



In This Issue

- From the President
- Introduction to Herd Health Surveillance
- Johne's Disease in Guernsey Goats - Guernsey Breeder Spotlight-Sarah Jane Owens, DVM
- Golden Plans
- Golden Tidbits
- Golden Resources

From the President

Now that we are busy raising kids and determining their outcomes, it is also the time for very important decisions regarding GGBOA. Our election is in progress and this will determine what the future holds for the Guernsey goats in the US. Looking at the Production Programs that the ADGA offers, THE most important thing for Guernsey goat owners is to understand they must be involved in DHI and Linear Appraisal for the Guernsey's to get data into the system so we can take advantage of these programs. Yesterday, the Wisconsin Dairy Goat Association offered a webinar regarding the Production Programs that was presented by Rebekah Clarke. She went into detail about how the systems are set up, how they are determined and what they mean. An incredible program. The one thing that she stressed over and over again is that the more participants involved, the more reliable the data will be. It was "Performance Programs 101" and it was recorded, but not sure how it will be made available and to whom, but can check it out. I would encourage everyone to look at it as it explains and clarifies much.

There is so much that we need to educate ourselves about regarding ADGA – from the Performance Programs to showing the Guernsey's and what all is

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Information Resources

The Goat Library –

<http://www.luresext.edu/?q=Library>
Anything you want to know about goats is here!

<http://www.luresext.edu/?q=Training>
Web training for goat folks!

British Goat Society
www.britishgoatsociety.com

American Consortium for Small Ruminant Parasite Control
www.wormx.info

Maryland Small Ruminant Page
www.sheepandgoat.com

ADGA
www.adga.org

entailed. I would encourage those who have breeds that they have already been showing to help mentor those of us who are uneducated about it! I know I have a lot to learn! I am fascinated by the whole process and am eager to put things into action and I trust that there are many in the same situation. So let's communicate so we can demonstrate to the goat world that we are serious and we can do the job that is necessary!



Gloria B. Andrews, DVM

WHY TEST MY GOATS?

The future of your herd and its health depends on staying healthy! Right? Even if you have acquired your Guernsey's in a perfect manner and have seen that they all came from herds that tested negative for all the diseases that we are concerned about, it is possible for diseases to enter even closed herds.

If you are a goat owner and do not routinely test your herd for diseases, how can you state that they are healthy? The diseases that we test for are caused by microorganisms that cannot be seen. It is called "herd health surveillance" because if you do not test, you do not know. Even with closed herds, diseases can find their way to your property via "fomites" – being carried in on boots, shoes, clothing or other articles. Herd testing at least annually is a necessity to maintain a healthy herd.

GOAT DISEASES OF CONCERN

1. CAE (Caprine Arthritis/Encephalitis)
2. Johne's Disease
3. CL (Caseous Lymphadenitis)
4. Brucellosis

Contact Us

<http://www.guernseygoats.org>

Follow Guernseys on FaceBook

GGBOA Members [Official]

GGBOA Public

Service and Product Resources

Select Genetics – MVE semen tanks

www.sementanks.com

Blue Mountain Genetics

Semen collection and sales

www.bluemtngenetics.com

Caprine Supply

www.caprinesupply.com/

Premier 1 Supplies

www.premier1supplies.com

www.biogenics.ltd.com

All information and supplies

www.usplastic.com

A wide selection on plastic jugs, etc

5. Tuberculosis
6. Mycoplasma
7. Scrapie

For beginning this topic, because Johne's Disease is something that Guernsey breeders are dealing with, Dr. Sarah Jane Owens, who is also a new Guernsey goat breeder, has offered an article about Johne's Disease and why it should be taken seriously.

JOHNES DISEASE IN GUERNSEY GOATS

Even though I'm a veterinarian, I bought Johne's disease.

I was so excited about my starter herd of Guernsey goats, and had an opportunity to buy multiple beautiful, well-bred adults. I looked over pedigrees and pictures of udders, asked about health and disease testing, arranged my quarantine area on a neighbor's property, and got in the car for a road trip to pick them up. The trip was very long, but the farm, the owner, and the goats were just lovely – a perfect genetic complement to mine, the product of years of careful breeding. We drove straight back through the night with our precious cargo of 8. The day we arrived home, I drew blood to retest for CAE, CL, and Johne's, then spent the week getting to know and love each of them and anticipating merging with our other goats in a big happy family. Then the bomb dropped – one was a strong positive for Johne's. I was so shocked - were we going to have to kill these beautiful goats? I couldn't even imagine – I was in tears, and in a total panic dedicated hours and weeks and months to fixing the problem and saving them as best I could.

I had failed to ask to actually see disease testing results, and verify that they were a properly done test from a reputable lab. The owner was knowledgeable, experienced, and caring, and I took that to mean that she had done the correct disease control measures. Everyone, including the previous owner, was devastated.

LINKS FOR JOHNES DISEASE IN GUERNSEY GOATS

Johnes.org – U. of Wisconsin site, a global hub of Johnes's research

<https://johnes.org/presentations-and-mini-lectures/>

<https://johnes.org/general-information/articles-and-brochures/goats-sheep/> *note that the testing strategy at the end of the booklet is out of date*

Great Australian government goat health plan including Johnes's, with info on kidding strategies

<https://www.animalhealthaustralia.com.au/what-we-do/endemic-disease/goat-health/>

Scottish action plan

<https://www.actionjohnesuk.org/the-delivery-team/>

Canadian site focusing on cattle

<http://www.johnes.ca/index.htm>

New Zealand site – cattle, sheep, and deer

<https://www.jdrc.co.nz/>



3.5-year-old Verandas Jazzyprimrose (Posey) was euthanized, after confirming with a fecal PCR and a second ELISA test that she was heavily shedding the organism, *Mycobacterium avium* subspecies *paratuberculosis* (MAP). It was very hard to do, as she had absolutely no signs and

was the picture of health. Even worse, the darling three-month-old Verandas Malva was euthanized. She had been nursing off Posey in the trailer, which had become dirty during our rushed trip home. Posey's udder was contaminated with manure and Malva had swallowed a



big dose of MAP at the most susceptible age. We also realized that the dam of another of our goats had been showing symptoms of severe wasting disease. So, they had all been exposed to at least two adults shedding heavily in the same yard. It's a logistical nightmare,

but we are keeping them on a property a quarter mile away with careful sanitation, age separation, and frequent testing. The Guernsey Goat community now knows there is widespread Johnes's in the US collective herd, including the Swind GGs. Swind is probably not the only source – it's a common though sneaky disease and most herds are at risk.



I'D LIKE TO EMPHASIZE THAT WE SHOULD LOOK AHEAD TO FIXING THE SITUATION, NO ONE IS AT FAULT, there is a lot of misleading information out there and even the most dedicated breeder with the best of intentions can be tricked by Johnes's.

I stand as an example. AND IT IS DEFINITELY POSSIBLE TO CLEAN THINGS UP MOVING FORWARD. There's no way to ensure transparency in any animal sale in any species, and it's mostly up to the future buyers, new herds and up breeding to make the difference.

In the US Johne's is entrenched in the dairy industry, there is no national eradication movement, and since it only clinically affects maybe 30% of the animals exposed, many producers just live with the production losses. A 2007 USDA study showed that 90% of dairy cow herds have it. On sheep and goat farms, surveys in various countries range from 3% to 83% of herds infected (the latter being Ontario in 2016).

The big difference with Guernsey goats, however, is that

- 1) we don't have replacement animals to let disease take over the current ones, and
- 2) any one farm with Johne's selling animals can affect the entire national herd.

We are already in a genetic bottleneck and if we lose enough of the hard-won genes we have, the breed could easily disappear in the US.

For brevity, I'll include reliable links at the end for educating yourselves further on the disease, PLEASE don't go to the goat internet forums or Facebook to do so!! There is very little hard science pertaining to Johne's in goats, most of what's on the internet is specific to cows, and may or may not be accurate for small ruminants. NB **** BEWARE that many labs, websites, and universities have not updated their websites or staff – I've gotten bits of outdated information from some of the most respected and current institutions this year.

The rest of this article I'll dedicate to practical information that's been helpful to me in managing the threat to my herd.

PREVENTION: Don't just ask about disease testing, ask to see the ACTUAL OFFICIAL DATED LAB RESULTS FOR THE HERD, NOT JUST THE INDIVIDUAL. Set eyes on the animal before purchasing, be blunt and ask about any goats that are unwell in the herd. Quarantine. Trading goats around and buying indiscriminately MUST NOT happen in this breed in particular.

Cows are not goats – Cows usually get diarrhea, goats do not. Goats are even more likely to shed MAP heavily before they show any symptoms.

Manure control – Especially in kidding and feeding areas. There are lots of resources out there for how to protect kids and feed from manure contamination, including fantastic design ideas from the commercial sheep and goat sheds/barns in countries where small ruminants are economically important, especially the UK. I love the floor grids where manure falls right through. My own budget version is rubber mats on top of raised pallets, a 'litterbox' of pine bedding pellets for urination, and moveable Coolaroo dog hammocks for lounging. The rubber mats are easy to sweep clean, I sweep right into the pellet litterbox where they never eat, and remove it all every couple of days. The Coolaroo beds drain through the mesh and are easily hosed down.

Kidding pens, colostrum sanitation, and age separation in larger groups are very useful tools for herd health. Pasteurization of colostrum for CAE isn't enough for MAP.

DIAGNOSIS: Why is my goat skinny? Because she is lactating heavily? Has parasites? CAE? CL? Low social status? Johne's? Don't assume it's any single one of the above – be responsible to the rest of your animals and check for ALL of the above. One compromise to your goat predisposes it to the rest of the problems and they frequently overlap.

The most updated information on Johne's testing: Fecal PCR is the best way to screen your herd annually, or high-risk animals every 6 months. PCR's have negligible false positives, are more sensitive, and can indicate how advanced an infection is.

Infected animals can shed MAP in their manure off and on for many years before showing any signs of the illness. So negative tests are only a snapshot of how many animals are shedding, not a definitive way to tell if or how much of your herd is infected.

Even if you've had a closed herd and all negatives for years, it can still pop up in a hidden carrier. Bacteria can be tracked in on shoes or equipment from other farms. For larger herds, follow selective testing protocol - aim for at least the oldest 50%, or even better all over 2 or 3 years old. If you have an open herd or exposure risk, start testing at 1 years old. To save money, some labs will permit you to submit samples from up to 5 animals that get pooled together for a single PCR. Or to get a more accurate result on a single animal, you can collect samples on three different days and ask the lab to pool them.

Here is a website link to the USDA list of approved labs. They are all equally good, but vary in whether they will pool samples or require vet referral.

https://www.aphis.usda.gov/animal_health/lab_info_services/downloads/ApprovedLabs_Johne_organism.pdf

A lot of herd health programs advocate the ELISA blood test for screening. These are geared towards the dairy industry, based on the probability that if Johne's is present in a herd over 100, at least one will test positive. ELISA's are not as appropriate for genetically valuable individuals, like all of our Guernsey's in their tiny gene pool.

I HAVE A POSITIVE ANIMAL – WHAT DO I DO????

There is no cure, but there are plans and guidance available, from sources sympathetic about the devastation of finding this infection.

Any does that come up positive should be culled or permanently quarantined along with their most recent offspring (if dam raised)

Any bucks that come up positive can be quarantined and still used for live cover, as long as you don't let any manure contamination happen.

If he or she is a strong positive, euthanasia is the best option.

Herd health is hard. But a death of slow starvation from Johnes is harder. Quarantining and keeping them alive until symptoms affect quality of life is one possibility, there are a lot of gut health theories and

highly digestible foods out there that may slow down the progression. But have pity and don't let it go too far. Advanced cases also have a high probability of passing the infection to offspring in utero, so cull or quarantine their most recent offspring even if not dam raised.

Exposed animals: If possible, keep quarantined so there is absolutely no manure contamination outside of their enclosure. Test every six months.

We don't know exactly how much bacteria a goat has to ingest, but we do know the following:

they are most susceptible when young but can still get infected and shed MAP at any age

A higher dose of MAP is worse, but even a very tiny amount can be infective

My own strategy – I'm breeding my young, exposed does at 12 months, earlier than my other ones, when there is little chance of trans placental transmission. They were born in the spring, so I'm using an intravaginal CIDR to induce estrus out of season. Unfortunately, you're lucky to get 50% fertility with these, and Guernsey's seem to be even more resistant. I'm inducing the does with lutalyse so I can be present to remove the kids instantly and give them colostrum from test-negative does from a clean group. I am hoping to get 2 sets of kids before they are 2.5 years old, with the caveat that if one comes up positive, that doe and its previous offspring will need to be euthanized. I hope this also gives them a chance at a bit of life and family and love even if they do ultimately succumb. I've run this plan by several experts in John's management, and they've vetted it as having a high chance of success if done carefully. Some of our experienced producers have commented that Guernsey's suffer when pregnant at less than 1 year of age, and the kids don't thrive. Even in a salvage situation waiting until 12 months is ideal.

This link has excellent information about 'snatch rearing' kids for disease control, especially how to sanitize colostrum:

https://animalhealthaustralia.com.au/wp-content/uploads/2015/09/AHA04326_Technical-notes_FINAL_PRINT_18072016.pdf

Embryo transfer is another possibility. I've even looked into cloning! But it currently costs \$10-15,000 since livestock is more difficult to clone than dogs and cats.

Cleaning up – The bacteria don't travel or replicate outside of the animal, but they can last a year in the environment. In barns, **Most disinfectants don't work in the presence of organic matter so the most important is soap and a pressure sprayer to get rid of manure. Runoff must be controlled. You can use any tuberculocidal disinfectant - phenolic disinfectants with a detergent are the best, but are pretty toxic. It needs to contact the organism for 10 minutes to kill it, after 10 minutes more passes with the cleaner are more important than even longer contact time.

LINKS

Johne.org – U. of Wisconsin site, a global hub of Johne's research

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Canadian site focusing on cattle

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New Zealand site – cattle, sheep, and deer

<https://www.jdrc.co.nz/>



Do you know of a unique resource that would be helpful for goat owners? Email the information to teresa@dailyblessingsfarm.com



Golden Plans

The ADGA National Show

Louisville, Kentucky July 17-23, 2021

We are so excited to be able to participate and have exhibition Guernsey's at the ADGA National Show! Sara Dzimianski has agreed to take a representation of her Guernsey goats so all the exhibitors at the show can meet them and learn about them. GGBOA will also be sponsoring portions of the Production Awards. We are blessed to be involved. A great start!

Thank you, Sara! We look forward to watching videos of the event!

The ADGA National Convention

Tucson, Arizona November 8-14, 2021

We encourage any and all to plan to be involved. Whether that be creating goat things for donation to the Silent Auction Fundraiser that we have, or being there in person to attend classes or help "man" the booth. It is never too early to start planning. And as before, let's have a representation of all the wonderful Guernsey milk products that we can get there for the competition!

Golden Tidbits

Tidbit- A small and particularly interesting bit of information - From mentalfloss.com!

ACCORDING TO LEGEND, GOATS DISCOVERED COFFEE. According to an Ethiopian legend, the stimulating properties of coffee were discovered when a goat herder found his flock frolicking with extra verve after consuming the red berries of the coffee shrub. The plant had the same energizing effect on the herder himself—and with that, the tradition of drinking coffee was (supposedly) born.