

Deborah Niemann

REVISED SECOND EDITION

RAISING GOATS naturally

THE COMPLETE GUIDE
TO MILK, MEAT AND MORE



Praise for *Raising Goats Naturally*—2nd Edition

With endearing personal stories and layman’s scientific explanations, *Raising Goats Naturally* lays an enjoyable and empowering foundation for goat-rearing success on the self-reliant farmstead. Deborah Niemann exemplifies the best spirit and action in homestead animal care. What a great contribution to self-reliance.

— Joel Salatin, Polyface Farm

Now with even more detail and information, *Raising Goats Naturally* is a companion to anyone considering or keeping goats. Neimann is knowledgeable and her information complete, but she also brings a heartfelt love for her herd to her writing. Her passion for goats translates into excitement throughout the book, and will surely make readers eager for goats.

— Kirsten Lie-Nielsen, author, *The Modern Homesteader’s Guide to Keeping Geese*, hostilevalleyliving.com

Back in 2009, I wanted to start raising goats. I thought it would be fun to add a small herd to our small farm. My husband didn’t quite see eye to eye with me and long story short, we ended up raising chickens and ducks instead. But my dream of a herd of goats still lives on. Raising them naturally would of course be of utmost importance to me and after reading Deborah’s book, I feel confident about being able to do just that. From choosing a breed, birthing and raising babies, to feed, supplements, and health issues, *Raising Goats Naturally* is an easy to read, all-encompassing guide to getting started with goats. Now to convince my husband...

— Lisa Steele, author,
Fresh Eggs Daily: Raising Happy, Healthy Chickens Naturally
and *Duck Eggs Daily: Raising Happy, Healthy Ducks Naturally*

I’ve always been a fan of Deborah Niemann’s no-nonsense holistic approach to keeping goats. She has an encyclopedic knowledge of the species and this book is a direct reflection of that amazing expertise. *Raising Goats Naturally* is perfect for beginners as well as seasoned owners and a definite must for any goat keeper’s library.

— Jeannette Beranger, Senior Program Manager,
The Livestock Conservancy

Raising Goats Naturally thoroughly covers all aspects of what goat owners need to know to succeed with their goats. We have owned goats on our homestead for many years and I was impressed with how much information is packed into this book. I would highly recommend it for those just starting out with goats, but it's got enough detail for experienced goat keepers too!

— Lesa Wilke, farmer and blogger,
betterhensandgardens.com

In *Raising Goats Naturally*, Deborah Neimann cuts through the formulaic and often inflexible so-called “expert advice” and encourages us to get to know our animals and listen to what they tell us. Drawing on vast experience, Neimann offers an upbeat, authentic glimpse of what life with dairy goats is really like. This book is important because it brings animal husbandry back to the fore and delivers the goods in a highly integrated manner that's every bit as enjoyable to read as it is important for goatherds of all experience levels.

— Oscar H. “Hank” Will III,
Editor-in-Chief, *GRIT Magazine*
and author, *Plowing with Pigs*

RAISING GOATS **naturally**

**THE COMPLETE GUIDE
TO MILK, MEAT, AND MORE**

REVISED SECOND EDITION

Deborah Niemann



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Cover design by Diane McIntosh.

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Printed in Canada. First printing September, 2018

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Inquiries regarding requests to reprint all or part of
Raising Goats Naturally—2nd Edition should be addressed to

New Society Publishers at the address below.

To order directly from the publishers, please call toll-free (North America)
1-800-567-6772, or order online at www.newsociety.com

Any other inquiries can be directed by mail to:

New Society Publishers
P.O. Box 189, Gabriola Island, BC V0R 1X0, Canada
(250) 247-9737

LIBRARY AND ARCHIVES CANADA CATALOGUING IN PUBLICATION

Niemann, Deborah, author

Raising goats naturally : the complete guide to milk, meat and more
/ Deborah Niemann.—Revised second edition.

Includes index.

Issued in print and electronic formats.

ISBN 978-0-86571-847-0 (softcover).—ISBN 978-1-55092-642-2 (PDF).—

ISBN 978-1-77142-237-6 (EPUB)

1. Goats. I. Title.

SF383.N53 2018

636.3'9

C2018-902957-9

C2018-902958-7

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Acknowledgments

It takes a team to write a book, and I'm lucky to have a lot of wonderful people working with me on this one. Thanks again to everyone at New Society Publishers for understanding the need for a revised edition and then making it happen, with a special shout out to editor Murray Reiss for his hard work.

Goat extension specialist Steve Hart, PhD, of Langston University deserves an extra special thank you for once again reviewing the parasite information in the book and for answering all of my parasite questions, whether for a magazine article, blog post, video, or whatever project I'm working on.

I am also hugely appreciative of Julie Jarvis, who reviewed the illness chapter when I was having a perfectionist attack near my deadline. Her medical expertise as a physician assistant combined with her practical knowledge as a goat breeder is unique and invaluable.

I could not have written this book were it not for the members of the NigerianDwarfGoats.ning.com community who have shared their challenges, frustrations, knowledge, and successes over the years. Reading their stories made me realize the variety of problems that goat owners face on a daily basis, as well as the diversity of solutions. I continue learning from them every day. Feedback from students in my online Raising Dairy Goats Sustainably class at the University of Massachusetts-Amherst have also provided me with additional insight that helped shape this revised edition. I also owe a special debt of gratitude to the goat owners who were willing to share their stories and passions specifically for this book. Since the first edition, I have learned a lot about the needs of new goat owners from those who have asked

questions on the Thrifty Homesteader Facebook page, as well as all of the interns who have spent time on our farm.

Of course, my family deserves the biggest thank you of all for their love and support. My husband, Mike, deserves a special thank you because he became a novice goat keeper around the time the first edition was published, which was also when our youngest daughter left for college. When our daughters were home, the goats were our project, and he helped out by building fences and shelters. He didn't know the difference between a pastern and a pasture. Watching him start at ground zero five years ago gave me a front row seat to understanding what a new goat owner needs to know.

Thank you to my son, Jonathan, for keeping me well fed with lots of homemade meals. Both of my daughters also deserve a special thank you for growing our herd beyond the two or three milkers I wanted for a little goat cheese. Because of their desire to show and be on milk test, we wound up with much better genetics than we otherwise would have, and I learned a lot about goat conformation and milk production. My daughters' presence as co-owners of the goats helped reduce the learning curve for me considerably.

Preface to the Second Edition

The day after the first edition went to press, I saw a study about the profitability of does raising their own kids in a commercial dairy. How I wished I could have included it in the book, but it was too late. As the last five years have ticked past, however, more studies have been published, and I realized it was time for a revised edition.

I have also been receiving questions, comments, and other feedback from people who read the first edition, and I realized that some sections of the book needed to be expanded. A few new topics needed to be added, such as floppy kid syndrome and skin cancer, which had completely slipped under my radar before the first edition was published.

If you read the first edition, you won't see any new chapters in this one. I've simply incorporated a lot of new information throughout the book. Regardless of whether you read the first edition, I hope this book will help you worry less and enjoy your goats more.

INTRODUCTION



It was love at first bite when I tasted goat cheese at a party in Vermont when I was 19 years old. More than a decade passed before I saw goat cheese in a grocery store and immediately snatched it up. But at a dollar an ounce, it was a rare treat. When my husband and I started talking about moving to the country to grow our own food organically, goats were one of the three species of livestock I wanted, and I wanted them simply for that delicious cheese. I wanted chickens for eggs and cows for milk and butter.

While the chickens and goats proved to be easy for a city slicker to learn to raise, the cows were a different story. I had purchased Irish Dexters, which are the smallest breed of cattle, but I quickly learned that it really didn't matter whether a cow weighed 800 pounds or 1,500 pounds—if she wanted to do something, she could easily get her way because she outweighed me by so much that it was hopeless.

In purchasing both the cows and goats, I made similar mistakes. I bought animals that had no experience with milking, and I didn't even buy animals whose mothers had been milked, so the genetic potential as milkers was a mystery. I made the novice mistake of assuming that because every female mammal makes milk, they would all make good milkers. I knew nothing about udder texture, teat size, orifice size—I didn't even know what an orifice was! And it never occurred to me that a cow or goat might not be terribly excited at the prospect of being milked.

Learning to milk the goats was not the easiest thing I ever did, but it wasn't terribly difficult either. It was Mother's Day 2002 when I brought home my first two goats, a two-month-old doeling and an unrelated three-year-old doe that had been nursing triplets. My husband had built a milk stand based on pictures we found on the Internet. I arrived home with the goats shortly before sundown and attempted to milk Star, the three-year-old. We put her on the milk stand and filled up the feed bowl. She took a couple of bites, but as soon as I touched her udder, she kicked the bucket, turned her head around, and glared at me. She continued to give me this look that I translated as, "*What* are you doing back there?" There were ultimately four of us working toward the single goal of extracting milk from this goat. My husband held her back legs so she couldn't kick over the bucket. My two daughters scooped up the grain in their hands and sweet-talked her, saying, "Here, Star, don't you want some yummy grain?" Star continued to glare at me. Then I remembered reading somewhere that music relaxes animals and that some people play music in their milking parlors, so I suggested that we sing. "Twinkle, Twinkle, Little Star" seemed appropriate given the goat's name, but she was not impressed. However, within a few days I was able to milk Star by myself with no one holding her legs or sweet-talking her or even singing. It was my first lesson in the importance of the three Ps: practice, persistence, and patience.

The cows were a completely different story, though. I was never able to even touch their udders. Despite the fact the seller had said they would be very easy to train—"Just tie 'em up for a couple of days, and they'll be following you around like a dog"—they were range cows, never handled during their first year of life before I purchased them. Although livestock are domesticated, they have to be handled from the time they're born, or they can easily return to a feral state of mind. We wound up selling our first two cows after a couple of years, but I also came to the realization that we didn't need cows. The goats could meet all of our dairy needs—and more.

That soft creamy cheese that so many people call "goat cheese" is more correctly called *chèvre* (pronounced like "shev"), and it is possible

to make many types of cheese and other dairy products from goat milk. The first cheese I made was queso blanco, and it was quickly followed by chèvre, yogurt, kefir, and queso fresco. A few months after starting to make cheese, I began to make goat milk soap. Then we started making aged cheeses. Eventually we learned to make 100 percent of the cheese that our family uses, including cheddar, mozzarella, Parmesan, Gouda, Havarti, and more. Although we were vegetarians when we started our homesteading adventure, today we also eat goat meat and use goat leather. Even our goats' manure contributes to our homestead, as it is the only fertilizer we use in our garden.

It makes a lot of sense to raise goats for milk production for your family because goats are smaller than cows, eat less, poop less, are easier to handle, and produce a more manageable amount of milk. A potential buyer called me a few years ago because after a couple of years with a cow, her family realized that they didn't need the amount of milk a cow produced. They were not interested in making cheese, so it made no sense for them to have an animal that was producing five gallons of milk a day. Because dairy animals are all herd animals, you always need to have at least two, and with goats it is easy to add to your herd, especially when that special kid is born that you just can't bring yourself to sell. "Just one more goat" doesn't eat nearly as much as "just one more cow."

My journey with goats has been an interesting one, generally made easier and only sometimes more complicated by the internet. I joined online groups and forums where people would answer my questions when I came across a situation that was not answered in any of my books. In the early 2000s, most of the people answering questions on the groups had been breeding goats for at least a few years and had a lot of good information. Today, however, because goats have become more common, there are a multitude of websites and blogs putting out information, some of which is questionable or downright wrong. Although information is more plentiful than ever, it is also more challenging to weed through it all to get accurate information. Social media has made it even more challenging. I've seen people giving kidding advice when they've only had one or two sets of kids themselves. It's not unusual

for a person to ask a question and get more than 50 responses, many of which are contradictory.

There is no one-size-fits-all approach to raising goats. When I was in graduate school working towards my master's degree in communication, I had a professor who would often throw out a question and after someone gave an answer he'd nod and then ask, "Anyone else?" Someone would hesitantly raise a hand and say, "Well, it depends." The professor would smile and respond, "That's the grad school answer." He would reassure the first person that their answer was not necessarily wrong and point out that there could be multiple right answers to the question, depending on the situation. This is often the case when raising goats. Many people want to know exactly what to feed, what supplements to use, and whether a management practice is safe. Usually the answer is, "It depends."

The goal of this book is not to put forth the single best plan for raising goats and making dairy products. Quite simply, the best plan on my farm probably won't work for most other farms. It should be obvious that goats on the Illinois prairie will require different management from those in the Arizona desert or the mountains of British Columbia. But if the farmer two miles from me raised goats, they would require different management as well because the well water on that farm does not have the high sulfur content of my well. If I'm starting to lose you because it sounds like raising goats might be too complicated, wait! It really isn't.

The goal of this book is to give you the information you need so you can figure out what will work best for you and your goats. I see a lot of new goat owners online asking why they see so much contradictory information and wanting to know who is right. Is a certain brand of mineral the best? Should you give injectable mineral supplements? Why can one person's goats do well with a mineral block while other goats need loose minerals? The reality is that sometimes two people with seemingly opposite ideas are both making the right decision for their goats. This is why it is important for you to understand the "why" behind recommendations. If you simply try to duplicate the practices of

some award-winning herd, you could wind up with dead goats, and that is not an exaggeration or a hypothetical conclusion. It has happened.

Throughout this book, I've included stories that tell you about what various goats have taught me. I've done this because I truly believe that I have learned far more from my goats than from any book, website, or veterinarian. Your goats will let you know whether your management style is working for them. This book will give you a good basic knowledge of goats' needs, but ultimately it is by listening to your own animals that you will figure out the best way to care for them. When a goat gets sick, has difficulty birthing, or dies, it has just given you valuable information about your management practices and possibly about its own genetics. It is also giving you information when its fertility rate skyrockets or milk production goes down. Whether a kid grows quickly or slowly, it is giving you information about its mother's milk production. This book will help you understand what the goats are telling you so that you can provide them with the environment and diet that will help them reach their genetic potential.

You may be wondering what "raising goats naturally" means. It is definitely not what happens in factory farms, but it is not strictly organic either. It is important to understand that under organic standards an animal cannot be denied medical attention. The animal is supposed to be treated with conventional medication when necessary, but its milk cannot be sold as organic for the rest of the current lactation. Once a meat animal has been treated with conventional medication, it can never be sold as organic. There is no legal definition of "natural" food, but in my world it means that animals are not given antibiotics in their daily rations and they are not injected with hormones to increase milk production or to get bred. They are not given dewormers on a regular basis—either chemical or herbal. Just as it is my personal goal to have a diet and lifestyle that allow me to stay healthy and avoid routine medications, my goal for my herd is that they will stay healthy with the proper diet and management.

Goats have enriched my life in so many ways, from their charming personalities to their delicious cheese. Unfortunately, goats have a bad

WE STARTED our little endeavor partly because I'm horrified by factory farm treatment of animals and partly because I think a lot of the food that is being mass marketed right now is very unhealthy to downright poisonous.

When I started raising our chickens and goats, I had an epiphany about the "cost" of food. And I don't really mean money. Huge chain stores advertise "cheap" food, but I think the idea of "cheap" meat, eggs, or milk is an insult. There is nothing cheap about life. The amount of waste in this country generated either by individuals overindulging or restaurants or other institutions throwing food away affects the real cost of food, just as do poor management practices in the mass production of meat or eggs that cause huge recalls and the disposal of thousands of pounds of these products.

I have learned by watching pregnant does waddle around, scream in labor, and go through everything they go through to make milk that it's a big deal. It isn't just some beverage that appears in a bottle at the grocery store: an animal carried a baby, delivered and loved that baby, and then put their life energy into making that milk. I can't stand to waste an egg or a cup of milk that I and my animals have

labored over producing (pun intended). An enormous amount of collective effort, animal and human, has gone into that egg or milk, and it is special. To associate "cheap" or "disposable" with this milk is to say that my little goat's life, love for her baby, and effort to make milk is not worthy of the dignity we generally assign to living beings. I think that separating the food product from the intimate relationship with the living being that produced it is what allows us to treat factory-farmed animals so terribly.

Around the world, I see that some animals are afforded a certain quality of life or protection under the law, such as pet dogs, and some are not, such as factory-farmed animals. Some people are afforded certain rights, and some people are deprived of these rights due to societal prejudice. It is my personal philosophy that no life, human or animal, is cheap or expendable. My greatest hope for our farm is that my human children will grow up with an enduring respect for all life. I hope they know there is not a type of animal, breed of animal, or use for an animal that justifies forcing that animal to live with zero dignity or respect. I believe that this sort of respect for animal life will also help them to understand that there are no "types" of people who are less deserving of any quality of life.

— JULIANA GOODWIN, Punta Gorda, Florida



reputation—undeserved, in my opinion—for being difficult to handle and having off-flavored milk. And some people wrongly assume that having a dairy animal sentences you to twice-daily milkings every day of the year with no holidays. So another goal of this book is to dispel misconceptions about goats.

Whether you are just thinking about getting a couple of goats to make your own cheese or you are further along in your personal goat journey, there is always more to learn. Every goat is an individual and will present you with its own unique personality and physical traits. The milk that you get from month to month will be a little bit different, providing you with cheese-making surprises. Like every other aspect of

The Question of Lactose

Can I drink goat milk if I'm lactose intolerant? The answer to this question is actually quite complicated. Many people assume any type of physical discomfort following milk consumption is due to lactose intolerance, but there are a number of reasons why you may have difficulty drinking milk. If you are truly lactose intolerant, you cannot comfortably consume any milk because all milk contains lactose, a milk sugar. Aged cheeses will have less lactose in them as they age, so the older the cheese gets, the less you may react to it.

A true milk allergy, however, is a reaction to the milk protein, and this allergy can vary when consuming milk from one species to another, so you might react negatively to cow milk but be able to drink goat or sheep milk. There are people who have difficulty digesting pasteurized milk but are fine with raw milk. And then there is the most confusing group—those who react negatively to dairy products only sometimes. They may be reacting to the drugs or hormones that are in the milk, which can vary from day to day, depending upon

whether the milk came from a farm that uses hormones or when a cow received her last dose of an antibiotic. Even though no detectable level of antibiotics is permitted in milk for sale, a sensitive person may react to residual levels of antibiotics that are below what is detectable by modern testing procedures.

If you cannot happily consume milk and dairy products, try goat milk or goat cheese before actually buying a couple of goats to make sure that you will be able to eat and drink your homegrown products.

living a self-reliant lifestyle, you can't expect perfection. But at some point you realize that perfection really is not the goal.

The reason you have goats on your homestead is not necessarily to produce the perfect cheese or to create a million-dollar corporation that makes artisanal goat cheese. Goats on your homestead provide you with milk that is fresher than anything money can buy. It comes from animals that spend their days outside in the sunshine breathing fresh air. It comes from animals that have names and are loved and cared for. They are not given hormones to increase milk production or to grow faster than nature intended. Your homegrown meat and your homemade dairy products are free from ingredients that you can't pronounce. Although homestead goats can save you money, the reality is that the benefits are priceless.

PART I

Planning, Purchasing, and Protecting

If you grew up consuming cow milk, you may have considered a cow when you decided to start producing your own dairy products. But there are plenty of reasons why goats are a better option for most people in modern society. Goats are easier to handle simply because they are smaller than cows. If you did not grow up on a farm, where you got used to handling cattle, goats will be less intimidating. It can be almost impossible to find a trained milk cow to purchase, but training a goat is not as difficult or as potentially dangerous for the novice as training a cow that has never been milked. It is also less expensive to get started with goats because they do not require the heavy-duty handling equipment needed for safe handling of cattle.

Although goats are easier to raise than cattle, this does not mean that you can just bring them home and let them run free in the pasture and expect all of their needs to be met. This section will give you the information you need to consider before getting goats as well as information on choosing a breed, on housing, bedding, fencing, livestock guardians, and more so that you have everything in place and ready when you bring your goats home. If you already have goats, this section might give you ideas for making your life easier or your goats happier.

