



ANDDA

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Pregnancy Toxemia in the Nigerian Dwarf

By Clare M. Staveley, DVM—[Curbstone Valley Farm](#)

What is Pregnancy Toxemia?

Toxemia, also known as pregnancy ketosis, is a potentially life threatening condition of the gravid dairy doe. In the majority of cases it is a management disease, and occurs when a doe with multiple fetuses has insufficient caloric intake during late pregnancy, during the period of rapid fetal growth. Although Nigerian Dwarfs are well adapted to multiple births, they are not immune to toxemia.

The gravid uterus occupies significant space in the abdomen during late gestation, and restricts the doe's ability to physically consume enough feed to support both her and the fetuses. Body fat reserves are mobilized, which may overwhelm the liver, resulting in hepatic lipidosis (fatty liver disease), and further limit the ability of the liver to produce enough energy in the form of glucose. This downward spiral accelerates as fetal demand for energy grows, putting the doe's energetic balance further behind.

Although toxemia may appear to occur suddenly, it is typically a progressive disease that develops over a period of days to weeks, that may go undetected by the producer until the doe is obviously ill. Learning to recognize the early subtle signs of the disease is essential, if intervention is to be successful. The more advanced pregnancy toxemia is at the time of diagnosis, the more difficult it is to reverse and treat.

Prevention

In most cases it is far easier to prevent toxemia, than to treat it, assuming the condition is not complicated by underlying disease or injury.

Many potential risk factors can be identified and addressed BEFORE breeding, and include evaluating body condition score (either over-conditioned or under-conditioned), age, dental problems, and parasite load. Post breeding, the number of fetuses present, and environmental stressors during late pregnancy, may also increase toxemia risk.

Prior to breeding, it is important to assess each doe individually. How old is the doe? Although many does can be bred, and do well, into advanced age, any doe over the age of 8 years should be considered to be at increased potential risk for pregnancy complications, including toxemia.

It is important to assess overall body condition score (BCS) of the doe prior to breeding¹. Most cases of toxemia occur in does that

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Meeting Topic—Performance Programs

By Cade Cockburn, ANDDA Youth Ambassador, [Cade's lil Farm](#)

Who would have ever thought that stars, V's, and E's meant so much? If you're a dairy goat breeder, you need to know why!

Each and every one of us strive each year to better our herd and bring about the improvements that are needed. Performance programs are what aid us, as breeders, in making the right decisions.

Let's start off with the show ring. This is just one of three main performance programs that ADGA and AGS offer as a way to showcase your animals and get feedback on your herd from licensed judges. Attending and exhibiting at shows is an excellent way to compare your animals to other competitive herds in the country, and really get a feel for what is winning, what's not, and what traits your herd may benefit from in future breeding decisions. It's also fun when you are able to walk away with that coveted yellow and black ribbon!

Linear appraisal is another program that both registries offer that is an excellent tool at a breeder's disposal. Each and every one of us should take advantage of it! Instead of comparing your goats to other animals in the show ring, a licensed ADGA appraiser or AGS Classifier will compare each of your goat's structural and linear traits to an ideal based on their respective scorecard. This is a way to really get an idea of specific traits that your herd is strong in, and traits that it's lacking in. Though it is always nice to get that "Excellent" score, the point of linear appraisal is not to market your herd, but to help you gain an understanding of the strengths and weaknesses of your herd in order to make better and well informed breeding decisions.

The last of the three main performance programs that ADGA and AGS offer is milk testing. This can be done either through DHI's (Dairy Herd Improvement) 305 Day Test or one day milk testing. Milk testing, especially DHI, is how breeders can separate their strong producers from the weak. Collecting this data allows goat breeders to get a feel for not only how much milk their own goats produce, but how goats in other herds are producing. Anybody can say that their animal is productive, but the data collected through DHI will prove that. Using DHI ultimately helps breeders make decisions that will help their herd to be more efficient dairy animals.

All in all, performance programs such as showing, linear appraisal, and DHI are excellent tools that a breeder can use to better their herd. Whether it's getting an outside opinion on your animals, collecting that data, or seeing how your goats compare to others around the nation, performance programs are useful resources that each and every one of us should take advantage of in order to improve our herds!

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are bred with a BCS 4. Nigerians are frequently over-managed. Obese does are at increased risk of both toxemia and dystocia. Obesity can complicate severe toxemia management in late gestation, and also increases the risk of dystocia. If the doe is overweight, lose that weight before breeding.

Never diet a pregnant doe! While a target body condition score (BCS) of 3-3.5 is generally recommended prior to breeding, the most important factor during pregnancy is to try to maintain that condition throughout pregnancy.

When assessing does for breeding, first determine if the doe has any chronic physical condition that may interfere with the ability to consume enough feed during pregnancy. This could be a subtle lameness, of any cause, that may prevent a doe from standing at a hay feeder, or in pasture, for extended periods.

Does the doe have unexplained weight loss that needs to be investigated and corrected prior to breeding? Has a fecal been done recently to assess parasite burden?

Dental health, especially in aged does, is frequently overlooked. Missing, fractured, abscessed, or overgrown teeth can all limit feed intake during pregnancy. As a thorough dental examination requires sedation, this should be evaluated before the doe is pregnant. Observe your doe when she eats. Does the doe pick at her feed, or consume a mouthful of feed, and then drop it before chewing? Does she chew for extended periods of time, and drop cud? Does she maintain good rumen fill?

Can the doe get enough exercise during pregnancy? Late gestation does must be encouraged to exercise. Strategic placement of waterers and feeders can help to encourage does to move around. Even if a doe is confined to a kidding or hospital stall just prior to freshening, short walks 2-3 times a day should still be encouraged.

Clinical Signs

Early toxemia signs can be vague and difficult to detect. A healthy doe should maintain a good level of energy and activity throughout her pregnancy. Toxemic does feel ill. If you grain your does late in pregnancy, sudden refusal of grain is a common early sign. Sluggishness, reluctance to stand or move around, withdrawing from the herd, even a long slow Stage I labor may all be indications that a doe is toxemic. If you are questioning if a doe is toxemic, that is the time to investigate and test, because advanced disease can result in recumbency, blindness, tremors, coma and death.

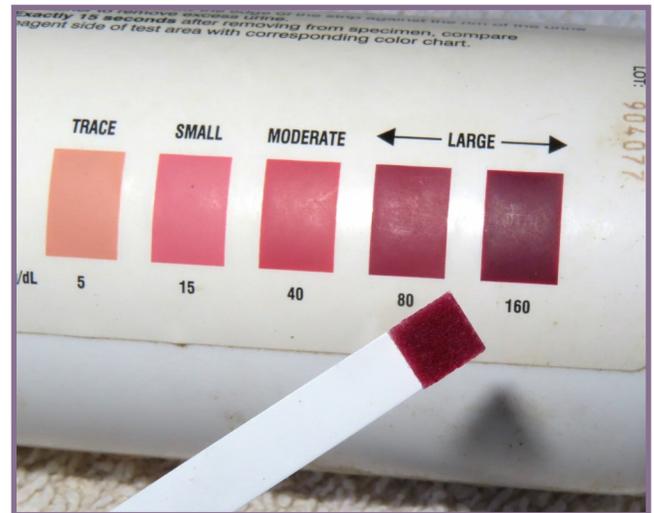
Diagnosis

The first line practical screening tool that we can all use in the barn is a ketone urine dipstick, available at all pharmacies in the diabetes management aisle. Note that containers of ketone dipsticks that have been open for more than six months can yield erroneous, or false negative results, and should be replaced.

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A doe that is resting will usually urinate soon after standing up. The reagent end of the stick is simply held in the urine stream when the doe voids, and results are available within seconds. As ketones do not exist free in the environment, if you have a concrete or rubber barn aisle floor, the stick can even be dipped in a puddle on the floor. Any ketones, even trace ketones on a urine dipstick, should not be ignored. Note that dipsticks can underestimate the level of ketones present compared to more quantitative blood measurement methods, but they will tell you if ketones are being produced, and the doe is in a negative energy balance.



While blood samples can be submitted to a veterinary diagnostic lab, results are not instantaneous, and of limited value outside of a hospital setting. For more advanced on-farm cases, a blood beta hydroxybutyrate (BHB) meter, which operates in a similar manner to a blood glucose meter, can be used by producers and veterinarians to monitor ketone progression, and response to therapy. A BHB meter will yield rapid results, however they are more expensive, and require the producer to be comfortable drawing blood, but may be useful for screening larger herds, or managing complex cases. BHB levels >0.8 mmol/L indicate subclinical ketosis. Clinical symptomatic disease is usually apparent with BHB levels >3.0 mmol/L.



As intervening at the subclinical stage of disease is associated with a more positive outcome, if a doe is ketone positive, do not wait until she is sick before reassessing her late pregnancy nutritional management. Any positive ketone test should get your attention. Trace ketone levels are your early warning that the doe is not meeting energy demand, and acting now can help you achieve the ultimate goal of getting the doe, and her offspring, safely across the finish-line. If you identify a toxemic doe, spot checking ketone levels of other late gestation does in the herd is recommended.

Note that blood glucose meters are NOT recommended for evaluating a toxemic doe. Although a doe might have low glucose during some stages of the disease, glucose levels are inconsistent, and often normal, even with advanced disease.

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Treatment

The critical importance of accurate breeding and due dates when managing this disease cannot be stressed enough. The lack of a known due date complicates decision-making, for both the producer, and the veterinarian, and may limit options when managing a doe with severe ketosis.

There are numerous approaches to treating a doe with toxemia. The first step is to assess pregnancy nutritional management. Are you feeding enough, frequently enough, for the stage of pregnancy? If you ultrasound does in early pregnancy, how many fetuses is the doe carrying? Is a quality, balanced, palatable, easily digestible, and nutritious feed available? Is there sufficient space for subordinate does to feed away from more dominant members of the herd to avoid being bullied?

Is there underlying illness or injury? Is the doe febrile? A doe with pneumonia, or other underlying infection, is likely to have a decreased appetite and be predisposed to developing toxemia as a result.

If ketones in urine are detected early, in a doe that is still bright and alert, simply gradually increasing the grain ration through to freshening may be sufficient. If a doe is sluggish, and not consuming grain, an oral high energy drench 2 , and/or daily administration of oral nicotinic acid (Niacin) 3 , may aid in getting a doe back on track, while gradually increasing the grain ration. To avoid aspiration, drenches should be avoided in does that are weak, or recumbent.

In more advanced cases, some producers or veterinarians may advocate for the use of oral propylene glycol, however, its use is somewhat falling out of favor. Although propylene glycol does provide a rapid readily metabolizable source of energy for the doe during the stabilization phase, and can be beneficial in some cases, it also results in appetite suppression with repeated administration. As a toxemic doe is already not consuming enough feed, propylene glycol should be used judiciously, and for the minimum period possible.

Does with toxemia are also likely to be dehydrated. In some cases your veterinarian may recommend subcutaneous or IV fluids, and regular administration of b-complex until the doe is consistently eating a normal ration.

In severe cases it may be necessary to work with your veterinarian to confirm fetal viability, either through palpating abdominal fetal movement, audible detection of fetal heartbeats, and/or ultrasound. If the fetuses are confirmed to be deceased, immediate induction or c-section to prevent septicemia may be required to save the doe.

If viable fetuses are present, and close to the expected due date, your veterinarian will likely recommend additional blood work and supportive care to stabilize the doe prior to induction. This is where having known breeding dates is critical. The closer the doe and fetuses are to the expected due date the better the outcome, but producers may still be

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You Can Dam Raise and Milk Test, Too!

By: Alicia Wingo, [ZW Goat Farm](#)

Have you been thinking about getting started on DHIA Milk Test but wondering how that would work with your doe's dam raising their kids? Let me tell you how we do it here on our farm.

Our Process: Starting on the day our doe kids, (depending on how many kids she has, we will go ahead and start milking her in addition to her kids being with/nursing from mom. We will also give kids bottles of mom's colostrum. We do this for two reasons, (1.) to make sure they are getting enough colostrum and (2.) to help them get used to the bottle. If she has 4 or more kids, I don't milk her but make sure kids are nursing well. Kids are still given bottles of colostrum. All kids are given supplemental bottles during the first 3 days. At this point, depending on how much milk the doe is making, we will continue to milk or give her a week or two without milking before we start milking daily.

At 2 weeks fresh, everyone starts getting milked 2x daily. At this point I am working on establishing/reinforcing good milk stand manners with each doe.

We like to have the doe's first milk test at around 1 month fresh and then do one test a month after that. The night before our milk test, does are milked out. I also get my equipment and paperwork ready.

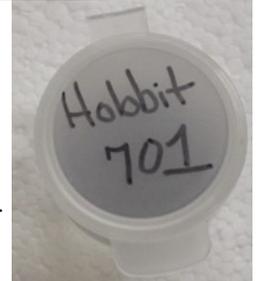
I don't really like to separate does and kids because this can stress them. So instead I will put a t-shirt on our doe, kids are unable to nurse but mom and kids can stay together.

On test day, we bring in each doe, remove the t-shirt, milk, and then put the t-shirt back on her and let her go back out to her kids. Her milk is weighed, sampled (with the sample going in the correct vial), and recorded on the paperwork. The remainder of the milk is filtered, bottled, warmed up and then fed to her kids. Kids are given however many bottles they need throughout the day.

At the evening milking, we follow the same process with one difference; we then leave the t-shirt off the doe. Once all does are



Quick Tip: I get my vials ready with doe's name and/or Id # and make sure that the vials contain their preservative tablet.



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milked and each doe's milk is weighed, sampled (with the sample going in the correct vial), and all paperwork is completed, the only thing left to do is package your sample vials and paperwork for shipping. I also place a small strip of scotch tape across the vial lids and gently turn the vial a few times to mix the preservative tablet through the milk before shipping. Your lab will then process your samples and send a report for your does to your DRPC, who will process your test results and send you a report on each doe and the paperwork for the next test.

Quick Tip: The t-shirt goes on the doe backwards with their back legs going through the sleeves and their rear sticking out of the neck hole. I sew a hem around the bottom of the shirt. Then cut a slit on each side of the hem for the collar to go through.



Milk testing really is much easier than many people think it will be. Take it one step at a time and before you know it you will be milk testing in no time!

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faced with choosing to save the doe, or the kids, if the doe continues to decline despite treatment. As each case is different in both timing of onset, and severity, each case has to be assessed individually to optimize the outcome.

Note that even mild-moderate toxemia can slow the onset or progression of labor. In addition to the toxemia, in some cases calcium levels may also be deranged close to freshening, which can result in weak contractions, and fetal malpositioning, requiring assistance. Toxemic does should always be monitored closely during labor, and delivery. Retained placenta is a common sequelae in more advanced cases. Colostrum quality and volume may also be adversely affected in the ketotic doe, proportionate to the level of ketosis, and may require colostrum supplementation of kids at birth.

Breeding dairy goats is an investment of time, resources, and emotional energy. The goal of any breeding is healthy dams and kids at freshening. Selection of sound and healthy does for breeding, in good body condition, without underlying disease, goes a lot way toward preventing toxemia. Quality nutritional management throughout pregnancy, including selective feeding of does with multiple fetuses in late gestation, and early detection and treatment of toxemia, will aid in avoiding the complications associated with advanced disease.

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How Reliable Is A Blood Test?

By Yalonda Patterson Burton, DVM [Cherry Tree Farm](#)

I have been on all sides of the deal when looking for or purchasing a goat. I was the naïve buyer at one time. I was the veterinarian doing the testing. And I have been the seller, which I hope was always honest and up front with our stock.

When purchasing a goat, I think there are steps and levels of security each of us need to take depending on our goals. There is a wide array of testing that can be done. Some useful, some not so useful. But all very available and to the unknowing new buyer can be overwhelming. I will give you my two cents and hope it helps in the future guide some individuals in their journey with goats.

There are always the big 3, as they have come to be known, CAE, CL and Johne's. CAE has readily available test that most are familiar with. CL and Johne's are a bit more complicated as their testing regimes are not as straight forward.

My personal advice when buying goats and looking at biosecurity is to know your seller. In the US, unlike some other countries, blood tests on herds can be drawn and submitted by the breeder. Now while that is greatly beneficial for our breeders, reducing costs and scheduling issues, it does not give any added protection to the buyer. As a buyer, you need to feel comfortable trusting what the breeder has told you. It is important to see any blood test on paper to verify they have been done, but ultimately even that piece of papers is only as honest as the person showing it to you.

I prefer to see negative CAE test in 6-12 months on the animal I am buying and prefer to also retest immediately on the day of purchase for my own records. I need to know or see that the herd I am buying from has no signs of CL on the farm. Also, do they have older does that have lived a full life and goats in all age categories? This helps me feel comfortable about Johne's not being present in the herd. But there are other disease processes that can be brought in by purchasing goats. Staph aureus is a bacterial infection of the mammary gland, not easily identified and does can become chronic shedders. Mycoplasma can manifest as upper respiratory disease or mammary infections. Q fever, toxoplasmosis and other reproductive disease can be shed by unknown carriers or at parturition. Subclinical sore mouth can cause an outbreak in an entire naïve herd in as little as 3 weeks. There are many things to take into consideration and ultimately each herd has to decide what is right for them.

All of these things can go further into depth of what and how to test for, how to get the best bang for your buck and what we need to do when we bring new animals in. I can say no matter what you do, buying animals opens your herd to risk. Is it a risk you are willing to take? Some are, some are not. Those risks can be reduced by open communication with each other, have a personal relationship with the individual and always being up front and honest about your goals with your herd.

BD Vacutainer® Venous Blood Collection Tube Guide

Tubes with BD Hemogard™ Closure	Tubes with Conventional Stopper	Additive	Inversions at Blood Collection*	Laboratory Use
Gold 	Red/Gray 	<ul style="list-style-type: none"> Clot activator and gel for serum separation 	5	For serum determinations in chemistry. May be used for routine blood donor screening and diagnostic testing of serum for infectious disease.** Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 30 minutes.
Light Green 	Green/Gray 	<ul style="list-style-type: none"> Lithium heparin and gel for plasma separation 	8	For plasma determinations in chemistry. Tube inversions ensure mixing of lot activator with blood. Blood clotting time: 60 minutes.
Red 		<ul style="list-style-type: none"> None (glass) Clot activator (plastic) 	0 5	For serum determinations in chemistry. May be used for routine blood donor screening and diagnostic testing of serum for infectious disease.** Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 60 minutes.
Orange 		<ul style="list-style-type: none"> Thrombin-based clot activator with gel for serum separation 	5-6	For stat serum determinations in chemistry. Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 5 minutes.
Orange 		<ul style="list-style-type: none"> Thrombin-based clot activator 	8	For stat serum determinations in chemistry. Tube inversions ensure mixing of clot activator with blood. Blood clotting time: 5 minutes.
Royal Blue 		<ul style="list-style-type: none"> Clot activator (plastic serum) K₂EDTA (plastic) 	8 8	For trace-element, toxicology, and nutritional chemistry determinations. Special stopper formulation provides low levels of trace elements (see package insert). Tube inversions ensure mixing of either clot activator or anticoagulant (EDTA) with blood.
Green 	Green 	<ul style="list-style-type: none"> Sodium heparin Lithium heparin 	8 8	For plasma determinations in chemistry. Tube inversions ensure mixing of anticoagulant (heparin) with blood to prevent clotting.
Gray 	Gray 	<ul style="list-style-type: none"> Potassium oxalate/sodium fluoride Sodium fluoride/Na₂ EDTA Sodium fluoride (serum tube) 	8 8 8	For glucose determinations. Oxalate and EDTA anticoagulants will give plasma samples. Sodium fluoride is the antiglycolytic agent. Tube inversions ensure proper mixing of additive and blood.
Tan 		<ul style="list-style-type: none"> K₂EDTA (plastic) 	8	For lead determinations. This tube is certified to contain less than .01 µg/mL (ppm) lead. Tube inversions prevent clotting.

Red Top tubes can also be used for milk culture. Be sure your lab is familiar with milk cultures and common problems

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Walking In The Footsteps—Sunni at [Flat Rocks](#)

Basic Info :

Sunni Florence. Flat Rock Farm. We run about 100 head in the herd most of the time. We started our registered Nigerian herd in 1987 when I was 13 years old. We have a few la Manchas but we have always been, and will always be, Nigerian breeders.

What do you feel is your highest/best accomplishment(s) with your herd?

Surviving for 33 years LOL. We've stood the test of time and our goats have too. Our animals are found in pedigrees all over the country for many generations. The overwhelming majority of polled Nigerians trace back to our herd at some point. Twenty years ago I probably would have said show wins, but as time goes on your goals change. I think we have contributed to the development of the breed and I'm proud of that.

My personal greatest accomplishment was Flat Rocks Groovy Girl. A doe that to me was the epitome of what an ND should be: strong, kind, willful with her herd but willing with her person; productive and elegant. She was everything I want in a dairy goat and a doe that will live on in our herd as long as our herd exists. My new goal is to incorporate her bloodline into the entire herd.



Groovy Girl and her dam, Lucky

When someone says "Flat Rocks" what do you hope is their "visual" of your animals? What do you breed for?

I want them to think of a structurally sound, yet elegant animal. Very strong in general appearance. But I also want them to think of an animal with tremendous longevity and hardiness who does their job willingly and with ease.

What is the best Advice you would give someone starting out in Nigerians?

Buy the best animals you can. Don't skimp on the buck. And most importantly, find a mentor. Either someone near you or even someone across the country that is happy to communicate and help you through the first few years. When you have issues, contact them. Don't ask some random FB group who may all be just as new as you are. Listen and learn and when your turn comes be willing to mentor the next person.

Do not hesitate to contact long-time breeders for help. I cannot stress this enough. Most of us are happy to have a conversation. We love to talk goats! It

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doesn't matter what the topic is. Please ask! There are no stupid questions and if I can help someone avoid an issue I've seen or a pitfall I've climbed out of, I'll be happy to help.

Find a vet and establish a relationship before you need them. Look for a vet who treats goats, or if there isn't one in your area, look for a vet who is willing to learn about goats. The best goat surgeon I know had never operated on a goat until I asked her to. She's an amazing vet and I'm lucky to have her, but I wouldn't if I hadn't asked.

Before Nigerians were accepted, there was no "database" – how did you make decisions on breedings?

The same way I do now. With my own eyes, knowledge and instincts. I approach breeding as more of an art than a science. Data means absolutely nothing to me. When planning a breeding I take many, many factors into consideration, some of which are not recordable by data. Not just structure and production but also hardiness and parasite resistance. Personality and will to milk plays a huge role for us. The most beautiful doe in the world does me no good if her personality makes life difficult. I want the whole package.

You have developed a "silver" Nigerian. Was that an intentional breeding or purely accidental? If intentional, how did you go about selecting for a specific trait?

I did not develop the color Silver. There have always been silver Nigerians, just not very many. One of our first ND bucks was silver. He came from Shaula Parker at Willow Creek, one of the foundation breeders. His name was Hayseed Blue Northern (Hayseed being Shaula's daughter, Lisa's, herdname). His dam was Hayseed Freska and his sire was Willows Beauregard, a buck you find in many foundation Nigerian Dwarf pedigrees. We kept several daughters and have always had at least one silver in our herd. In 2013 I produced a buck out of Flat Rocks Mythril Silver (silver doe) and Irish Whisper Harry Potter who I felt was worthy of being used as a breeding buck. His name was Flat Rocks Expecto Patronum and he happened to be silver. He was not kept intact for his color. He would have been



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used as a breeding buck in our herd no matter what color he was but I've always loved silver so that was a happy bonus. The silvers that have popped up in recent years are because of him and his get. It's exciting for me to see the bloodline spread.

Parasites are an issue in the goat world – do you breed for parasite resistance?

Yes we do breed for parasite resistance and always have. Early on we started removing animals from the herd books who were "hard" to keep. It just makes sense from a management standpoint. If I don't want the goat in my breeding program because it's unthrifty then I certainly don't want to pass those genetics along to someone else, so those animals were culled and sold without papers. Over the years that has narrowed our genetics down to easy keepers who are naturally resistant to parasites. We also practice strategic deworming, meaning we only deworm when necessary, not on a schedule, so we have avoided the parasite resistance that had become such a problem in the goat world. We also monitor our goats mineral intake very closely. In our environment, and with the feed and hay readily available here, we copper bolus twice a year and feed free choice minerals, all of which plays a part in parasite control. The best advice I have regarding parasite control is breed for what you want and learn your environment. There is no one-size-fits-all solution. See what works for other people in your area and build off their practices while modifying to fit your herd.



Mythril Silver and one of her progeny, Adamantium.

How do you keep your animals healthy in Texas with the mild winters?

We breed for hardy animals. We know our environment and what I can throw at us so we are always prepared. Our barns and outbuildings are built for hot summers and mild winters so well ventilated with more emphasis put on staying cool then keeping warm.

Regardless of where you live I cannot over emphasize the importance of knowing your environment. Have the mineral content of your water tested. Know the nutritional content of your hay. Watch for unusual plant growth. All of these things play important roles in herd health.

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A successful breeder doesn't just breed goats, it is a "total package." If someone has limited time, what do you feel is the best way to "prove" your genetics and market your herd? (Show, Milk, LA, Get into Production homes, learn photography skills, good website, word of mouth, etc)

That totally depends on the situation, but the beautiful thing about Nigerians is how adaptable they are to different lifestyles. Over the years our lives change and these little goats happily adapt. My advice is do what you are able to and if your situation changes roll with it and do something else. I think new breeders feel a lot of pressure to do it all, or that there is only one way to do it, and nothing could be further from the truth. Do what works best for your situation. Don't be afraid to try new things and never, ever think you are doing it "wrong." One year you may be able to utilize all the programs available and hit 6 shows. The next year you might have a new baby or need to move and can only pick one program. Or you may have to take a year off from breeding. That's okay. The main thing is to enjoy your goats.

However you decide to prove our your herd always remember your greatest asset is your herddname. Protect it. Remember that every kid you produce carries that name. If and when you produce a kid that you feel isn't up to snuff don't sell it to an unsuspecting newbie. Take it out of the herdbooks. Only sell animals you are proud of. Never hesitate to sell your best. If you can move someone else's herd forward by selling them an exceptional animal do it. They won't forget it.

What have I not asked that you feel is important?

One of the most important things I learned early on is remember there is a person behind every goat. Always be kind. If you have the opportunity to make someone's herd better take it. If you get the chance to pass on information that will help someone do it. Be open to meeting new people and learning new things. I still learn things about goats and things from goats every single day. I've met the most incredible people through goats and made friends I will have forever.



Sunni's daughter, Morgan, is an integral part of Flat Rocks and started freshening does by herself at the age of 12.

Recipe of the Month—Goat Milk Velveeta

By: Ann Alecock [Two Dogs Farm](#)

Goat Milk Velveeta

By Ann Alecock, [Two Dogs Farms](#)

1 Gallon Whole Goat Milk
3 tsp. Citric Acid
3/4 tsp. Baking Soda
1 Tbs Sea Salt
1 Tbs Butter

1. Dissolve the citric acid in half a cup or less of water.
2. Heat the milk to 140 degrees.
3. Add Citric Acid/water to the heated milk and stir gently. Turn off stove and let curds form. They will be small, similar to ricotta.
4. Put cheese cloth in a colander. I actually use a handkerchief. I clip on using clothes pins. Use a large ladle and put 1/3 of the whey into the cloth and let drain. You can use the corners and roll the cloth back and forth to speed up the draining process. Once the curds form a log put in to a glass bowl, and divide and drain the remaining why.
5. Put the 3 cheese logs into a stainless-steel large pot and add the salt, butter and baking soda to the cheese curds and put on medium heat.
6. Mix well, and stir constantly. The cheese will start to puff and melt in to a Queso cheese consistency.
7. Take a glass meat loaf pan and place press and seal paper into the pan. Pour the finished cheese into the lined container. Put in fridge, when cool wrap in press and seal.
8. We add salsa and heat in the microwave for queso dip. Better yet add Chorizo (spicey Mexican sausage)

We're on the web
www.ANDDA.org



**PROMOTING THE
NIGERIAN DWARF
BREED SINCE 1996**

Editor:
Karen Goodchild
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