

# KINDER QUARTERLY

A PUBLICATION OF THE KINDER GOAT BREEDERS ASSOCIATION



## In This Issue

### KGBA Corner

Letter from the President .....	2
KGBA News .....	3
Welcome New Members .....	3

### The Healthy Herd

Can You Pinch an Inch?.....	1
Feeding Kinders: Breeder Interviews .....	6
ZCG's Goat Feed Mix .....	9
Winterizing Your Herd .....	12
Biosecurity and Your Herd .....	13

### Kinder Breed Spotlight

Understanding the Standard: Part One .....	10
--	----

### Homesteading

Homegrown Goat Food .....	8
Cream Separating.....	15

### Recipe

Italian Goat .....	16
--------------------	----

## CAN YOU PINCH AN INCH? ASSESSING YOUR KINDERS' BODY CONDITION

by Sue Beck, Kathrin Bateman, and Elizabeth Sweet

As the days become shorter and the weather colder, most of us focus on preparations for the coming winter. Unfortunately, one of the most important things we can do for our goats is also one of the most overlooked — having our goats in good body condition before the temperatures dip gives them the best chance of weathering winter in good shape.

Just looking at your goats won't give you a fine-grained, reliable assessment of their body condition, especially in winter when coats are longer and thicker. There are three areas of a goat's body you will want to inspect by hand on a regular basis in order to assess body condition and

whether you may need to adjust your feeding regimen.

The first step in ensuring winter weight maintenance is assessing each goat individually and rating its condition using a body score chart. These charts are specifically designed to help owners check for key signs of condition and are extremely helpful. When using them, remember that our goats are dual purpose and should NEVER look as lean as a dairy goat! Seeing a Pygmy goat's ribs or hip bones would mean that it is emaciated. It is incredibly important to keep reminding ourselves that our Kinders are (continued on page 4)...



# Your KGBA

## KGBA Board

### President

Sue Beck

### Vice President

Ashley Kennedy

### Secretary

Jean Jajan

### Treasurer

Lisa LaRose

### Members at Large

Brenda Lee Shulte

Kathrin Batema

## Registrar

Jan Hodges

## Web Committee

Paul Jones

Carla Durham

Kelsee Gibbs

## Newsletter Committee

Kathrin Bateman

Elizabeth Sweet

Simone Smith

## Contributors

Kathrin Bateman

Sue Beck

Simone Smith

Kay Spencer

Elizabeth Sweet

## KGBA CORNER

### Letter from the President

This moment sneaks up on me every year. I've purchased hay, tweaked feed amounts, and bedded barns. Feet are trimmed, fecals checked, and blood work complete. Does are bred according to plan, and suddenly I am done. Free to enjoy my fuzzy little goats and dream of spring babies. The hustle and bustle of fall on the farm is a fun and exciting time, but I always cherish the peacefulness of winter.

As the new year begins, I find myself reflecting on the many changes that have taken place within the Association. We are experiencing unprecedented growth, renewed excitement, and an expanding volunteer base. We are seeing Kinder goats represented at multiple venues throughout the United States, and we once again have Kinder herds in Canada. Members in numerous states are working to hold shows and evaluations in their communities, which will offer more exposure for our little goats and a great opportunity for owners to connect with one another.

The Board of Directors is also facing changes. We have a number of wonderful board members stepping down after this year, and we will be very sad to see them go. Lisa Lamm has spent many years volunteering her time and experience to the association and will be greatly missed. In the years that Lisa Naumann has been treasurer, she has worked to make many fundamental changes to our operating procedures that enable the entire association to run more smoothly. Carla Durham has played key roles in numerous committees and always volunteers to help when we need something done. These women have all been a huge asset to the association and will be missed in the year to come.

It's hard to say goodbye to so many incredible board members, but in doing so, we are able to welcome new volunteers. Ashley Kennedy has been breeding Kinders for many years and is already actively sharing her knowledge and experience with other members. As vice president, she will play key roles in a number of areas, including education and show/evaluation program development. Brenda Lee Shulte is already helping to streamline the registration process and make the association as "user friendly" as possible. Kathrin Bateman has been appointed to finish Lisa LaRose's member-at-large term and is also already hard at work on the Newsletter Committee. While relatively new to Kinder goats, she has years of experience raising high quality Nigerian Dwarf goats. We look forward to the fresh ideas and viewpoints that all our new board members bring with them, and look forward to another great year with the KGBA!

Best Regards,

Sue Beck

*The Kinder Quarterly* is a publication of the Kinder Goat Breeders Association. Kinder® is a registered trademark of the Kinder Goat Breeders Association. All rights reserved.



## HEAR YE! HEAR YE! KGBA NEWS

### Membership Renewal

Membership dues were due on January 1st. Members that renew before March 1st receive an early bird discount of \$5 off!

Want to be added to the KGBA breeder listing? It's free for members! Just fill out the online form at <http://www.kindergoatbreeders.com> or email [sue@jabeck.com](mailto:sue@jabeck.com).



Photo: Simone Smith

## SHOW NEWS

### Southeast — Let's Go To A Show!

Would you like to show your Kinder goats? Or maybe just go to a show and see the Kinders that are being shown? Maybe you want to purchase more Kinder goats for your herd, as there are often goats for sale at shows.

My name is Kim Shunney, and I have been raising and showing Pygmy goats for many years and have now entered into Kinder goats. In the past I have chaired, judged, and actively shown at NPGA-sanctioned shows on the East Coast. I would like to put on a sanctioned Kinder show but want to know if that is something members of the Kinder Goat Breeders Association would be interested in.

If you would like to see and attend a Kinder show here on the East Coast, please contact me via e-mail at [kshunney66@yahoo.com](mailto:kshunney66@yahoo.com) and give me your name and the state you are located in. Depending on the response, a show could be set up as soon as the summer of 2015.

Kim Shunney

### Northwest — Ellensburg, WA

We are looking into holding a sanctioned Kinder goat show in Ellensburg, WA, in either 2015 or 2016. We have not determined an exact date, but we would most likely look at June or July as the preferred months. We would like to attract Kinder owners from throughout the region, as well as vendors who are looking to promote their goods and organizations. If anyone is interested in attending, showing, having a booth and/or planning this event, please contact either Kat or myself:

Kat Satnick - [KSatnik@yahoo.com](mailto:KSatnik@yahoo.com)

Stephanie Lounsbury Griffin - [stephlounsbury@hotmail.com](mailto:stephlounsbury@hotmail.com)

Stephanie Griffin

# Welcome!

## Welcome to our new members!

Paul Jones  
Scott and Jackie Taylor  
Joella Pettigrew  
Lindsey McGuire  
Julie Snider  
Richard Friedberg  
Elizabeth Sweet  
Michele Berndt  
Bennett Griffith  
Aleta McOmber  
Kim Thompson  
Nancy Wisner  
Kathrin Bateman  
Amy Weatherby-Johnson  
Rachel Toroni  
Duane St. John  
Jackie Taylor  
Eric Dickerson  
Megan Javornik  
Douglas & Elizabeth Whitley  
Clint St. John  
Amy Lyons  
Shari Henry  
Katie Zielinski  
Maureen Mack  
Richard Watts  
Julie Bradburn  
Maureen Mack  
Elizabeth Reiner  
Darold Thrasher  
Donna Maywhort  
Carrie Evans  
Lisa Walworth  
Trent Teske  
Autumn Prouty  
Donna Benoit  
Suzanne Culter



# Assess each goat's body condition to refine your feeding program.

(continued from page 1) half Pygmy, and judging them on the basis of a dairy ideal is a critical error and one that can cost your goats their health as well as costing you milk, meat, and the optimal growth, development, and value of kids.

A detailed scoring guide can be found online at <http://www.luresext.edu/goats/research/bcshowto.html>. There is a useful video and a fact sheet with pictures for each body score. But I like the body side shots even better in this reference: [http://www.ansci.cornell.edu/goats/CSGSymposium/bodycondscore\\_goat.pdf](http://www.ansci.cornell.edu/goats/CSGSymposium/bodycondscore_goat.pdf). It's especially helpful because it pertains to meat goats. Finally, Maxine Kinne's guide to scoring Pygmy goats provides another reference, with instructive drawings: <http://kinne.net/bcs.htm>.

Body condition scores range from 1 – 5. A body condition of 1 is too thin, while a body condition of 5 is too fat. Either extreme is reason to look for causes and take measures to correct the problem. For dual-purpose Kinders, even a body condition of 2 or 2.5 suggests that an adjustment is in order. In general, I prefer to keep my goats between 3.5 and 4 on the body condition scale. Because our winters are long and cold, I like to go into winter with goats at a 4. For many, this would be considered fat, but I know that they can easily burn off many calories on cold winter nights. I never decrease feed for a goat at this point of the year — if spring shedding reveals a bit more thickness than I prefer, I can make alterations to their diets then.

Here's what to evaluate:

- **The spinal process** — The spinal process is the ridge of the backbone. If the spine is a bumpy, discernible ridge and there is a depression just on either side where a smooth cover of muscle and fat should be instead, the goat is too thin, and it's time to adjust its feeding regimen. Ideally,

you shouldn't feel a bony ridge sticking up. Instead, the backbone should be smooth, with gentle ripples that tell your fingers where the vertebrae are beneath. That indicates a body condition score of 3. If the vertebrae are so heavily covered in fat that you can hardly feel them at all, that indicates a body condition of 5, and your goat is too fat. The slope from backbone down to the shelf of the transverse process should be a smooth one or gently rounded with muscle and fat cover and no depression between the backbone (or spinal process) and the transverse process.

- **The transverse process** — The transverse process is the wide bony shelf on either side of the ridge of the backbone. It can be very clearly seen on a goat that is too thin, with hollow flanks beneath. Ideally the transverse will be barely discernible. Place your hands on the transverse process and feel along its edge. You should not feel the sharp bony edges of the lumbar vertebrae, only thinly covered. Instead, the edge of the transverse process will be smooth beneath a layer of fat and muscle cover, and the flanks below will not be hollow. The transverse process should not be lost in fat; nor should it be bony and sharp.
- **The ribs** — If you can readily feel and see a goat's ribs through a thin layer of flesh, the goat is too thin. If you can't feel them at all, the goat is too fat. If your goat's body condition is ideal, you can feel the spaces between the ribs, but only by exerting pressure to find them. You won't be able to see the ribs. (Of course this time of year, winter coats tend to obscure ribs and other details, so you have to rely on what you can feel.)
- **The sternum** — A goat in good body condition has a substantial

## 7 Reasons to Keep Your Kinders in Good Body Condition:

- Well-fed does give more milk.
- Well-fed bucks maintain their health through rutting season.
- Well-fed does give birth to larger kids and are better able to feed them.
- Larger kids are more resilient to stresses and transitions.
- Healthy, stocky kids grow faster and sell more quickly and for higher prices. (A kid from spectacular genetics can't become spectacular if its nutritional needs aren't fully met throughout its growth and development.)
- Animals in good condition dress out as larger carcasses.
- Doelings whose nutritional needs are met can be bred earlier without stunting their growth.



padding of flesh on its sternum, or breastbone, beneath its brisket. You can grasp the flesh between thumb and forefinger, yes, but you can't readily feel the cartilage or the ribs that connect to the sternum. The pad of flesh is substantial and firm. If your goat is thin, the layer of fat over the sternum will be thinner, and you'll be able to readily feel the connective tissue and the junction of the ribs and the sternum. If your goat is over-conditioned, that sternal fat will be too thick to grasp readily, and you won't be able to feel at all what's beneath.

Settling on a feeding plan that works is critical. You know you have the right baseline when your goats have been on the same rations for at least a month and show no signs of dropping or gaining weight on their current feed amounts. Knowing that the amount you are feeding is a good maintenance amount makes it easier to catch other problems before they become critical — if I know that my doe has maintained her weight well on a certain ration and she suddenly starts to drop weight, there is obviously a problem that will take further investigation.

Once you have a baseline, you can adjust your feeding regimen to account

for factors that affect nutritional needs. These include growth, stage of pregnancy, lactation, breeding season, internal/external parasites, trauma, stress, herd changes, and weather (on colder days, increase hay, but increase grain only if extreme cold continues for weeks). When biting insect loads are high or weather is bad, don't assume your goats are getting enough grass out at pasture; offer some supplemental hay if their body condition is dropping. And take into consideration that hay and pasture forages vary widely in their nutritional quality. Grass hay and alfalfa hay, for instance, are very different feeds. Assessing each goat's body condition regularly is the best way to tell if your feed choices are working. As you assess your herd and their feed requirements, remember that it's best to limit your herd's size to the number of Kinders you can monitor closely and feed well.

Feeding regimens vary around the country, based on what feeds are regionally available and affordable. There's no one way to meet your goats' nutritional needs. With that reality in mind, we interviewed breeders Laura Kennett, Jean Jajan, and Ashley Kennedy and asked them to talk with us about their feeding regimens and

how they adjust what they feed depending on circumstances and their goats' condition. (Laura's remarks are excerpted from her email response, and Sue's and Ashley's are summarized from phone conversations.)



In this photo, Alsace Acres Stella (right) has reached a body condition of 5. Note the fat behind her elbows. Time to control her portions. Having does at a body condition of 4, though, is not a bad idea going into winter where winters are severe. Photo: Sue Beck



The photo on the left shows a doe previously in good condition. A number of stressors caused her to lose weight and eventually become emaciated (right). In addition to adjusting feed intake to reflect individual physical demands such as milk production and pregnancy, finding and removing stressors (i.e. parasite burden, competition for food or aggressive herd mates) is very important in maintaining herd health. By separating this doe from aggressive herd mates, increasing her grain rations, and drying her off, her owner was able to bring her back to a healthy weight in just a few short months.



Here is a good example of why feeding adequate amounts of grain will actually save you money in the long run. Well-nourished kids reach their optimal size and grow more quickly than poorly nourished ones. **Photo 1** shows a doeling after arriving at her new home around 12 weeks old. Notice her thinness and her rough coat? **Photo 2** shows her at 6 months old, virtually the same size as a 2-month old buckling. **Photo 3** shows her at age 1 year, still very small for her age. **Photo 4** shows her at age 2, having given birth to normal-sized kids and having come into her own with a solid build although she remained on the small side. Because she had catching up to do, she could not be safely bred until she was 1.5 years old.

## Laura Kennett

Silver Creek Farm, Baldwin, Wisconsin

**Climate:** Cold winters with snow, annual rainfall 31"

**Setup:** One acre of fenced pasture

**Hay:** Our goats have free choice hay year round. They get hay with less alfalfa through their dry period to help prevent milk fever but otherwise have good quality hay with around 50-60% alfalfa mixed with other hay grasses. If the alfalfa is too low, I supplement with alfalfa pellets. I also give alfalfa pellets the week before kidding (and then after kidding through production) to boost the calcium level in does preparing to kid. Bucks get a little less alfalfa in their hay but also have free choice hay. All goats also have access to pasture at all times.

**Grain:** We feed a mix of oats, BOSS, beat pulp, and a small amount of nonGMO corn. Bucks do not get corn or beat pulp. All goats get grain year round; the bucks get less in the summer. When does are milking, we also add a small amount of Calf-Manna and some flax seeds to their grain mix. They are given grain in proportion to their production and body condition. I drop the Calf-Manna in August because it has soy in it, and soy can impair fertility. I dry does off two months or so prior to kidding and decrease the grain they get. But adult bred does get around two pounds of grain per day through the winter. Young does get around three pounds per day, but that varies. Last winter, when it was 10 degrees or

colder for 45 days straight, everyone's ration was increased. Most of the does had triplets last spring after a very long and harsh winter, so the increase was worth it. This winter has been milder, so we backed off a bit until we hit a cold spell. I watch body condition closely and adjust accordingly.

All goats have free choice goat mineral with ammonium chloride added to the buck mineral. I mix in a small amount of kelp and powdered vitamin ADE mix with the mineral. They only get a little kelp because it can mess with hormone functions, but it also has health benefits. All goats have free choice baking soda most of the year. I pull this in August and give it only if they are bloated. I give it back free choice once everyone is bred. Supposedly this makes for more doe kids, but I am keeping track to see how that goes. I give a copper bolus to goats who seem deficient throughout the year, but in the spring I give one to everyone prior to kidding. Bucks get copper in the spring, too. I do a 2 gram bolus.

We try to grow our own hay and oats. I monitor weights on adults and growing kids monthly. Diets are adjusted as needed. We also give BoSe in the fall and spring.

We pull all the babies and bottle-feed them because it's more fun for us that way. Kids have access to hay by four days of age and grain at about a month. This year I am going to start kids on just oats at a month of age and gradually switch them over to what the adults eat. I keep the kids separate to ensure that they get all the feed they want and need. Kids get more grain than the adults do to support their growth in the cold winter. I don't push the grain though.

# Jean Jajan

Gray J Kinders, Grants Pass, Oregon

**Climate:** Mild, 30 inches of precipitation annually, summers are dry—no grass by June

**Setup:** Limited pasture

## Basic feed regimen:

- Free choice alfalfa (Note: alfalfa is higher in protein and calcium than grass hay. Where alfalfa is hard to find, other feeds must make up the nutritional difference.)
- Locally produced meat goat ration (pelleted feed with some grain)
- Loose goat minerals similar to Manna Pro brand
- Bicarbonate of soda free choice

Jean feeds her does on the milk stand, a quart of grain with alfalfa pellets to slow them down. Does are milked once a day and dried off in September. Jean takes them off grain then but still gives them some alfalfa along with grass hay. Her goal in cutting back feed in the fall has been to reduce the number of kids per doe because her does were having too many quads and quintes. She'd ideally like to see triplets instead and believes that her adjusted regimen has been successful.

Jean feeds black oil sunflower seeds when showing.

In general, she feeds no grain to kids, though condition is her guide. Doelings nurse their mothers longer than bucklings do, so that can be a factor. If a doe has quintes or quads, she makes sure those kids get more; and she doesn't start milking the doe until the kids are weaned. She does the same thing with young does that freshen with triplets.

She does not generally feed her bucks grain, but they do have free choice alfalfa. If a buck needs grain to maintain condition, she gives a cup of meat goat mix and feeds ammonium chloride to minimize the chance of urinary calculi.

Jean adjusts her feed regimen if any goat is getting skinny. She says she keeps her goats a little fatter than some do, but that has helped her to place in shows and sell kids. Are they too fat? Not at all. When she had a one-year doeling and a nine-month wether butchered, they were nice and round, but there was no internal fat to cause processing headaches.



# Ashley Kennedy

Still Meadow Kinders, Maderos, California

(Ashley will be moving part of her herd to Colorado, but this information pertains to her experience in California.)

**Climate:** Hot and dry, infrequent rain in winter

**Setup:** Dry lot with occasional bits of grass after rains

## Basic feed regimen:

- Pretty much as much alfalfa as they'll eat is put out twice a day.
- Approximately two pounds of Chaffhaye per goat each morning
- Grain is a meat goat finisher mix
- Loose goat minerals offered regularly

Ashley feeds her does about two cups of grain per milking and milks twice a day.

She feeds her kids some grain but doesn't overdo it because she wants them to develop mostly on grass/alfalfa hay. At six to eight weeks they start nibbling on it, and she works them up to about one cup per day, either given all at once or divided into two feedings.

Ashley's does always get grain, and the amount is adjusted according to their need as judged by body condition. Does are always either in milk or pregnant, so grain is always a part of their diet.

Young bucklings are weaned earlier than doelings are, so they tend to get a bit more grain to compensate during their early growth period. They get no grain after six months of age, except for mature bucks who are losing condition during rut.



Breakfast at Still Meadow Kinders in Maderos, CA

# Homegrown Goat Food: Some First Steps

by Elizabeth Sweet

**S**ome Kinder owners with adequate land in favorable climates are experimenting with raising food to meet some, most, or all of their herds' needs. Whether you are embarked on a quest toward self-sufficiency or concerned about what's in the feed available to you at the local feed store (or both), growing at least some of your goats' food can make nutritional and economic sense. Here are some starting points that won't keep you out of the feed store anytime soon but will enable you to grow more and buy less.

## Improving pasture

Goats are not grazers that thrive on grass pasture (or grass hay) alone. Left to their own devices, they would prefer to eat about 60% of their diet as browse selectively nibbled from bushes, brambles, and trees. If pasture is what you have, consider dividing it into paddocks so that goats can be rotated from one paddock to the next frequently. That way the nutritious plants goats favor have a chance to regrow as opposed to being wiped out, and the goats are not forced to graze close to the ground, where parasites are waiting to be swallowed. A good goat pasture looks weedy. Ideally it will be growing all manner of things—dandelions, yarrow, lambsquarters, purslane, plaintain, amaranth, chicory, dock, flax, clover (more for the pasture than the goats), herbs, even stinging nettles or a bit of wild rose. Cowpeas (high protein) and brassicas such as kale (nutritional bonanza) can be incorporated, too, and will offer late-season forage. Pasture and browse can also be blended in an alley-cropping system, where goat-friendly strips of pasture lie between rows of trees. In such systems, movable electric fences keep the goats from destroying trees on either side, and goats are moved often.

## Growing browse

If you border goats' paddocks with trees, bushes, and brambles, they can browse over and through the fence without killing the plants. In some places where there isn't space for a grazing system, goat owners regularly cut browse and bring it to their goats. Some trees such as mulberry, willow, poplar, black or honey locust (not thorny honey locust unless you want an endless supply of wooden nails, and do note locusts' toxicity to horses, cattle, and chickens), and Russian or autumn olive can be coppiced, or cut off near the base, and will just keep right on growing new branches that can be cut and cut again for goat browse. Silver or sugar maple leaves (not red maple leaves, which are toxic) are nutritious both during the growing season and dried in winter. Unsprayed rugosa roses can be a source of rose hips harvested for extra winter nutrition. If you are cursed with kudzu or invasive honeysuckle, take heart: these are both goat food. If you have fruit trees but don't spray them, you can give your goats pruned branches, except never feed branches from cherries or plums and other stone fruits because the wilted leaves are toxic to goats.

Goats can eat some fruit, but don't feed them too much, or you will see butterfat levels drop in does' milk. Goats also like pine needles in moderation and will eat acorns in winter. To leach most of the tannins out of these (as winter rains do for wild animals) you can soak them in several changes of water or put them in a net or bag in a running stream for a few days. The acorns of white oaks, which have deeply lobed leaves with rounded edges, have fewer tannins and are preferable to the acorns of red oaks.

## Planting a garden for goats

You can grow a great deal of winter food for goats in a garden. Just be prepared for your goats to think that

any new food you offer them is weird. Chop up a new food and mix it with any grain/goat feed/regular treats you know your goats relish, so they get used to it. Perhaps grow new foods on a modest scale (or share your garden bounty) until you win your picky eaters over. Then scale up production as you learn what works. Pumpkins and winter squash, sweet potatoes (not regular potatoes), turnips, and beets are great winter staples for goats, as are carrots and cool season greens of all sorts. As Kinder owner Leigh Tate has found, sunflowers and sunchokes, like corn stalks, are edible in their entirety during the growing season, and harvested sunflower seeds can supplement food in winter. Leigh also notes that you can harvest and dry cowpea plants (think 16% protein and don't bother shelling the cowpeas) and some grains such as oats or barley. Don't thresh them, just harvest and dry stalks and all — goats need the roughage, and too much grain in the diet spells trouble.

## Growing fodder

For a small herd you can supply excellent supplemental nutrition for your Kinders by growing and feeding fodder. Hunt down a source of organic hulled barley or corn and set up a small-scale home fodder system. Information on how to do this abounds, and we hope to follow up in a coming issue with an article on the subject.

## Toward a sustainable system for feeding your goats

If your aim is to become truly self-sufficient, you have to take a deep dive into understanding goat nutrition and make sure that your goats stay well nourished as you work to reach that goal. Some Kinder owners are doing just that. Kathrin Woodlyn Bateman (Massachusetts) is working with permaculture experts Dave Jacke and Mark Krawczyk to devise a plan for a

coppice silviculture system designed to feed her sheep and goats. That plan will be included in the forthcoming book *Coppice Agroforestry: Perennial Silviculture for the 21<sup>st</sup> Century*. Leigh Tate, author of the blog and book *5 Acres and a Dream*, has documented her extensive research into goats' nutritional needs and how she can supply them on her property in South Carolina, nowhere near alfalfa country. She and her husband have had their soil tested and are gradually remineralizing it to make up for deficiencies so that the carefully selected balance of crops grown there will come to have the minerals goats need.

The journey toward growing your own goat feed starts with baby steps and continues with lots of research, learning, and experimentation, all with careful attention to monitoring and maintaining the health and condition of the herd.



## References

French, Khaiti. Growing Winter Fodder for Livestock Vitality. *Acres USA*. Issue 516. June 2014, pp. 18-21.

Hassler, Suzy. "Planting a Goat Garden: Variety is the Spice of Life." *Dairy Goat Journal*. Web.

Nolte, Molly. "Edible and Poisonous Plants for Goats." Fiasco Farm. Goat Health and Husbandry. Web.

Tate, Leigh. *5 Acres and a Dream: The Challenges of Establishing a Self-Sufficient Homestead*. Kikobian Books, 2013.

Weiseman, Wayne, Daniel Halsey, and Bryce Ruddock. *Integrated Forest Gardening: The Complete Guide to Polycultures and Plant Guilds in Permaculture Systems*. White River Junction: Chelsea Green, 2014.



Left to their own devices, goats prefer a diet of about 60% browse. Here Tadpole Acres Kiwi gets a vertical assist from Tadpole Acres Sugar at Black Mountain Kinders, as the herd browses happily on brambles and multiflora rose. Photo: Elizabeth Sweet



Alicia and Zachary Weaver send ZCG kids to their new homes with this feed recipe. New goat owners can find readily these ingredients at Tractor Supply and other feed stores. Alicia says that the recipe has been developed over years with the input of other Missouri goat breeders. Beet pulp boosts milk production, and sunflower seeds make for shiny coats while the tannins in them help a bit to discourage parasites.

## FROM ZACHARY'S CHAMPION GOATS...

### ZCG Goat Feed Mix

- 8 blue coffee cans Purina Xclamation feed or Purina Goat Chow
- 1 blue coffee can black sunflower seeds
- 2 blue coffee cans beet pulp
- 1 blue coffee can corn
- 1 blue coffee can oats
- 1 blue coffee can alfalfa pellets
- 1/2 blue coffee can Goat Balancer
- 1/4 tsp coccidia preventer

This goat feed mix is the "grain" portion of ZCG goats' diet. The herd is also fed hay and Chaffhaye, a fermented, non-GMO alfalfa that goats thrive on. (See [www.chaffhaye.com](http://www.chaffhaye.com) to learn more and find a dealer in your area.) Many Kinder owners find that it's a good idea to mix Chaffhaye in with favored foods until their pickier eaters acquire a taste for it.

Zachary's Champion Goats is located in mid-Missouri.

# Understanding the Kinder Breed Standard:

## Developing an eye for a good goat

by Kay Spencer

### PART ONE: Kinder Type

**T**he focus of this new quarterly feature will be on developing the ability to tell a superior goat from a poor one. This skill is one of the most important tools in a breeder's toolkit. Why? Because a herd of faulty, low-quality goats costs you just as much time and money as a higher-quality herd does, without optimally rewarding your investment.

Poor conformation can mean goats that give a meager amount of difficult-to-obtain milk. It can mean legs that break down and udders that droop after only a few breeding cycles. It can mean goats that produce weedy, unthrifty kids that can be sold only at backyard-goat prices. Selling inferior Kinders also lowers the reputation of the breed as a whole, bringing down prices for all sellers, while the reverse is true of high-quality Kinders.

It costs the same to feed and care for a sound herd of well-made animals producing plenty of milk, plus high-value breeding stock and meaty market kids.

A breed standard is simply a set of written guidelines describing certain visually observable qualities desirable (and undesirable) in a breed. They are written by the breed associations, which maintain registries of domestic animal breeds. These guidelines are used to create judging scorecards for shows, but our standard also serves a more important function, which is to help breeders address the specifics of what goes into making the Kinder a



Kinders draw width and chunkiness from their Pygmy genetics. Older-style Pygmy bucks with good body length and capacity, such as Satchmo (left), make good candidates for Kinder "starter kits." Kinders should embody their dual purpose of providing both milk and meat, as this Gray J doe does, below.



Their Nubian genetics afford Kinders udders made for good milk production and easy milking. The best Nubians for establishing new Kinder lines are the older-style, meatier Nubians such as doe pictured on the right, from Goddard Farms.



solid, practical, dual-purpose homestead goat with an identifiable set of traits. The discussions in this column are therefore going to be structured around the Kinder standard.

Before we crack open the standard, however, there are some foundational concepts and vocabulary we need to go over.

#### **SOUNDNESS VS TYPE**

When we discuss conformation, these words are used in a specialized sense.

**Soundness** encompasses the good qualities that should be present in all

goats: deep chests, high udder attachments, straight legs, and so on. These qualities are necessary prerequisites for long, productive, healthy lives for all goats. **Type**, on the other hand, consists of those traits which identify the goat as belonging to a specific breed: in Kinders these are things like ear set, head profile, medium-small size, and an overall shape which draws some qualities from meat goats and some from dairy goats.

For example, a champion Toggenburg may be very **sound** but certainly will lack Kinder **type**. A scrubby, faulty

# Kinder type reflects the breed's dual purpose...

Kinder may be recognizable as that breed **type** but be quite **unsound** otherwise. What we are aiming for is excellence in both soundness and type.

## **DAIRY CHARACTER VS MEAT CHARACTER VS KINDER CHARACTER**

High-producing milk goats tend to have a certain set of conformational traits that add up to what is termed "dairy character." They have deep, wedge-shaped bodies, long necks, thin skin, and elegant, angular frames. They don't tend to accumulate fat and visible muscle.

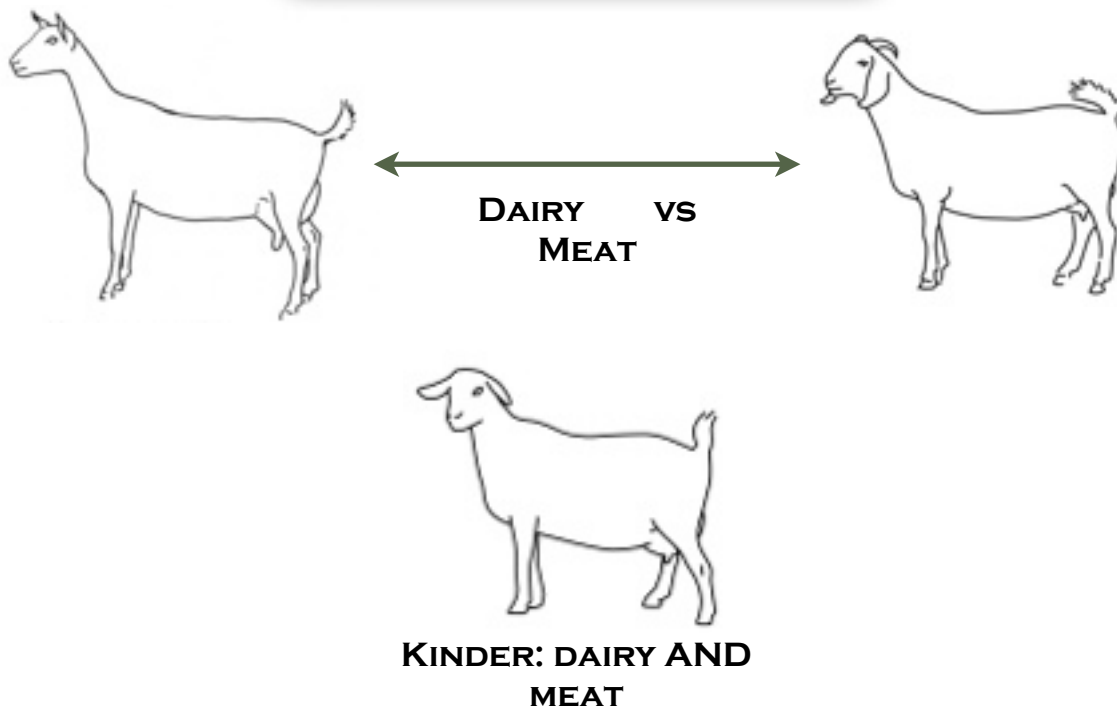
Meat breeds are very different. They also need to be deep-

ched with good length, but they are heavy for their height, thick-boned, and heavily muscled, with an overall impression of strength and bulk.

Our Kinders should fall somewhere between these two characters. They should be noticeably stockier than a purely dairy breed like a Nigerian Dwarf, yet they should also be more

refined and graceful than a small Boer goat. The standard notes that the Kinder's "*compact physique conforms to dairy characteristics despite its somewhat heavy bone and lean yet well-muscled structure.*"

Many Kinder breeders find it challenging to strike a balance between meat and dairy characteristics, but this balance is essential to the Kinder's uniqueness as a breed and its value as a dual-purpose animal.



# Winterizing Your Goats

by Sue Beck



Capricorn Acres Kinders explore their snowy surroundings. Photo: Simone Smith

**W**inter means different things in different parts of the country, but it means a change in weather everywhere. Being prepared for these changes can mean the difference between a healthy herd and heartache.

There are three main criteria that are often considered when preparing your herd for winter — shelter (draft free but not airtight), feed (as much good quality hay as they can eat, but don't overdo the grain), and water (warm water that's easily accessible at all times). Without these essentials, your herd will quickly perish, but most of us want to do more than simply keep our goats alive — we want them to thrive in a comfortable, healthy environment. So what else can you do?

First and foremost, know your herd! It's hard to recognize a goat that is acting off if you don't know how your goats normally act. Pay attention to how they eat, how active they are, and how they interact with each other and with you. Check the lumbar score (body condition) of each goat once a week and take note of any weight loss.

Check undercoats to make sure your goats have adequate fur for their climate. Most goats will have a good layer of undercoat; but if they don't, they may need selenium and/or a coat. While checking their fur, look for any signs of lice or mites — these can become a problem when animals start spending more time inside in close proximity. Using essential oils or natural parasite dust can often alleviate external parasites before they become a problem. The stress of cold can bring out internal parasites as well, so be sure to include FAMACHA scores in your weekly checks to assess whether a goat may be anemic. (For more information about FAMACHA scoring, see [http://www.jackmauldin.com/FAMACHA\\_Postels.pdf](http://www.jackmauldin.com/FAMACHA_Postels.pdf))

Watching your goats more closely will become a habit, and you will notice more quickly if something is wrong. Things to watch for are coughing, cloudy eyes, runny nose or eyes, lack of appetite, and behavioral changes. If something seems wrong, it probably is — separate the goat you are concerned about (illness spreads quickly in close

quarters) and call your vet for advice. A goat can go from a little bit off to critically ill in a very short time, and winter is not the time to wait it out to see if your favorite doe improves on her own.

And possibly most important — have a working relationship with a veterinarian that you trust! There is nothing worse than having your favorite goat become ill on Christmas day in subzero temperatures and having no one to call. Most large animal vets make house calls 24 hours a day, but most make emergency calls only for clients. Having the vet of your choice make one healthy herd visit to your farm per year is great insurance for your valuable goats.

## Winter Tips:

- Toe check! Muddy debris that gets packed in goats' feet on warmer days can freeze in their hooves when temperatures drop, causing pain, bruising, and abscesses.
- Stop frostbite. Applying udder balm or petroleum jelly to ears and udders in extremely cold temperatures can help stop frostbite. Refrain from clipping udders until temps rise in the spring.
- Old down or fleece vests put on with the zipper on top are great goat coats!
- Adding molasses to water slows freezing by lowering water's freezing point by more than 3°F. In bitterly cold temperatures, of course, your goats may need a heated bucket to keep their water from quickly becoming a block of ice.

# Biosecurity and Your Farm

by Kathrin Bateman

It's easy to take the health of our herds for granted until we hear about someone who has had the misfortune of a herd devastated by a disease that they can't ever cleanse from their farm. While very few diseases create such a drastic situation, it's still best to prevent the heartache of illness in our herds by thinking ahead.

Biosecurity is not the first thing we usually think about when adding livestock to our farm or homestead, but it is precisely at that time that we have the most leverage to prevent future disease issues. If you're reading this newsletter, you probably already have livestock, and I'd like to encourage you to craft a farm policy to safeguard the health of your animals. Having a clear policy in place is easier than figuring out what to do in each moment, and it's easier to tell visitors they need to disinfect their boots because it is the farm policy than it is to explain your reasons every time.

A future article on the KGBA website will give detailed information about herd testing. In the meantime, see <http://waddl.vetmed.wsu.edu/animal-disease-faq>. The goat/sheep section on this page from the Washington Animal Disease and Diagnostic Lab (WADDL) will fill you in.

The major diseases of concern for goat herd health are CAE, CL, Johne's disease and, in some parts of the country, brucellosis. Brucellosis has been eradicated from some states; but if you are bringing in new stock from areas where Brucellosis is still a problem, consider having stock tested prior to purchase. Most sellers will do testing for you, at your expense, if you desire more testing than they currently do. Health certificates are required for interstate transport, but regulations vary from state to state, and you may

choose to request testing beyond that required by law.

Certain breeds have the reputation for having disease problems, and it would be nice to do our best as breeders to avoid garnering a similar reputation for Kinders. Johne's disease has been reported in Pygmy herds, and it behooves anyone buying a Pygmy buck to buy only from a breeder with a rigorous testing program in place. Areas of the country with a lot of dairy industry tend to have more Johne's disease than other areas. When you buy land in those areas, it is prudent to avoid old dairy properties if possible. Various meat breeds have a Johne's disease problem as well.

Johne's disease organisms may be found in the manure of any ruminant that is a carrier of the disease. Soils on farms that have had diseased stock in the past will possibly harbor the infectious organism, putting any future stock at risk. Also consider what animal manure is uphill from your farm and divert runoff so that it does not reach areas where your livestock are pastured.

CL and Johne's Disease organisms can live in soil forever, and while it is possible to have a herd health program that will allow you to keep some or most of your livestock healthy even if your herd has been exposed, it is a huge detriment to be unable to sell breeding stock. Doesn't it seem better to create farm policies to avoid those issues? So what can we do?

Yes, it can feel like a hassle to worry about testing when all you want to think about is bringing those new goats home to your farm, but that hassle is nothing compared to the hassle of realizing that you've brought a disease onto your farm that may never be completely cleared from your

soil, making it impossible to sell any future stock except as meat.

While biosecurity may not be as much fun to think about as breeding decisions and kidding season are, smart policies will help keep your goat experience a happy and rewarding one.

## **BIOSECURITY STRATEGIES**

Consider these options when crafting a biosecurity policy for your farm.

- Work with a vet to create a testing program for your herd.
- Buy only from breeders who can show you herd testing results and their farm's biosecurity policies.
- Quarantine new animals to help make sure they don't bring disease or parasites into your herd. Presumably they've already been tested for disease, but if you need to do further testing, it is prudent to keep them in a stall and treat stall bedding as potentially infectious. Do not compost that used bedding in a location where rain can wash its pathogens into your paddocks.
- If you bottle-feed livestock babies, consider the source of the milk you are using. If it is milk from your disease-free farm, it is presumably safe; but store-bought milk, even pasteurized, may harbor Johne's disease, according to some research findings. Johne's disease is endemic in the entire dairy cattle industry. Some research suggests that Crohn's disease in humans is related to Johne's disease in ruminants.
- A prudent farm policy requires visitors to disinfect boots before stepping onto farm property. Because a simple on-site spray down with a disinfectant does not thoroughly disinfect, it is prudent to ask the cooperation of visitors when

*The practice of biosecurity has become more important than ever as herds become larger, both people and animals travel greater distances, and people become more concerned about the welfare of farm animals and the safety of their food supply. - Eugene C White, DVM*

a visit is being scheduled. (See side bar: Disinfection requires scrubbing manure off boots first, spraying boots thoroughly with disinfectant, and then letting them sit, un-rinsed, for 20-30 minutes.) Ask visitors to wear footwear that has not been worn on a farm or to disinfect it before arriving. Give them your guidelines for boot disinfection since many people may assume a simple spray down is sufficient.

- Disinfect your own boots before and after you visit another farm, for the health security of the other farm and your own. Plan policies for delivery services that could spread disease or parasites as they go from one farm to the next. Delivered items may be left outside livestock areas and brought in by you. Plastic boot covers are also an option.
- Avoid taking your livestock to public venues OR have clear safety policies for these situations to help keep your stock healthy. Disinfect stalls before unloading your animals and ensure that your animals will not be not in stalls that adjoin stalls with animals from another farm. See that barriers are in place to prevent fairgoers from petting your animals since they might have petted other animals that carry disease.
- If you offer stud services (some breeders don't, for biosecurity reasons), have clear requirements for visitors who bring does for stud services and for the does they bring. Insist on herd testing.

These choices can help contribute to a prudent biosecurity policy. Consult with your vet and area farmers to find out if there are particular concerns that may suggest certain strategies be added to your policy.

### More than you wanted to know about bleach:

- A 10% bleach-to-water solution will last about a day. Use a 20% solution to make it last about a week. Mark each bottle with dilution rate and date.
- Clorox says its bleach doesn't have an expiration date, but it does have a production date. The first three digits of the code designate the production facility; the next number is the last digit of the year; and the last three digits are the day of that year.

Given the code MD21002...

MD2 is facility

1= 2001

002 = Jan. 2nd (2nd day of year)

The makers of Clorox recommend storing bleach at room temps and say that after six months bleach starts to lose its effectiveness at the rate of about 20% per year until it is totally degraded to salt and water.

- Bleach is quickly inactivated by organic matter such as manure, so it's best to wash the object being disinfected (such as boots) first and then to spray it with a diluted bleach solution and let it stand for 20-30 minutes.
- Most disinfectants, including bleach, work best above 65° F, and some do not work at temps over 110° F.
- Bleach is corrosive to metal and will damage cloth and rubber at high concentrations.



Conscientiously implemented biosecurity measures go far to protect the health of our Kinders.  
Photo: Sue Beck

### A few other disinfectants:

- 2 1/2 tablespoons of Lysol per gallon of water — used as a general surface disinfectant
- Isopropyl Alcohol — used mainly as a surface disinfectant
- Nolvasan — used for disinfecting premises and equipment or at low dilutions for teat dip



# Cream Separating

by Simone Smith

**Y**ou may be wondering if purchasing a cream separator is valid expense. Will the costs outweigh the benefits? Is this a luxury item or one that will prove to be invaluable to your homestead? Let's explore some costs, models and basic information.

What is a cream separator and how does it work? Tharran Gaines explains at FarmCollector.com:

In its raw form, milk contains a mixture of large and small butterfat particles held in suspension because they weigh less than the other parts of whole milk. It's not unlike drops of oil mixed with water.

In both cases, lighter material rises to the top when the mixture is left standing. Consequently, when whole milk sits for some time, the heavier skim milk gradually settles to the bottom of the container, while the lighter butterfat rises to the top.

The earliest methods of cream separation involved gravity. In one early method, milk was poured into shallow pans (2 to 4 inches deep) known as setting pans. The pans were placed in a cool, clean room for 36 hours, allowing the cream to rise to the top. At that point, it was skimmed by hand with a tool called a cream skimmer.

This method made it difficult to handle large amounts of milk. As much as 30 percent of the cream was left behind. What's more, if the milk wasn't properly stored, the cream could easily sour. It wasn't until the mid-1800s, when

inventors first applied centrifugal force to the separation of milk. A centrifugal cream separator was used to separate the cream from the milk after the milking was done. These machines used centrifugal force to send the cream and the milk to separate spouts where they flowed into their own containers.

Today a cream separator can easily cost upwards of \$700. There are many different models to choose from: some are electric, and some are hand crank. Cheaper models have many plastic and aluminum pieces while the more costly models are generally stainless steel.

Personally, I initially had reservations about spending a small fortune on something I wasn't sure I could operate, let alone use often.

I had done the research, digging through internet sites, videos, and forums; but it was not until I talked to another homesteader and questioned her thoroughly that I was willing to take the plunge and purchase one. She bought a hand-crank Ukrainian model on Ebay. It was half the cost of the other models. I was concerned that it was not going to be a quality product but decided to take the risk. With the help of my husband we ended up buying the same Ukrainian model on Ebay. I remained skeptical until we put it to use. It did come with English instructions, but I relied instead on the help of numerous YouTube tutorials and was able to figure out how to put it together. (See references below.) The tutorials are very clear and easy to understand.

My first attempt at making cream went pretty well. It was a little messy but only because I overflowed my bowl. I had the cream bowl under the milk spout and the milk bowl under the cream spout. Let's face it—homesteading is often messy!

When I had collected my cream and separated milk what surprised me the most was how good the milk still tasted. The cream-separated Kinder milk seemed to still retain much of the creaminess that I love in milk.

Basically I realized I could enjoy the milk and not be consuming such a high calorie beverage, plus I got to keep the cream. Bonus! The cream? Deliciously thick and bright white. A goat converts beta carotene into Vitamin A, which lacks color, and that is why goat milk and cheese is white.

All in all, I am happy with our decision to purchase our separator, and for several reasons. Kinder goats have milk higher in butter fat than the milk of most other goat breeds, yet goat's milk is different than cow's milk, which is why a separator is even more useful. Dr. Thomas Cooke explains, "Goat's milk has smaller fat globules and does not contain agglutinin which allows it to stay naturally homogenized...." The cream in goat's milk, therefore, does not naturally separate and rise to the top in the same manner as the cream in cow's milk does. When you use the skimming method, it takes copious amounts of goat's milk to collect enough cream for making butter or cheeses. While the skimming method works fine for some, I wanted faster results with more cream. If you are busy and your time is limited, a cream separator is an excellent timesaving device.



## References

Goat's Milk vs. Cow's Milk:

<http://www.mtcapra.com/benefits-of-goat-milk-vs-cow-milk/>

Cream Separator Video:

<https://www.youtube.com/watch?v=DxY8K5YBTMY>

## ITALIAN GOAT

by Tina Hirsch, adapted by Simone Smith

### Ingredients

Goat hind/shoulder roast  
2 medium green bell peppers  
Dry Rub Bone-In Roasts with a mix:  
1 tablespoon ground black pepper  
2 teaspoons garlic powder  
1 teaspoon onion powder  
1 teaspoon dried oregano  
1 teaspoon dried basil  
1/2 teaspoon crushed red pepper  
6 cups of hot water (and juice from cooking)  
Beef base to flavor to taste

### Directions:

Place roasts in roasting pan on a rack.  
Pour enough water to cover the bottom of the pan,  
almost touching the meat.

Roast at 400 degrees until internal meat temperature is 160 degrees. Baste meat once or twice during cooking.

While meat is roasting, slice up 2 medium bell peppers in 1/4" slices, pour a little olive oil into a skillet, and sauté peppers on medium heat until lightly browned.

Set aside at room temperature.

Remove roasts from pan, place in refrigerator for several hours

Pour juice from the roasting pan in to a pot; add any left-over rub, a clove of garlic chopped finely, and beef stock.

Heat to boiling, then simmer for about 20-30 minutes, adding stock until you get the flavor/richness you desire. Set aside.

Once roasts are completely cooled, remove from fridge and slice thinly against the grain.

You can dip the meat in the hot au jus for about 1 minute to heat it up before serving or combine the meat, peppers, and juice in a crock pot to keep warm.

Use tongs to remove meat from crock pot and a spoon to dip the au jus (if you wish) and pour over your sandwich and serve on high gluten hoagie buns or Italian bread. (A strong bread that will hold up to the juice and not fall apart). As an added extra, you can serve with peperoncinis on the side.

## KINDER QUARTERLY

*Kinder Goat Breeders Association*

PO Box 271  
Franksville, WI 53126

Place mailing label here.