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*Please note that views or opinions  
expressed by members are not necessarily  
the views or opinions of the MDGA  
board or program chairs.  
Implementing any animal husbandry  
advice found in Mini-Goat Notes is done  
so at your own risk.*

# **Miniature Dairy Goat Association Mini-Goat Notes**



## **Letter from the President**

Spring is upon us and as such that means barns across the country are filling up with amazing new little goat kids! Long years of hard work coming together into those sweet little faces, exciting new genetics being tested, and lots of fresh sweet milk flowing! It is exciting to see members striving to breed the best little Mini goats around and sharing their pride and joy! Kidding season can be stressful, chaotic, and joyful all at the same time but I hope that each and every one of you has lots of joy in the fruit of your labors and take pride in the progress you have made!

With lots of brand new babies comes lots of registrations for our registration team! MDGA has had incredible growth and has made strides to improve our registrations process by hiring on four new registrars over the last year. We hope to offer our members a registration process that runs more smoothly and quickly. There are some things however, that as members, can speed up the process and keep things running quickly.

1. Make sure you have all photos, necessary paperwork (leases or ADGA papers for foundation animals), and payments attached to your application. The less our team has to reach out and gather missing documents, the faster they can get through registrations. On the left sidebar of our website there is a link to an infographic on how to take proper photos for your animals that you can utilize.

2. Utilize the online application form when possible! When you use the online form, you aren't having the additional wait time of postal transit and you are instantly added to the queue.

3. If you have not received your paperwork or have an issue, please use the form on our home page instead of emailing the registrars. This will help streamline the process of finding your paperwork.

We are pleased to see the growth, not only in memberships and registrations, but also in our Davis and Milk programs this year! It is inspiring to see all the fantastic things our mini breeders are accomplishing!

**~Cassandra Baldovinos~  
MDGA-President-2023**

## **MDGA Board**

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Cassandra Baldovinos  
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## **Tattoo Letter for 2023**

# **R**

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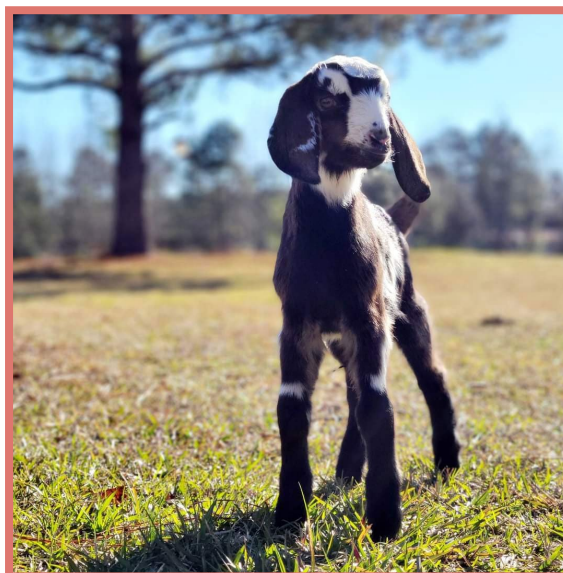
## **Announcements: MDGA Election**

Our annual officer elections were held in March so please join us in congratulating the following:

President: Cassandra Baldovinos  
Vice President: Dee Daniels  
Secretary: Roxanne Willoughby  
Treasurer: Kellie Pinard

We would also like to announce a new Social Media chairperson: Michelle Wittke

We appreciate all the hard work and effort the board puts forth in making sound, ethical decisions on behalf of MDGA.



*Photo by Tamara Crosby Lake*

## **Program Chairs**

### **MDGA Shows**

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## **Show Bill 2023**

*Texas Mini Milkers Texas Two-Step*  
*Boerne, TX*

*May 6*

*Kendall County Fairgrounds*  
*ADGA and MDGA Show*

*Kentucky Mini Dairy Goat Classic*  
*Edmonton, KY*

*May 13*

*Metcalf County Fairgrounds*  
*Mini LaMancha and AOM*

*2 rings*

*Texas Mini Milkers Memorial Classic*  
*Brenham, TX*

*May 27*

*Mini Nubians and MDGA*  
*2 rings*

*Ozark Empire Fairgrounds*  
*Springfield, MO*

*July 30*

*AOM Jr and Sr Does*

*Be sure to check out the MDGA website for the most up-to-date  
show listings and announcements!*

## Notes From the Mini-Goat Folks: Showing

**What's your best tip and biggest encouragement for those considering participating in a live or virtual show?**

Jump in and do it! Practice makes perfect. For good photos, I have a whole page on my website with tips. <http://greengablesmininubians.com/.../taking-good...>

**Eliya Elmquist**

Get a show collar (or any collar) And get them used to being led around with it!! Your first couple might not go the way you're planning but you're gonna learn a lot!!

**Courtney DuCharme**

Just go! Even if you don't have goats to take yet, if there is a local show near you go! Watch and learn and then take your goats to the next one!

**Sarah Laughter**

Don't be afraid to show and don't over think it. Use what the judge tells you as a tool; it's just one persons opinion over yours, the next judge will probably give you a whole different reasons.

**Melissa Swartz**

Don't be afraid. We are all new at one point, and everyone I've met at shows are always so helpful!

**Alyssa Downs**

My biggest tip is..."Just Do It!" Particularly for Live Shows...we always have lots of folks that just want to come and watch. While this is perfectly okay, my advice would be to bring a few goats and plunge right in. MDGA shows are usually very laid back and very beginner friendly! If you are still a little nervous, don't just come and watch...come and VOLUNTEER! Shows need many volunteers to make it all happen, and you will learn A TON by helping out! Either way, it will be so much fun, you'll be eager for show season to start again next year!

**Kerry O'Neal**

As someone who followed Kerry O'Neal's advice I can say I totally agree. Definitely just do it, volunteer, bring a few goats, we are all learning. And I learned so much to enhance my breeding program. There's no substitute for seeing the goats live and hearing

the judges reasons. And the conversations and relationships with other breeders are the best! Love our Texas Mini Milkers club and our [Texas Two-Step - ADGA & MDGA Dairy Goat Show](#).  
**Natalie Babiak Weber**

Do it! Win or lose, it will be a learning experience!  
**Erik Paul Brown**

Enjoy the experience and take in as much from those around you to keep learning.  
**Stephanie Williams Trout**

Assuming your goat isn't in first place, pay close attention to the comments about the animals placing ahead of yours. Time permitting, take time to examine the top animals to see what features they have that places them at the top of their class.

**Ed Kinser**

Remember - it is just one judge's opinion.  
**Kari Zisk**

Just jump in and do it. Rip the bandaid off. If you are friends with a farm that wants to show, get stalls next to each other. Make sure you pay for an extra stall for personal belongings. Ask for help when



needed. My first show as an amazing experience. Other breeders answered all my questions and gave sage advice.

**Michelle Shawnee Eisenring Taub**

*Photo by Janessa Leigh Trafford*



## Milk Program: Stars Spring 2023

The Milk Committee is proud to share that our 2023 number of goats on test have exceeded the 2022 numbers already and it is still growing! Great job! Let's prove those DAIRY goats!!

We'd like to recognize the following animals that have earned their milk stars between the time period of January 2023 - March 2023.

### BUCKS

Awee Paddington +B Suzy Sarna DVM  
Goat Trails Zorro +\*B Christina Shirley

### MINI OBERHASLI

White Rock Farm Root Beer \*P Heather Edwards  
No Empty Acres Tiny Dancer Maya \*P Melissa Sargent

### MINI LAMANCHA

4 Hands Senza \*P Christy Nutt  
StoneCreek BC Junebug \*P Melissa Sargent

### MINI ALPINE

SerenityOaks BSB Raining on Sunday \*P Sarah Evancho

### MINI NUBIAN

Acadia P Elizabeth McCord \*P Suzy Sarna DVM  
Acadia Epiphany \*P Suzy Sarna DVM  
Cedar Creek Ravenous Kisses \*P Carrie Plowman  
Lil' Rascals Calico \*P Carrie Plowman  
Walk the Walk's Cricket \*P Nicki Crews  
Hilltopper Farms Nevers Amalia True \*P Michelle Taub  
Whispering Willows Anouk \*P Michelle Taub  
ZyGoat Farms RD Dewdrop \*P Michelle Taub  
Goat Trails Sweet Iris Blue 2\*P Michelle Taub  
Rosies Critters Lily Rose's Villain 2\*P Michelle Taub  
Green Gables CGF Cal's Starburst 3\*P Michelle Taub  
ZyGoat Farms Teyla Emmagan \*P Michelle Taub  
Rosies Critters Negasonic Warhead \*P Michelle Taub  
Genoa Meadows Sandy \*P Kellie Pinard  
Green Gables FF Cali Eclipse 5\*P Eliya Elmquist  
Green Gables GS Cali Magma 5\*P Eliya Elmquist  
Green Gables CGF She's a Peach 5\*P Eliya Elmquist  
Skillman's Andromeda \*P Eliya Elmquist  
Green Gables SOF Snow Camo 3\*P Eliya Elmquist  
Green Gables DT Southern Belle 4\*P Eliya Elmquist  
Green Gables DT Desert Snowstorm 4\*P Eliya Elmquist  
Green Gables E Royal Buggy 2\*P Eliya Elmquist  
Green Gables AC Rapunzel 3\*P Eliya Elmquist  
Goat Trails LF Honey-Rose 2\*P Beverly Holley  
Cedar Creek AWR Dippin Dots \*P Beverly Holley  
Cedar Creek ME Snow Bunny 2\*P Beverly Holley  
Dreamy A Farm Meadow \*P Shawn Forsythe  
HeartBreak Kidz Dixie 2\*P Shawn Forsythe  
Treestar Aunt Sister \*P Shawn Forsythe

# Healthy Minis: Are You Deworming Correctly?

By Kendra Rudd Shatswell

Parasite management is crucial to a healthy, happy goat. The goal is a low-enough parasite burden animal health is not compromised. While there is not a singular parasite management plan that works for every farm, there are a few practices EVERY owner should follow that will ensure goats are dewormed correctly and prolong the efficacy of chemical dewormers. Additionally, every goat owner should be aware of parasite resistance and strive to postpone it as long as possible. “Anthelmintic resistance is defined as a heritable genetic change in a population of worms that enables some individual worms to survive drug treatments that are generally effective against the same species and stage of infection at the same dose rate,” according to “Biology of Anthelmintic Resistance: These Ain’t Your Father’s Parasites” by Dr. Ray M. Kaplan.

## DEWORMERS

First, owners need to understand there are different classes of dewormers, also referred to as anthelmintics. A class consists of dewormers that share a similar mode of action. You can find more information here: [https://www.uaex.uada.edu/farm-ranch/animals-forages/sheep-goats/classes\\_dewormers.pdf](https://www.uaex.uada.edu/farm-ranch/animals-forages/sheep-goats/classes_dewormers.pdf) and here: <https://www.heftygoathollerfarm.com/post/which-dewormer-is-best-for-goats>. Many dewormers are off-label – not approved for goats without a valid relationship with a veterinarian. For a handy chart on dewormers, complete with dosages and crucial notes, visit <https://www.wormx.info/dewormers>. Note that effective dosages might vary from farm to farm.



*A few dewormers, both approved and off-label.*

## RULE ONE

### Do NOT rotate dewormers.

Rotating between classes and dewormers leads to parasite resistance and accelerates dewormer failure. Most dewormers are broad spectrum, meaning they will work on most GI tract parasites. A couple of exceptions are tapeworms and liver flukes. Find what dewormer works on your farm based on fecal egg count reduction tests – determine the egg count prior to deworming compared to fecal egg count 10-14 days after deworming. An effective dewormer will have at least a 95% kill rate. Dewormers can still be useful with a lower kill rate, but it might be a good idea to either combine two classes (more on that shortly) or use in conjunction with another alternative treatment, such as copper oxide wire particles or a diet high in tannins. Dewormers from two or more classes can be combined to increase effectiveness and slow resistance. The newest research indicates a combination treatment is desirable over a using a single dewormer. Note that these are given at the same time, but NOT mixed together. It should be cautioned that improper use of combination dewormers could select for worms that are resistant to both anthelmintics so be sure you are deworming only when necessary. For more information on combining dewormers, please refer to the following: <https://www.wormx.info/combinations>

## RULE TWO

### Do NOT deworm on a schedule.

Contrary to recommendations given when dewormers first became available, deworming should not be scheduled. We now know scheduling treatment accelerates resistance, and chemical deworming should NOT be preventive. Parasite numbers wax and wane during different seasons and in different conditions. Lactating does will likely be more susceptible to parasite burdens than a dry doe, and bucks are more likely to be susceptible in rut, etc....As detailed in the “Barber Pole Worm” post, Barber Pole worms and other internal parasites thrive in certain conditions and will have lower survival rates in others. For example, Barber Pole worm eggs and larvae survive very well in warm, humid conditions, but use up their energy stores very quickly in dry heat. Learn about the life cycle and preferred conditions of the parasites your herd is dealing with to better manage them – **Goat Biology.com** has some excellent animated slides detailing the lives of common goat parasites. The American Consortium for Small Ruminant Parasite Control offers many articles and files on the subject, as well.

### RULE THREE

#### **Deworm only the animals that require treatment.**

By selecting only animals that need deworming versus deworming the entire herd, the goat-keeper does not expose all worms to the chemical, thereby slowing the worm's ability to develop genes to resist the anthelmintic. The idea of leaving unexposed parasites is called refugia. The Latin term means "in refuge." By leaving untreated animals and therefore unexposed worms, there will be few resistant worms to mate with many susceptible worms, and the resistant genes will be diluted in the next generation. Refugia refers both to adult worms not exposed to dewormer and the larvae and eggs on pasture that were not the product of resistant worms. Good explanation and illustration of this is here: <https://www.youtube.com/watch?v=yRK1qLzXm2s> and here: <https://extension.msstate.edu/publications/sustainable-parasite-control-for-sheep-and-goats>.

Furthermore, it is documented that the parasite burden is NOT evenly distributed among the herd. Research shows 20-30% of goats in a herd will carry up to 80% of all parasites. By first identifying then deworming and/or culling these animals, the goat owner will greatly reduce the parasite burden both in the goats and on the pasture. Deworm animals based on FAMACHA scores – remember this only indicates anemia that is generally caused by Barber Pole worms or liver flukes – and/or a fecal showing a high eggs per gram count. Many producers misuse the FAMACHA system – check out <https://www.wormx.info/dosdents>.

Utilize your livestock veterinarian, send in samples to the **Veterinary Parasitology Laboratory** (<http://www.midamericaagresearch.net>) or invest in your own microscope. Fecals are the best way to determine an internal parasite burden, but even a fecal might be inconclusive - for example, some liver fluke eggs require a fecal sedimentation test instead of a fecal float and usually produce very few eggs. There are many fecal float methods, so it is best to choose one and stick with it. Using a McMaster slide is the best way to get a fecal egg count and fecal egg count reduction percentage, instead of just an idea of a high or low burden.



For more information on the McMaster slide, go here: [https://web.uri.edu/sheepngoat/files/McMaster-Test\\_Final3.pdf](https://web.uri.edu/sheepngoat/files/McMaster-Test_Final3.pdf) Tolerable parasite levels will vary from farm to farm and goat to goat. Remember that some goats are more resilient to parasite burdens than others, but these animals are shedding higher numbers of eggs in the pasture.

### RULE FOUR

#### **Dose correctly.**

Dose by weight to avoid under-dosing. **WEIGH THE GOAT BEFORE DOSING.** If you do not have access to a livestock scale, weight tapes or cloth measuring tapes are a cheap investment. There is a relatively accurate formula here - <http://www.infovets.com/books/srmr/C/Co98.htm> Administer the dewormer correctly - from the article "Choosing the Right Drug for Worm Control" – "Delivery deep into the oral cavity avoids closure of the esophageal groove, so the medication goes into the rumen rather than the abomasum. This step facilitates longer contact time of the drug with the gastrointestinal tract and improves drug efficacy." Dewormers in the form of pour-ons, injections, and long-range (persistent activity) drugs have proved to be generally ineffective in goats. These sub-lethal levels mean many worms survive and develop those dreaded resistant genes. For further reading, check out "Should I consider using LongRange™ dewormer for parasite control in small ruminants?" by Dr. Ray Kaplan. Some sources recommend fasting the animal 12-24 hours before treating with ivermectins and/or benzimidazoles, with the exception of does in late gestation. The idea is that this increases drug availability, meaning the worms will be exposed to the drug for longer and are thus more likely to be killed.

### ADDITIONAL CONSIDERATIONS

As goat producers, we are exercising *parasite management, not parasite elimination* when using dewormers. Dr. David Fernandez explained in an online parasite information session, "No matter how hard you try, you cannot eliminate every parasite from your animals. If you try hard enough, you will create some of the toughest parasites on Earth which will eventually make your life miserable, not to mention your goats'. Instead, we need to focus on managing parasites so that they do not cause an intolerable level of harm." Again, this will vary from farm to farm and goat to goat, but by deworming wisely, you can successfully manage the parasites in your herd.

Another note on newly-freshened does - it is likely



that does that have recently kidded will experience a “bloom” of internal parasites. This is known as the periparturient egg rise, a “temporary loss of naturally-acquired immunity to gastro-intestinal parasites,” according to the American Consortium for Small Ruminant Parasite Control. This can happen shortly before or up to two months after kidding. Read more at <https://www.wormx.info/pper>

Dewormers are not the only way to manage parasites. Other options include copper oxide wire particles, sericea lespedeza or other high tannin forage or feed, rotational grazing, dry-lotting, haying or plowing, strategic co-grazing, and more. Recently, a product called BioWorma® has become available to the United States. According to their website, BioWorma® is “A natural biological control that captures and consumes infective worm larvae (including chemical resistant/anthelmintic multi-resistant larvae) within the manure of grazing animals.”

Fecal egg counts, FAMACHA scores, and careful observation are crucial to best determine what parasites your goats are burdened with, how heavy that burden is, and how well your dewormer and deworming practices are working. In conclusion, successfully managing parasites via dewormers will vary from farm to farm but ALWAYS dose correctly and treat only animals the need treated, and NEVER rotate dewormers or deworm on a schedule.

## SOURCES

*“Biology of Anthelmintic Resistance: These Ain’t Your Father’s Parasites”;* Ray M. Kaplan, DVM, PhD, DipACVM, DipEVPC College of Veterinary Medicine University of Georgia, Athens, GA

*“Choosing the Right Drug for Worm Control”;* Lisa Williamson DVM, MS, DACVIM University of Georgia College of Veterinary Medicine Athens, Georgia, USA

*“Correct Administration of Anthelmintics”* Ken Pettey Department of Production Animal Studies, Gareth Bath Department of Production Animal Studies, Jan van Wyk Department of Veterinary Tropical Diseases, Faculty of Veterinary Science, University of Pretoria.

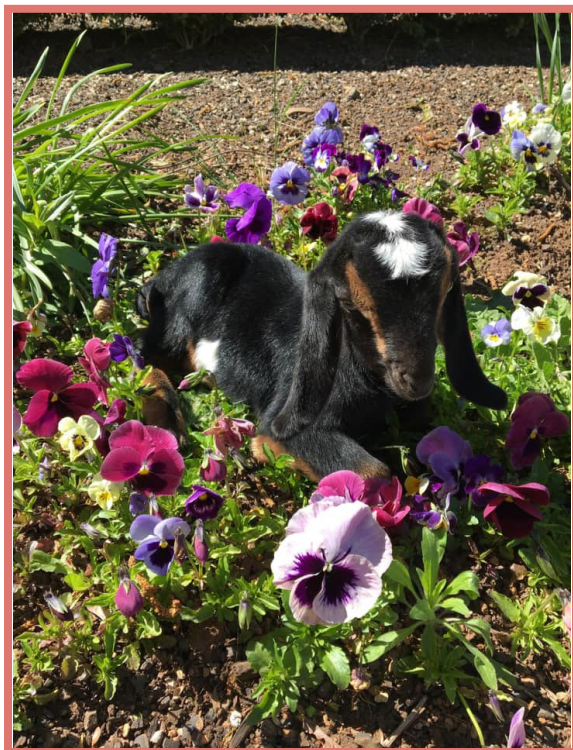
*“Do’s and Don’ts of FAMACHA Scoring®”* Katherine Petersson, PhD Associate Professor of Animal Science, University of Rhode Island

*“Extending the Efficacy of Anthelmintics”;* Lisa H Williamson, DVM, MS, DACVIM University of Georgia College of Veterinary Medicine

*“Goat and Sheep Parasite Control”* (powerpoint presentation) Jerry Lamb, University of Tennessee Extension, Rhea County.

*“Refugia - Overlooked as Perhaps the Most Potent Factor Concerning the Development of Anthelmintic Resistance” [2001]* Van Wyk, J.A. (Pretoria Univ., Onderstepoort (South Africa). Veterinary Tropical Diseases Dept.)

*“Should I consider using LongRange™ dewormer for parasite control in small ruminants?”;* by Dr. Ray Kaplan Professor of Parasitology, Department of Infectious Diseases College of Veterinary Medicine University of Georgia Athens, Georgia



# Happy Spring!

*Baby in the flower bed. By Milynn Schaeffer*



## Recipe: Boiled Custard

*Shared By: Jo Weidner for the Blue Ridge Goat Club*

**1 ½ qt. \*goat milk**  
**4 whole eggs**  
**1 cup sugar**  
**2 tbsp cornstarch**  
**1 tsp vanilla**

*\*If you are unfortunate enough to not have goat milk available (perish the thought) use whole milk but not the reduced fat type. Then, for your next batch of custard, call a goat club member and barter for some better milk (and eggs too if you need them!)*

Beat sugar and eggs together until blended.

In a double boiler, heat milk slowly until scalded.

Pour approximately one cup of hot milk into the egg-sugar mixture and stir to blend. Pour egg-sugar mixture into scalded milk and cook slowly (stirring constantly) until the boiling point is reached.

Dissolve cornstarch in small amount of cold water and slowly stir it into the hot mixture.

When the custard begins to thicken, remove from heat and add vanilla.

Fit a piece of waxed paper on top of the custard while cooling not only to protect it, but to easily remove the skim that forms during the cooling.

Best if eaten after refrigerating overnight but if you can't wait, serve in a bowl with a scoop of vanilla ice cream and enjoy!

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## Mini Goat Classifieds

Members, shows, and clubs - you can advertise your farm, organization, or event to other MDGA members! Fill out the online form at <https://miniaturedairygoats.net/mini-goat-notes-directory-submission/>

### *All En Time Farm*

Lavinia Allen  
Floyd, Virginia 240901  
[allentimefarm@gmail.com](mailto:allentimefarm@gmail.com)  
<https://www.facebook.com/AllEnTimeFarm/>  
(540) 520-8755  
We are a small farm in SW VA raising Mini Nubians since 2012

### *Rafter O at Cordova Creek*

Kerry O'Neal  
Canyone Lake, Texas 78133  
[kerry@RafterO.com](mailto:kerry@RafterO.com)  
<https://raftero.com>  
Mini Nubians - healthy, friendly, and exceptional!

### *Shadewood Family Farms*

Christy Hittner  
Fullerton, Nebraska 68638  
[hittnerfamily@aol.com](mailto:hittnerfamily@aol.com)  
(308) 550-2603  
Gorgeous show quality Alpines, mini Alpines, and Nigerian Dwarfs

### *Texas Mini Milkers*

THE Mini Dairy Goat Club of Texas!  
[info@texasminimilkerm.org](mailto:info@texasminimilkerm.org)  
<https://texasminimilkerm.org/>  
GREAT mini THINGS are HAPPENING in TEXAS - Join us!

### *Udderly Outrageous Goat Boutique*

<https://www.etsy.com/shop/UdderlyOutrageous>  
NEW Goat tee and gift shop including MINI breeds!  
Updated weekly!

# Letter to the Editor: Photographing A Rear Udder

By: Eliya Elmquist

Originally posted on Goat Mentor June 2015

A good udder photo will show the quality of the udder - attachment, rear udder height, medial suspensory ligament, teat placement and size, capacity etc.

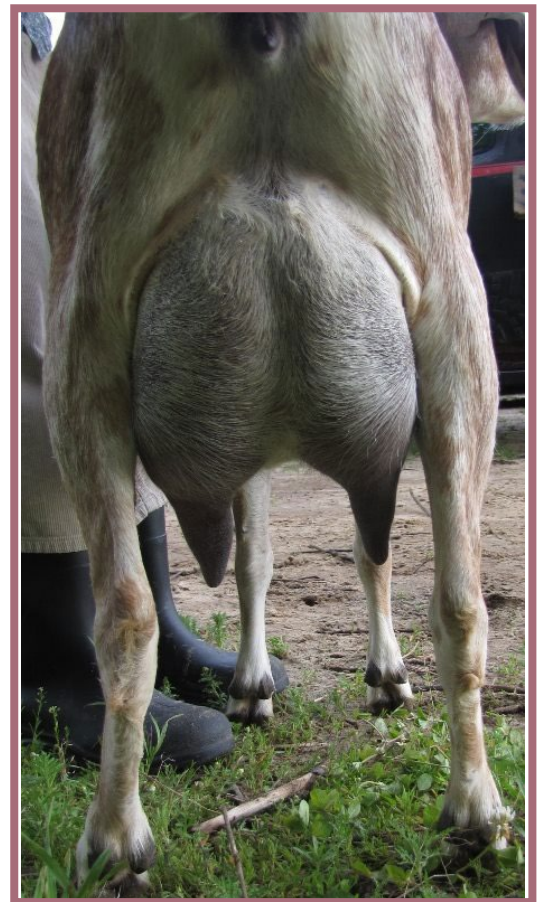
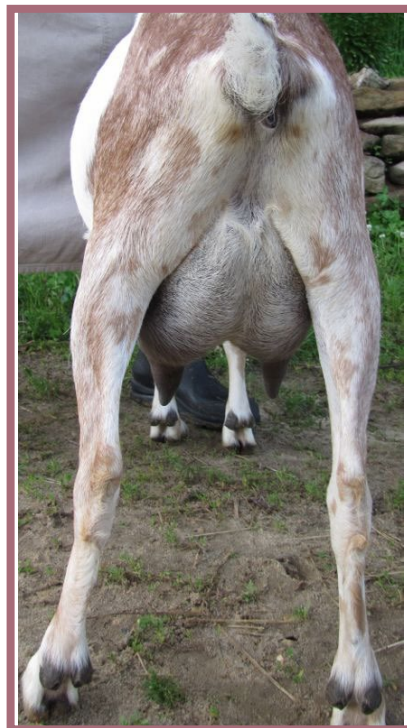
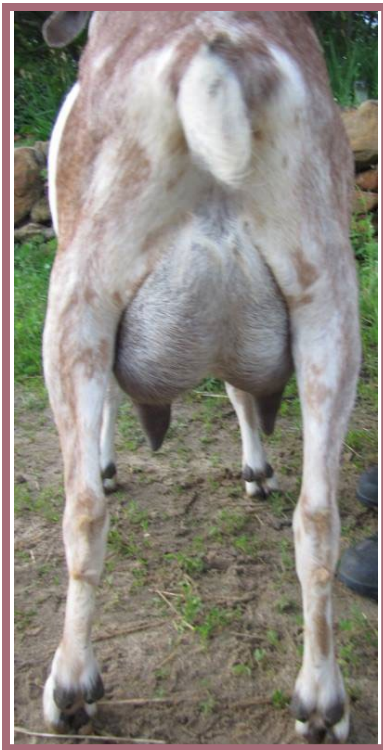
Getting pictures of a goat that shows them as they are is HARD.

For example, I have a 2nd freshening 3 year old who in real life has a very nice, wide and high udder with good attachments. In trying to get her to stand for the pictures, she did NOT like the idea

of someone standing behind her so she was either trying to twist around or was straining forward. Both of these poses made her udder look terrible. When twisting, her udder looks lopsided. When straining forward, the udder would get tucked in front of the back legs making her look like she had a heart shaped rear udder.

It is hard to believe that these are pictures of the same goat's udder taken within a few moments of each other!

*Photo 1 and 2 - Udder looking lopsided, due to twisting around and camera angle, and narrow at the top due to straining forward on the collar.*



*Photo 3 - Finally cooperating better showing the balance and height and width of rear udder better (it still looks nicer in person, however).*



## Photos from the Mini Goat Folks



*Photo (above) by Jeanne Carson*



*Photo (left) by Megan Neuhardt*

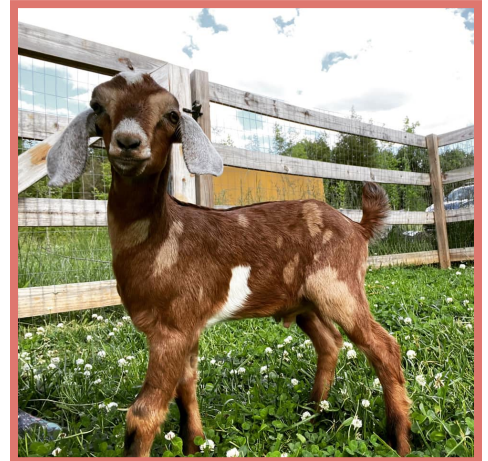
*Sisters (right) by Sarah Slater*



*Photo (below) by Amanda Graf*



*Photo (left) by Hilary Gettler*



*Photo (above) by Jackie Daly Edwards*

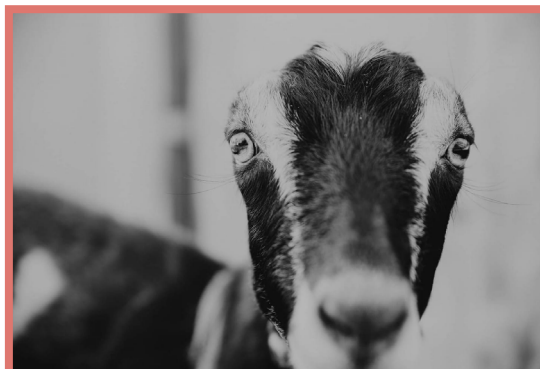


*Photo (above) by Jamie Butler*



*Photo (left) by Shannon Beamon*

*Miss Sapphire with a heart and bow and arrow on her ear.  
Photo (below) by Saron Dorthick*



*Photo (right) by Alexandria Bathalon*





# Genetics and Anatomy of the Ear Types in Miniature LaManchas

*By: Ed Kinsler*

There are three types of ears found in the Miniature LaMancha goat breed: erect, gopher, and elf.

**Erect ears**—these are the typical full-sized ears like those found in Nigerian Dwarves, Alpines, Toggenburgs, etc.

**Gopher ears**—could be considered an “almost earless” condition; in appearance, gopher ears are folds of skin around the ear opening; of particular note, there is no muscle tissue attached to these folds, so gopher-eared goats cannot move or “prick” their ears.

**Elf ears**—these intermediate ears are very small, but often have a little “pointed” projection which may stick out, fold down, curl, or be carried flat against the head; elf ears have muscles, and elf-eared goats are able to move their ears in response to sounds.

There are only two genes involved in the determination of the three ear types described above. These genes may be considered co-dominant or incompletely dominant. Neither gene is dominant or recessive (as is often stated in some of the written descriptions).

These genes seem to have no exact name, but an easy way to list them is:

**Ear gene**—when fully expressed, a gene that produces typical, full-sized ears

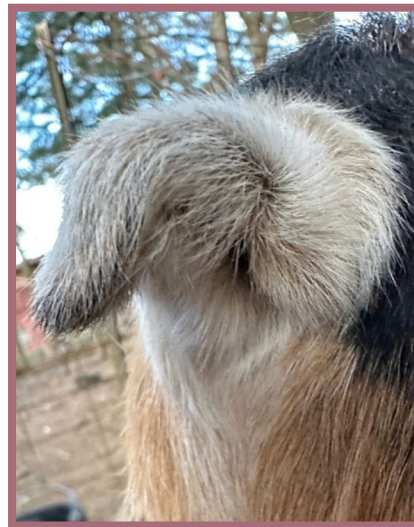
**No-ear gene**—when fully expressed, a gene that produces no ears, which is equivalent to the gopher ear.

Keeping in mind that genes typically occur in pairs, and this is true for goat ear genes, these are the three possible genotypes (gene pair make-up), with each producing a different phenotype (ear type):

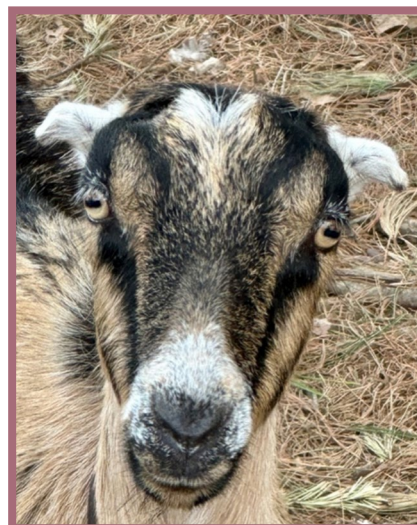
**A gene pair in which both genes are for ears—produces a goat with typical, erect ears**

**A gene pair in which both genes are for no ears—produces a gopher-eared goat**

**A gene pair with one ear gene and one no-ear gene—produces an elf-eared goat.**



*Examples of elf ears*



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Here are the possible crosses and their predicted offspring:

**Eared X Eared = all offspring will have typical, erect ears**

**Gopher X Gopher = all offspring will be gopher-eared**

**Eared X Gopher = all offspring will be elf-eared**

**Eared X Elf = on the average 50% will have typical, erect ears & 50% will have elf ears**

**Elf X Gopher = on the average 50% will have elf ears, and 50% will have gopher ears**

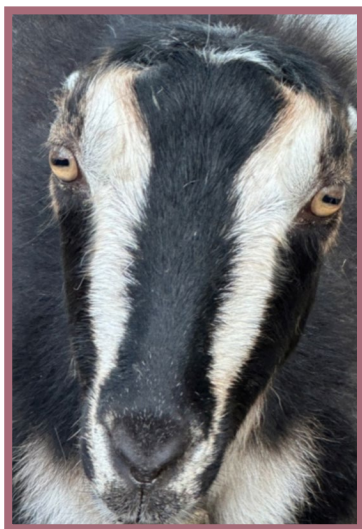
**Elf X Elf = on the average 25% will have typical, erect ears; 50% will have elf ears; 25% will have gopher ears**

For identifying ear types, the normal ears are obvious, but it is the differentiation between gopher and elf ears that gives newcomers a problem. Gopher ears have only a small amount of cartilage that can be barely felt as a short tube inside of the auditory canal. The small external ear itself typically has no cartilage but consists of folds of skin which may have a small point. The folds of skin, including the point, lie close to the head, encircling the auditory canal. A gopher-eared goat

often appears to have no ears at all. The elf ear, in contrast, has cartilage that not only extends farther from the canal than that of the gopher ear, but extends into the point. The whole elf ear usually protrudes from the head and is quite obvious as a small ear (though it sometimes does lie close to the head). One feature that clearly separates elf from gopher ears is the ability of the elf-eared goat to move and adjust the ears as it focuses on sound. The elf-eared goat has definite muscle control of its ears. On the other hand, gopher-eared goats do not have muscle control of the ear and will not move the ears in response to sounds.



Longtime breeders of LaManchas, Miniature LaManchas, or LaMancha crosses can differentiate between elf and gopher ears at a glance. Less practiced individuals should rely on the presence or absence of ear control. Measuring to identify elf versus gopher, as suggested in some breed standards, is not considered reliable because age of the animal, as well as individual variation in soft tissue structures (such as ears in dogs or noses in humans) is likely to result in incorrect identification of the ear types.



*Examples of gopher ears*