIONS

JERILYN HERRICK
FINANCIAL MANAGER

JUSTIN NOLT
OFFICE COORDINATOR

KIM BRENDLE
PHARMACY

NEVADA STOLTZFUS
PHARMACY AIDE



DECISION MAKING ON THE FARM

SCOTT TILLMAN, DVM

Dairy veterinarians are a quirky breed, and when you get a pile of us together, we can often empty a restaurant of all its patrons and embarrass our spouses with our sick sense of humor and “tall tales.” However, one more sensible thing that most of us share is our love of numbers. The dairy industry is full of metrics and financials, all changing by the day with the volatility of the commodity markets. Most of us thrive on this complexity, and quite honestly, it makes the on-farm decision making process much more fun.

One useful calculation that we make in conjunction with producers on a daily basis is if a treatment outcome is more beneficial than the animal's salvage value. Many times we are making these decisions based on a hunch. However, there is a formula that can be used effectively and isn't all that difficult to commit to memory. It is as follows:

$$\text{Favorable Outcome Value} = (\text{Salvage Value} + \text{Cost of Intervention}) / \text{Prob. Of Favorable Outcome}$$

Ultimately, if the replacement cost of the individual animal is less than the favorable outcome value, then we should probably cut our losses and cull the animal. However, if the cost of achieving a favorable outcome is less than that animal's replacement costs, then we should opt for the treatment.

Some examples:

Dairyman Swifty is dealing with an LDA in a first lactation cow. Before calling the vet, he first checked the latest Lancaster Farming periodical and saw the previous week's top lactating 2 year olds were going for \$1600 at New Holland. He was excited to get this heifer into milk, and her family lines are quite impressive, so he thinks she would be in the top portion of any dairy sale. If he were to ship her direct to slaughter, he would probably get \$700 in today's current market. On Swifty's farm, he typically has an 85% success rate with LDAs and assumes all costs (vet fees and treatment) will be in the \$400 range.

Doing the math:

$$\begin{aligned}\text{Favorable Outcome Value} &= (\$700 + \$400) / .85 \\ &= \$1300\end{aligned}$$

$$\text{Favorable Outcome Value } (\$1300) < \text{Replacement Value } (\$1600)$$

The math says we should call Ag Vets and get her cut as quickly as possible, and then follow up with medical interventions to get her over the hump.

Another example:

Dairyman McSquirrely's older bank barn dairy simply lacked adequate heifer facilities. As a result, once bred, they were pushed out to the neighbor's rented farm, and brought back as his records indicated. Unfortunately, one heifer fell through the cracks, and McSquirrely's neighbor called him after church on Sunday with a heifer, flat out in the meadow, with cleanings exposed. McSquirrely immediately shelved his pride, and called Ag Vets. Once an exam was performed, it was obvious this heifer has been trying for quite some time. The smell combined with the July heat drew in every fly within a half-mile radius. The calf was dead and bloated, and an attempt at a full fetotomy was going to be around \$600 with a very marginal to poor prognosis (20% chance of survival). Given her condition, humane euthanasia would be the only alternative. McSquirrely, remembering the above equation, quickly ran the numbers in his head

$$\begin{aligned}\text{Favorable Outcome} &= (\$0 + \$600) / .2 \\ &= \$3000\end{aligned}$$

$$\text{Favorable Outcome Value } (\$3000) > \text{Replacement Value (assume } \$1500)$$

Mr. McSquirrely, after doing the math, realized he could purchase almost 2 replacement springers at the same cost as trying to save this poor heifer. As a result, he opted for humane euthanasia

These examples, and the economic decision-making required, are neatly accounted for in this simple equation. Of course, not all decisions are as easy as the two above, and often prognosis is a best guess and case dependent. However, using this approach can help point us in the right direction, and moreso, help producers objectively deal with on-farm decisions.





PRODUCT SPOTLIGHT

Indications:

Intramammary use to reduce the frequency of existing infection and to prevent new infections with *Staphylococcus aureus* in dry cows.

Limitations:

Not to be used within 6 weeks of freshening. Not for use in lactating cows. Milk taken from animals within 96 hours (8 milkings) after calving must not be used for food. Animals infused with this drug must not be slaughtered for food within 60 days from the time of infusion nor within 96 hours after calving. Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Reach out to your herd veterinarian for more information to place an order.

SVD PRODUCTS EXCLUSIVE TO AG VET

SVD DAIRY IMPLANTS, SVD CALF & HEIFER IMPLANTS and SVD PINKEYE/MYCO BOVOCULI

Mastitis protection, pinkeye, calf and heifer prevention from pathogens like mycoplasma, we have a vaccine for you.

Take a moment to talk to your herd veterinarian to develop a farm-specific protocol so together we can grow a healthier tomorrow.



ADVANCES IN REPRODUCTION

JAMES SHISSLER, VMD

Last year I gave a short talk on some of the newer repro research to a dairy producer group, and wanted to share some of the info with everyone in this newsletter. In the past 10-15 years, we've seen many advancements in repro, from sync programs gaining popularity and increasing complexity, ultrasound allowing earlier and more accurate diagnosis of pregnancy and ovarian structures, activity monitors to improve heat detection, sexed semen, and genomic evaluation to allow for much faster genetic improvements. Genomic testing allows for the top 20% of heifers to be bred to top AI bulls, and the lowest 50% to be bred to beef semen or used for embryo recipients, and marketing excess heifers. One study showed about a 9% difference in pregnancy rate between the top one-third of herds and the bottom one-third resulted in an almost \$143/cow/year in net farm income. Top herds in the study also produced almost 7 pounds more milk/cow/day than the bottom herds.

So what strategies may we use to improve pregnancy rate, the main indicator of reproductive efficiency? We'd like to achieve a pregnancy rate of greater than 25% for the best profitability. Your vet at herd check is happy to evaluate your farm records or current DHIA test and monitor the pregnancy rate.

Presynchronization programs:

Goal is to improve pregnancy rate for first services. Various programs exist, but the most common are: -Presynch (2 PG shots 14 days apart, then 11-14 days to start ovsynch).

-Double Ovsynch (like it sounds, an ovsynch is done prior to the ovsynch used to breed, with 7 days in between).

-G6G, kind of like a shorter double ovsynch: (PG shot, 2 days later GnRH shot, then 6 days later an Ovsynch is started).

The reason these increase conception rate is by improving the chances of having a CL for ovsynch, and having the cow in a more ideal part of her estrous cycle. This actually also reduces potential for twins by having a CL when starting ovsynch.

Evaluate with your vet on your DHIA records if your first service conception rate is between 40-50% ideally. If you are employing a presynchronization strategy and aren't achieving that, then evaluate cow body condition, signs of anestrus/anovular at herd check, cows not cleaned up with pyometras/metritis. Also reducing heat stress and overcrowding (particularly prefresh and recently fresh cows), ketosis (negative energy balance)/metabolic diseases, and improving forage quality/nutrition, and reducing mycotoxins/molds with binders. Mineral/vitamin status is also very important for health and repro.

Also pushing back days to first service closer to 80-90 days in milk can sometimes improve conception rate if not achieving >40% CR on 1st services at 60-70 days in milk. This is especially helpful in 1st calf heifers/primiparous according to research (8.5% increase in CR). However, make sure ALL cows are receiving their first service by 90 days in milk though for good reproductive efficiency though, a benchmark frequently evaluated by experts. Days open beyond 150 days in milk becomes more costly, potentially losing \$3-5 per day for each additional day open.

Additional PGF treatment:

An additional PG shot during an Ovsynch resulted in a 10-15% better luteal regression of the CL on the ovary, increasing the conception rate of Ovsynch by 3-5%. This additional second PG shot is given 12-24 hours after the first. So Ovsynch starts with a GnRH, wait 7 days, give a PG shot, then a second PG shot in 12-24 hours, then the last GnRH (56 hours after the first PG, then breed AI 12-16 hours after).

Another option if adding the extra PG shot is too intimidating, a similar conception rate boost may also be obtained by increasing the PG shot by 50%. This would mean 7.5 cc of Lutalyse rather than 5 cc, or 3 cc of Estrumate rather than 2 cc.

Second and subsequent services:

Next would be what to do now that we found an open cow at herd check, what methods will get her bred back the quickest, or with the best conception rate? I've seen some herds repeat a G6G type of protocol, but that adds 8 days and 2 additional shots to the Ovsynch. It's a viable option though.

With ultrasound greatly improving ovarian structure diagnosis, we can easily distinguish which cows have a good CL on the ovary (2cm or greater), vs. cows that have no CL, very small CL < 1.5 cm, a follicle with no tone, or cyst. Other cows may have just gone through a heat (ovulatory depression or a CH may be found), or just a cow that is NS (no significant structures). Just with an Ovsynch on open cows, a cow with no CL gets approximately 17% conception rate, while a cow with a CL gets around 35% conception rate. The CL almost doubles the conception rate! (50% reduction in CR for cows with no CL at open diagnosis).

Plus ovsynch starting with no CL increases double ovulations, increasing the potential for twins.

The strategy for cows with a 2cm+ CL is to either start ovsynch, or a "short synch" which skips the first GnRH and 7 days, and goes right to the PG shot. (Some herds may also do what is called "Resynch," where a GnRH is given to all cows 7 days prior to herd check). Ovsynch or "Short Synch" are both shown to produce similar conception rates (33-35%) on cows with a good CL in more recent studies.

So cows that don't have a good CL, what can we do to improve the conception rate on those? Well, 2 strategies have been researched that improve the conception rate to the 35% range. One is using a CIDR (progesterone device inserted vaginally) during the ovsynch protocol or "CIDR synch." This is started at open diagnosis, and a GnRH is given, a CIDR inserted at the same time, then 7 days later the CIDR pulled and PG shot given, then follow the rest of the normal ovsynch protocol, or use an additional PG shot as just discussed above. For those producers that aren't as interested in using CIDR's, a second strategy for those cows with no CL or very small CL would be an additional, 2nd GnRH shot, given the day of herd check, then waiting about 7 days to start the full Ovsynch protocol. So GnRH, 7 days, GnRH, 7 days, PG, 56 hours, GnRH, then breed AI in 12-16 hours. The advantage is no CIDR use and cost, but the disadvantage is increasing an additional 7 days.

Just to summarize: Good CL=short synch or ovsynch, or No CL or small CL=CIDR synch or Pre GnRH Ovsynch. All of these protocols should receive close to 35% conception rate.

You may have heard the mantra, breed early and often. Staying at the front end of the milking curve means more efficient milk production. Optimize pregnancy rate by implementing a high-conception rate synchronization program followed by an intensive heat detection program to identify open cows for prompt re-insemination.



Our practice continues to place an emphasis on staying at the forefront of surgical techniques and offerings for our clientele.

From the basics of humane castration and dehorning, abomasal displacement correction, and laceration repair to cesarean sections and surgeries of the cecum, we continue to provide optimal care conveniently on the farm.

We are constantly evaluating the latest research and implementing it in our day-to-day work, all with an emphasis on improved pain management, surgical sterility, and ultimately, producer profitability.



Rest assured you can trust our team to provide top of the line surgical services for your livestock.



137 E 28th Division Highway
Lititz, PA 17543

FROM THE OFFICE

All of us in the office would like to extend our gratitude and thanks for your business. We enjoy speaking with you and meeting some of you from time to time when you stop at the office or we see you at an event.

Just a few updates from the office that we wanted to make you aware of. Nevada Stoltzfus, our pharmacy aide is now crossed trained for the communications department. She will cover the phones for Justin Nolt when he is out of the office. Flo Zimmerman continues to work part-time and is in the office until 1pm.

A service you may not be aware of is that we offer **text messages (office contact below) for NON-EMERGENT items** (veterinarian arrival times, appointment reminders etc). If you have texting capabilities on your mobile device and would like to sign up for this service, please let us know the next time you call into our office. We included our TEXT ONLY contact information below. **Please continue to use 717-625-4212 to reach us by phone.**

We also have **paperless billing available**. Feel free to share your email address with us and we would be happy to add this service to your account.

As always our Veterinarians and support staff strive to provide you, your herd and your animals with exceptional customer service. If you have a suggestion for us to help that goal, please don't hesitate to let us know or your herd veterinarian.

Main Office: 717-384-5177 TEXT ONLY

Pharmacy: 717-456-0504 TEXT ONLY

Standard Service Hours:

7 AM -5 PM, M-F

7 AM - 12 PM, SAT

**Call charges dependent upon time call is received*

Extended Service/Emergency:

24 hours/7 days a week

Typical Business Office Hours: M-F 7 AM to 5 PM

