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MAY 2022 NEWSLETTER

Milk Culture Sampling

If our milk lab gets poor samples, they will report poor results. Cleaning a teat end for milk culture sampling is a lot more time consuming and it takes a lot more effort than getting a teat prepped to milk. The teat end needs to be almost sterile. It needs to be clean, and the end wiped with alcohol and cotton. The cotton should look clean after the last wipe or wipe it again. Then strip out two strips of milk before you put a single strip in the culture tube. And please, don't touch the teat end or you need to get the alcohol and cotton back out. You should wear gloves.



Poor milk samples will lead to poor test results. The teat end needs to be almost sterile.

Take home points:

- The teat end needs to be almost sterile.
- ✓ Two strips before the sample is taken.
- We are not a cheese plant, we only use 1 ml of milk, just enough to dip a tiny loop in. You don't need a second strip. Every extra strip causes dirt and dust from up on the udder to drift down. Some days we dump more milk down the lab drain then water from the restrooms.
- If you don't get 10 to 20 percent of your samples back as no growth, you are probably collecting the sample wrong, and we are culturing contamination.



Lessons on Injections

Dr. Ralph Stowell recently held a livestock education program in Waupun on animal health to over 100 4-H and FFA students from throughout the county. The program included a lesson on giving intramuscular and subcutaneous injections. The students practiced giving injections on bananas and oranges following the presentation. The youth are all livestock project members and will show either a pig, lamb, or steer at their county fair. They use the meeting as a requirement to show and potentially sell at the fair auction.

Adjust Facilities with the Season

Hot weather is just around the corner. Take a rainy day and make sure the sprinkler system pipes are flushed out and the sprinkler heads function.

Perhaps clean fan blades and make sure the calves will be cool on those first really hot days. Consider putting hutches up on blocks and new gravel under the hutches.

We're going to have some wild temperature swings so make sure the curtains work well and that employees, especially employees you hired during the winter months, know how and when to operate the curtains.

Let's not have any pneumonia disasters this spring from, "We forgot to move the curtains."

Asian Longhorned Tick new to North America

Coming to a pasture or woodlot near you is the Asian Longhorned Tick. This is a new tick to North America and was first reported in the United States in 2017. This particular tick has a unique feature. The female can lay eggs without a male to fertilize, and the eggs will hatch and repeat the cycle. So, it only takes a single tick to create a population in a new location.

The tick is important for two reasons. First, because it reproduces without a male, it can multiply rapidly. Beef calves on pasture can get significantly infected and stop growing. Second, the tick carries a disease *T Orientalis*. I know you don't care about the disease, but it causes rupture of blood cells in the infected animal and can create poor doing animals and death. According to the USDA, a cow may have a 25 % decrease in milk once becoming a host.

It is similar to anaplasmosis which we didn't see until the last decade when infected animals were brought into our dairy herds from western grower operations. The use of common needles transferred that disease. The *T Orientalis* disease doesn't need common needles, it uses the tick.

There are 3 sizes as the tick matures. It's not in Wisconsin, but as of 2021 it was found in 17 states including Missouri and Ohio. Winters don't kill the tick.







The Asian Longhorned Tick is pictured above. At left it's full of blood.

Notes: Dehydration, Vaccine, Scours

A recent guest speaker had some great information to share. Here are a few highlights from what was said.

- The intestinal track lining is the largest immune organ in the body. This makes sense because the gut lining is a constant border battle between bacteria and an animal's blood stream. An unhealthy gut lining, or scours, is such a drain on the immune system that pneumonia often ensues after a scours outbreak.
- Dehydration is bad news for gut and respiratory immunity. The mucus layer in the gut and inside the trachea and bronchi of the lungs is actively produced by the body and acts as a wall to bacterial invasion. But as the body becomes dehydrated, this mucus wall quits working and disease risk increases. Make sure animals have access to plenty of fresh water, including young calves.
- Vaccine thoughts: Cattle, and people for that matter, must be healthy in order for vaccines to work. Even dehydration can inhibit the effectiveness of a vaccine. Don't vaccinate in extreme heat.
- There are several different types of vaccines, and your veterinarian can discuss options but remember that some vaccines transfer immunity to baby calves. Although, giving mom a nasal vaccine doesn't protect the baby calf.

Dr. Al on Bank Artificial Intelligence

Last month I wrote a check to pay a bill. When I did the month end account reconciliation, the check had cleared the bank. The vender sent an updated bill the following month that we hadn't paid. I did some digging, didn't make sense but this is what happened. I sent the check to the wrong vendor.

That vendor deposited the check with the wrong name in their bank. Then their bank sent it to our bank who happily took the money out of our account. I'm not sure who is responsible for the error, I just straightened it out with the vendors and left the banks out of it. But everything is automated and evidently the artificial intelligence at the banks doesn't pay any attention to the name on the check. There are no humans interacting with bank accounts anymore.