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8 Steps to a Great Milking Routine

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Udder health is critical for overall doe health, milk production, length of productive lactation, and safety and quality of the milk. There are a number of things you can do while milking goats to maximize udder health. Somatic cell count is a measurement of the amount of inflammation in the udder. Somatic cells are inflammatory cells, and are shed normally in milk, though if inflammation or infection is present they will be shed at higher numbers. A milking routine is important for udder health and by doing these 8 steps, you will be on your way to a more productive, healthy herd.

1. Maintain the environment

Milking starts with the environment: the environment of the pen the doe lives in and the place where she is being milked. Pens should be maintained clean and well-bedded. Make sure the pens are not overstocked. If there is excessive hair on the udder, it should be clipped for cleanliness. Maintain a calm, quiet environment. When she is brought up to be milked, handle her calmly and gently. Does in milk have to have hormonal input from the hormone Oxytocin to let down their milk. This hormone is inhibited by stress, fear, or pain. Keeping the milking process a positive experience will help her milk out more quickly and completely. Consistency will help reduce stress and improve goat comfort. The milking stanchion and barn should be cleaned and disinfected regularly.

2. Pre-dip

Pre-dip is used to prevent environmental bacteria from entering the teat end during the milking process. Pre-dip is often different from post-dip – make sure you are following the manufacturer directions. Dip the teats from the end to the base with an approved pre-milking disinfectant. Ensure full coverage of each teat. If using spray, make sure the whole teat all the way around is covered, with special attention to the teat end. If using a dip cup, make sure clean dip is used to completely cover both teats. Do not dilute the teat dip. Throw out any dip leftover in your dip cup or sprayer at the end of the day.

3. Strip

“Stripping” is the process of hand-milking out at least 2-3 squirts of milk. This is the first stimulation of the teat end

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Meeting Topic—Showmanship Tips

By Cade Cockburn [Cade's Lil Farm](#)

Showmanship: it can be the most nerve wracking, but sometimes the most rewarding class you can show in at a dairy goat show.

I find that many dairy goat youth who are new to the show arena may be hesitant to participate in showmanship classes. I know I sure was! However the point of a showmanship class is not to win (although that's just icing on the cake!), but to learn how to be proficient in showing off your dairy goat to its best advantage before a judge.

The skills you learn in showmanship make you better prepared for showing goats in general classes. I have been participating in showmanship classes for many years now. Here are some of the things I wish I would have known when walking into my first ever showmanship class.

- **Study the ADGA Showmanship Scorecard**

The showmanship scorecard is the gold standard that you will be judged on when you enter the class. Get an idea of what the judges will be looking for and

how much emphasis they place on each category. Knowing this information before you walk in the ring will help you be better prepared and also may give you an advantage if a tie needs to be broken and you know the point value of each item on the scorecard!

- **Watch senior showmanship classes**

A lot of times, this is the age group where the judge will expect the most out of the competitors. Being the oldest, they likely have more show ring experience and will be more prepared for advanced showmanship techniques and questions. Be attentive and pay attention to what the winner does - you may want to model that in your own showmanship class!

- **Work daily with your animal and know them inside and out**

Having a well behaved animal that responds well to you is crucial to succeeding in a showmanship class. It's hard to do well in showmanship if you are dragging your animal around the ring. Take the time to make sure they lead properly and they allow you to set them up properly. Also know what conformational strengths and weaknesses your animal has so that you are better able to show it to its best advantage and answer any questions that the judge may have.



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- **Take the time to fit the animal properly**

Spend extra time making sure your showmanship animal is clipped, bathed, and looking her best. When a judge sees a shaggy animal walk in the ring with hooves that haven't been trimmed, you immediately are docked some points on that showmanship scorecard. Ensuring that your animal is well groomed and neat will earn and will immediately give you credibility in front of the judge that some of your competitors might not have. If they know that you took the time to fit your animal properly, they will view you as a serious contestant in that showmanship class



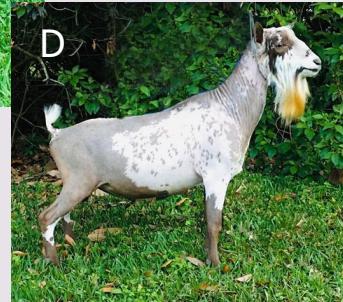
- **Remember to have fun!**

Sometimes during all the intensity of a showmanship class, we can make ourselves miserable and forget to have a good time. Always go the extra mile to compete well in showmanship classes, but at the end of the day, remember that it is a goat show and the purpose of the class is to learn and improve for the next time. If you make a mistake, that's okay! You will remember not to make that mistake again and the next show always provides you a new opportunity to improve.

All in all, showmanship classes are fun, rewarding, and worth it. They mark the absolute best opportunity to learn how to be a better dairy goat exhibitor. Watch and learn from other showmen as well as judges on how to become the best showman you can possibly be. Taking advantage of showmanship classes gives you invaluable knowledge that can be carried over to general goat classes at shows. Who knows, the class winner may be decided because their handler was the best at showing her to her best advantage!

SCORECARD BREAKDOWN

Evaluate the following bucks based on the ADGA and AGS scorecard and put in placement order from 1st to 4th.
Answers based on Lee Bergfield; evaluation on page 12.



How To Set Up and Feed Fodder

By Melody Shaw, [Narrow Gate Nigerian Dwarf](#)

Looking to supplement your feed bill or offer a little variety and foliage to your herds' nutrient depleted Winter diet? Why not grow fodder?

In as little as 8 days you can grow 1 lb 1.3 ozs of seed (3 cups worth) into a fodder biscuit weighing 7½ lbs.

Your herd will not only benefit from the added nutrients fodder brings to the feed trough but also offer the satisfaction tearing tufts of fresh foliage adds to your herd's enjoyment.

The definition for fodder is described as a "course food for livestock, composed of entire plants, including leaves, stalks, and grain".

It is an (overall) easy crop to grow. Fodder does not require sunlight. It does however need good drainage and air-flow to prevent molding.

If you have solid bottomed trays you can accomplish good drainage by drilling holes at one end of the tray and setting them at a sloping angle on a table or shelf.

I have several shelves and have mine set-up in a zig-zag pattern so that I

can water from the top and it slowly irrigate each tray below before draining into a reservoir at the bottom.



Fodder grows best in temps between 70° and 75° F. Air-flow and heat can be distributed throughout a room using a small oscillating fan.

Whole, untreated seed is needed for growing. I use black oil sunflower seeds, wheat, and barley.

Using one cup of each, I dump it into a container and cover them with water. You can soak seeds for 30 minutes or 24 hours...whichever works best for you.



When soaking is done I spread my seed-mix out as a thin layer in one of my waiting (23" x 16¼" x 6") trays.

Each day I fill a new tray with a batch of soaked seed-mix. As a new tray is filled I move the previous day's tray over a space on the same shelf



or up to a higher shelf so that the newest tray is always at the bottom (where they will receive the least amount of irrigation force

when
watering).

Depending
on room
conditions
and
dryness of
your seed
mix/

fodder, trays need to be watered (by misting or sprinkling) 2 - 3 times a day.

On day eight your fodder is ready to be fed.

I lift the fodder biscuit from the tray and flip it over onto a table ready for cutting. Using an electric knife or



good pair of kitchen shears I cut the biscuit into 1/2" to 3/4" squares. (Larger chunks can pose a choking hazard.)

You can also feed as a whole biscuit. (Though generally they only eat the green parts being fed this way.)



Additional information and pictures can be seen here: [http://narrowgatenigeriandwarf.com/
blog.html#target-section-Fodder](http://narrowgatenigeriandwarf.com/blog.html#target-section-Fodder)

Toxic Plants—Perilla Mint

Also known as Beefsteak Plant, Perilla Purple, Joseph's Coat and many others. This plant grows in the Eastern United States.

The square stems of this plant are erect, hairy, and are shades of green or purple. Flowers are either white or purple.



All parts of the plant are toxic, but the flowering and seed stage of the plant contains the highest concentration of perilla ketone toxin. Toxicity is highest when fresh plants are ingested, and may be toxic when baled in hay.



Perilla Mint causes respiratory distress and interstitial pneumonia. Treatment is frequently ineffective, and mortality is high. Recommended treatment may include the use of corticosteroids, non-steroidal anti-inflammatories, and minimizing stress.

The best time to control Perilla Mint is April to June; it is most dangerous to livestock when flowering in late summer and early fall.

Source: [Natural Resource Conservation Service](http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plants/about/perilla-mint/)

(Continued from page 1)

which sends signals to the brain to let down her milk. It also removes any milk that may have been exposed to bacteria on the outside, and allows you to check the milk for any abnormalities. Do not strip milk into your hands. A strip cup is recommended to improve accuracy of the evaluation of milk. Check the milk for flakes, cheesy chunks, blood, manure, or watery appearance. Strip while the pre-dip is still on the teat.

4. Wipe

Using a dry, single use towel (disposable or reusable), put the towel open in your open hand and fully enclose the teat, then wipe completely by twisting down gently as you wipe. The goal is to get all of the pre-dip off of the teat and dry the teat completely. Use one towel for only one doe. If the udder is wet, you can then use a towel to wipe the udder so no water drips down onto the teat. If there is manure stuck to the teat, you can wet a towel and wipe with a damp towel, but always finish wiping with a clean, dry towel.

Do not ever hang a machine or hand milk a goat that does not have CLEAN and DRY teats. Bacteria travels easily through water but not in dry air. This is why you do not need to wash the entire udder every time. The water traveling from the udder down to the teat end will bring bacteria with it. Disinfection is important, but if the udder and teats are wet, bacteria will remain. Pre-dip (especially iodine pre-dip) is a contaminant, and care must be taken to ensure it does not get into the milk.

5. Hang

The machine should be hung 60-90 seconds after she is first stripped, when her teats are clean and dry. This timing is important for milk letdown. If you hang the machine too early, she will not have let down her milk and she will take longer to milk out and less milk will be collected.

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Scorecard Placement

This is my class of Nigerian Dwarf bucks. I am placing them C, D, B, A. It's hard to judge these beautiful boys from just a picture. For one, I don't get to see them move. I also don't get to feel the dairy strength, get the bird's eye view of their angularity, or see if they are squatting or if they actually have correct rear leg angulation.

1 C over D is more angular in the rear leg set and blends more smoothly in the front end. He also has the advantage of being more level in the rump from thurl to thurl (From what I can tell in the picture)

2 D over B is a deeper bodied buck, specifically in the rear barrel. He also is deeper in the heart girth and adds just as much general appearance to his resume as does B, and therefore body capacity will be the defining factor in this placement.

3 B over 4 A has the advantage in general appearance being longer and stronger over the topline. He also has the advantage in body capacity being deeper in both the heart girth and rear barrel.

4 A over the rest of the class is simply more smoothly blended throughout. He does grant to the depth and length of several others in the class but has the overall general appearance to place 4th.

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While she is being milked, pay attention to the machine. If you hear squawking, the liners may be slipping and may need to be adjusted or changed. If the milk flow slows, be ready to take the machine off. Make sure the milking equipment is maintained properly and replaced according to recommendations. Hanging the machine and monitoring the milking process is important to prevent the risk of mastitis.

6. Take off

Overmilking can cause teat end damage which is a major risk factor in developing mastitis. Most does will be milked out with a milking machine in 1-3 minutes, and by hand in 3-5 minutes. If it is taking longer than this, consult your veterinarian. When it is time to take the machine off first, be sure to first shut off the vacuum. Do not pull the machine off while the vacuum is still on. The timing and method of taking a machine off is crucial to maintaining udder health.

7. Post-dip

Dip the teats from the end to the base after milking with an approved post-milking disinfectant. Ensure full coverage of each teat. The same principles apply to post-dip methods as pre-dip.

8. Turn Out

Mastitis is often contracted immediately after milking, because during milking the teat end sphincter is relaxed and open to allow the milk to flow, and it takes about 30-120 minutes for the teat end to close up following milking. Have fresh feed and water available to the doe when she returns to her pen to encourage her to stay standing for at least 30 minutes and give that teat end time to close.

Store dips and chemicals properly and follow expiration dates. All equipment (dip cups, sprayers, milking machines, stanchions) should be cleaned between milkings. If using reusable towels, make sure you are washing them with hot water and bleach and drying at high temperatures. Wear disposable gloves and clean and disinfect your hands to reduce risk of disease transmission.

Remember, does can carry bacteria and not show any clinical signs. So in order to protect you and your goats, keep your hands clean at all times!

Somatic cell count is an indicator of clinical mastitis (signs of inflammation) and subclinical mastitis (which can sometimes have no clinical signs). Therefore it is a useful indicator of udder health. Goats produce more somatic cells than cows, because the way milk is made in the caprine udder is different than the bovine. However somatic cell counts of less than 200,000 generally indicate healthy udders and somatic cell counts of over 800,000 generally indicate some level of mastitis. There are many contributing factors to udder inflammation, such as nutrition, water, disease control, vaccination, stocking density, environment, and stage of lactation. Milking routine is one way to reduce somatic cell count and maintain udder health. Following the steps the same way every time will improve doe health and the health of the herd overall.

UC Davis DNA testing offered through multiple registries

UC Davis is the leader in offering caprine DNA testing for a myriad of reasons, including parentage and casein. If a registration number is not provided on the test results from UC Davis, the tattoo sequence and birthdate must be on the report.

[ADGA](#) offers members a discount when selecting DNA testing through their office. The price for Plus members is \$20 each, for up to 3 tests, and \$27 after 3.

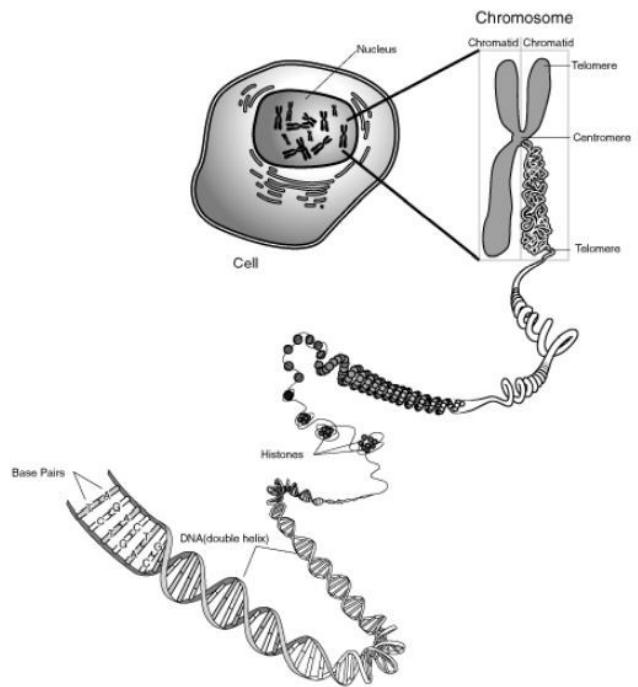
UC Davis also offers direct DNA testing to breeders, and will share results with registries so breeders can obtain a discount. AGS is an affiliate registry and the cost for each test is \$31 with no limit. If a breeder chooses to test directly with UC Davis and share with ADGA, a \$15 fee is required to accept results.

If a registry affiliate is selected when choosing to test directly with UC Davis, the university will share DNA results with the designated registry. At this time, UC Davis will share directly with [American Goat Society](#); [Pedigree International](#); [International Goat, Sheep and Camelid Registry](#); [Awapawa Goat Breeders Association](#). IGSCR also offers a Breed Analysis test if ordering through their registry.

Once a DNA test is selected for UC Davis to share with a registry, it is irrevocable. Tests available specific to Nigerian Dwarfs are Genetic Marker (individual test), Sire Verify, Dam Verify, Casein, Scrapie Susceptibility and Freemartin.

When contracting directly with UC Davis and opting to share information with a registry, it will allow the registry to request additional testing on the sample in the future. Future testing might be requested by a registry in regards to possible progeny pedigree queries. You would own the DNA sample results if testing directly through UC Davis and choose where to share results.

[Link to UC Davis Genetic Marker Testing.](#)



DNA Response from UC Davis

There are two ways that we work with goat registries/associations. What we consider the preferred way is how organizations such as ADGA operate. In this mode, the registry submits the order for testing to the VGL, sends the sample collection kit to its member, the member sends the sample to the VGL, results are reported to the registry, and the registry receives a bill each month for testing performed. In this case, from the VGL's perspective, the registry owns all the samples and results. Part of our agreement with the registry (unless they specifically opt out) provides that if another client has the VGL case number of a sample tested, they may use this case number to request a parentage analysis using that case number as a parent. (This last item is the extent of how a goat previously tested with ADGA would be available to you, only for use as a parent in parentage verification, and ADGA could opt to not allow this.)

The other way that a registry can work with the VGL is via "affiliation," and this seems likely more what you were asking about. In this case, individuals test directly with the VGL, and for each sample, they can opt to affiliate that sample with one or more registries that have asked us to offer this option. Doing this makes all of the results, updating the record, and requesting additional tests available to the registry. It also provides a discount on the price of testing. In return, the VGL expects that the registry will be an active part of the testing process to help with parentage issues and provide guidance and education to its members and that the registry, by promoting testing, will have at least 50 samples affiliated per year. The registry receives a MyVGL account where they can view all affiliated samples, results, and case numbers. All tests are available, but only the genetic markers and parentage is typically discounted. As for "breed analysis," I would need to refer you to an expert. This is something that we only offer for certain breeds and for certain uses, and I don't know enough about it to comment.

We require a VGL case number to specify the sample tested by another client in a parent verification, so no, just the registration number will not work. I would suggest reaching out to ADGA if you're considering use of their case numbers. Since they can put a block on that at any time, it seems wise to establish a dialog. Maybe they can help with the instances where you only know the registration number.

Shayne Hughes
Association Director—Admin and IT
Veterinary Genetics Laboratory
University of California Davis

“Kid Coolers”

Simplfy Your Life -- Feed Kids ONCE a Day!
with free-choice cold milk

Instructions to Make a Cooler:

It is best to locate the kid cooler on the outside of a wire mesh fence panel, and elevate it so the nipples are at a good height for the kids to nurse [18" from the ground is a good height for kids older than 2 weeks, 13-14" is good for kids just learning to use the coolers]. Set up the cooler at the location, and mark the cooler where the nipples should be located. -- It is important to do this step, becasue you want the nipples to be spaced so they will fit between the squares of the wire panel.

Using a drill with a 1/2" "plug cutter" drill bit, drill the holes. Drill from the outside of the cooler toward the inside, and take care to make the holes straight in, and do not enlarge them. This is especially important for the inside hole, since the base of the lambar nipples must seat in that hole. (note: if this is your first experience cutting into a cooler, they consist of an outside and inside wall, with crumbly insulation in between - when you drill, you will go thru the first wall easily, then thru the insulation, and then you have to get thru the inside wall. The inside hole will require you to put more pressure on the drill.) Now, you will likely have the drill bit stuck in the hole. If you cannot get it back out without enlarging the hole (you don't want to do this), just remove the drill bit from the drill and push it all the way thru - tedious, but it is the simplest way. It may be necessary to use an exacto knife to remove any shreds of plastic that remain in the hole but again, do not enlarge the hole beyond 1/2".

When the holes are drilled, measure lengths of clear vinyl tubing the desired length. You want the tubing to reach the bottom of the cooler, but not longer than that.



To set the coolers up to feed kids. Wash them, add the desired amount of cold milk, and add one or two frozen "blue ice" blocks. You will need to have double the number of ice blocks, so half of them can be in the freezer being refrozen for the next day. Place the coolers on the outside of the fence panel, with the nipples protruding thru the fence into the pen. Place them on an elevated surface such as a cinder block. Attach the coolers with a bungie cord.

Materials You Will Need:

- >>A cooler [choose one with walls <1" thick, if possible.]
- >>Drill & Drill bit [a 1/2" "plug cutter" bit sometimes works well, you want a 5/8" hole]
- >>Xacto knife
- >>Lamb bar nipples
- >>Clear vinyl tubing [3/8" OD x 1/4" ID]
- >>"blue ice" or other rigid re-usable [you will need 2-4 per cooler]
- >>bungie cord
- >>cement block

Used properly, kid coolers are a labor-saving way to raise healthy, well-grown kids. They are intended to allow kids access to free-choice cold milk. The “labor-saving” part is that you only need to wash and refill the coolers once a day, at whatever time fits your schedule. The following method is how we use kid coolers at the UCD goat facility.

To start kids on coolers is as easy as teaching them to use a lambar. We have a few “starter coolers”, which are small coolers that hold less than a gallon of milk. Instead of placing the milk into the cooler, we put the milk into 2, 1-quart square freezer containers. These go into the cooler and the tubing goes into the milk. This way we can fill the quart containers all the way to the top, and kids will get milk as soon as they start sucking on the nipple. Another advantage of the 1- quart containers is that you can measure the amount consumed. We like to leave them full, and when we come back to them we can see if the kids are nursing on their own, how much they ate, and if they still need help. We normally put warm milk in the coolers to start the kids. Most kids can learn to use the starter coolers just as soon as they have had their colostrum and are nursing well from a nipple. Once kids are using the starter coolers well, you can switch them to bigger coolers, with cold milk. We find that kids on free-choice milk will consume between 3/4 and 1 1/4 gallons per day. If you don't want to feed that much, you might opt to give the milk in a couple of feedings, but with the coolers set up, all that there is to do is open the lid, and dump in whatever milk you want to feed. If you do feed a limited amount, you will have to make sure that there is room for all the kids to drink at the same time.

When using kid coolers, it is important that you clean the cooler, nipples and tubes thoroughly every day (see cleaning method).

Courtesy of Jan Carlson

Edit: This is one example of kid rearing. Please monitor milk intake for adequate nutrition or bloat issues.



To Wash Coolers:

As with anything that has milk on it, you must first rinse with warm water.

After rinsing, use warm soapy water with some bleach in it. Scrub with a scrub brush and use a brush to clean inside the tubes. Rinse again with clear water.

It can be convenient to have a second set of nipples and tubes that can be clean and ready for use. If you don't have a utility sink, a bathtub will do.



“Starter Cooler”

Recipe of the Month

Traditional Easter Sweet Cheese

By: Dawn Robnett, [Mesquite Valley Farm](#)

This month's recipe comes from a great little cookbook I had been eyeing at Caprine Supply by the name of *Kaw Valley Dairy Goat Club Cookbook*. I'm not usually one to buy cookbooks because they so often disappoint but Caprine Supply had it on sale and I decided to give it a try. To my surprise, this little book has quite a few recipes I'm looking forward to trying. It reminds me of a potluck cookbook. Most of the recipes are centered around goat milk or chevon but there are a few that have nothing to do with the topic of the cookbook but just look plain delicious. For the price, I highly recommend it.

Ingredients:

1 ½ quarts goat milk
1 dozen eggs
4 tablespoons honey
½ to 1 teaspoon salt
Handful of golden raisins (optional)

Beat the eggs, honey, and salt together until they're well blended. Heat the milk in a large pan, stirring constantly. When it comes to a boil, add the egg mixture and continue to boil and stir for 8 to 10 minutes or until mixture curdles like yellow cottage cheese. Remove the pan from heat and mix in raisins. Take a folded cheesecloth and place in a large colander. Pour the curdled milk into the lined strainer and pull the corners of the cheesecloth together, twisting tightly and squeezing out as much liquid as you can while forming the curds into a ball. Tie the bag shut with a piece of string and hang it overnight to drain. When you unwrap the cheese the following morning, store it in the refrigerator in an airtight container to keep it fresh, moist, and ready to eat.

Recipe by: Cimaron Meadow of the Kaw Valley Dairy Goat Club

We're on the web
www.ANDDA.org



**PROMOTING THE
NIGERIAN DWARF
BREED SINCE 1996**

Editor:
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OK Doe K Dairy Goats

Please let us know if you have a
comment or article idea!