

Accelerated Breeding Programs for Meat Goat Enterprises

Frank Pinkerton and Neal Amsberry

Preface

In the Meat Goat Industry Update, Part I, March 2014 issue of Goat Rancher, we documented the continuing decline of our industry numbers and noted that we are producing only half or so of domestic consumption of goat meat. This drop in market share will continue unless we *increase* production (or imports *unexpectedly* decline with time). Simply put, we need more slaughter goats; however, there are only a few ways to get them. We could increase number of goat enterprises or their sizes, or we could increase output by marketing larger kids. Or, we could get more kids/doe sold/farm through a modification in reproductive management. See below.

Introduction

Over the years the Goat Rancher has provided various information about target-marketing strategies and management of meat-goat herds to get 3 kid crops in 24 months (accelerated breeding). There are opportunities (high seasonal demand and concomitant prices), but there are also constraints to such schemes, e.g., increased labor, more complex facilities, and more detailed management (tightly scheduled breeding-kidding and more precise record keeping). Obviously, accelerated breeding is not for everyone owning goats, but it deserves serious consideration from certain of you, particularly those who are suffering from unsatisfactory cost-benefit ratios. Put more

starkly, your income (returns to labor, management, and capital) does not cover, much less exceed, your outgo. Since one cannot expect USG subsidization or endless patience with, and dollar support from, one's partner, the end may be closer than you think; proceed apace, but carefully.

Individual owners cannot hope to do much in the way of increasing goat prices or reducing input expenses appreciably; accordingly, it is time to look at increasing net income via larger percentages of kids sold per doe per year. Casual inquiries inform me that meat goat owners commonly sell about 150% kid crop/year and too seldom do much more than break-even. Improved management could raise this figure to 200% (a triplet sold for every single sold), but this is rather difficult to do on once-yearly kidding. However, if one averaged selling a 150% kid crop three times in 24 months, the annual figure would rise to 225% ($3 \times 150 = 450/2$)—well worth one's consideration. At 175% kid crop three times in 24 months, annual off-take would rise to 263% ($3 \times 175 = 525/2$)—a lovely prospect, indeed.

This article is purposefully structured, not as an academic piece, but as a model for useful education and practical instruction. Much of the information flows from a chance encounter with Mr. Neal Amsberry of Lexington NE who emailed me favourably on my recent Rancher article on Breeding Meat Goats, Part I (Feb '14). I thanked him and inquired about his goat operation. His answers were intriguing, and extensive follow-up exchanges led to this useful article Editor Hankins is pleased to share.

Narrator Neal had early Angus experience, then California oilfield toil, then commercial packing plant assignments in NE, and then decided to use his small, irrigated central

Nebraska farm to do meat goats (and his employed wife is still with him). His early goat experience was, admittedly, a painful learning curve, but he persevered as ignorance gave way to on-the-job training. He tells it as it is, or seems to be a close observer of the goat production and marketing environment in which he operates. See below:

I bought my first goats in early 2006, 3 of the worst goats ever. Two died right away and the third one had kids but got mastitis—my first of many culls. Then I begin buying dairy and Boer goats and had 75 sale barn does by 2007. A miserable experience... poorly conditioned, diseased, high mortality. However, after two years of hanging-in and trading-up, I had nearly 200 does, mostly Boers and Boer crosses. But, after suffering major losses to Barberpole worms and working myself into a hole, I was ready to quit. Then I leased my first Savannah buck and bred the Boers to him. That is when things changed for the Broke Richard Ranch. Production went up and losses went down, due mostly to reduced worms. After nearly four years, I was starting to break-even.

I always had a few goats kid twice per year, and I began looking at why and how I could get more of them to produce more kids. *So I began breeding three times a year*, and began turning a profit in 2010. In fall 2011, I quit my day job and began taking serious interest in my goats. I took the Meat Goat Producers Course at Langston University, and mortality fell from 10% to .25% that same year. I continued to improve management, and the following year I lost only one kid.

I sought to do more, but then the drought hit in 2012. In June '13, I sold all my adult does—had been on hay for 11 straight

months and the two-year drought was hanging on. *I was tired*, but retained 44 doelings—30 Savannah crosses, 11 Spanish-Boer, and 3 Nubians. I also bought as many feeder kids as I could find for fall pasture and resale in the higher-priced winter market. This helped cash flow and turned a modest profit. So... I am rebuilding. I bred half the doelings for April '14 kidding and will breed the other half for Sep/Oct kidding. I intend to retain all doe kids to get my numbers back to 125 does. It won't take long with three crops/year.

Open does make me no money; thus, I strive to keep them bred or milking all the time. Some say that strategy will 'wear out' a doe prematurely, but I have not found it to be so **if** feeding and management are adequate to meet their needs. A productive doe will have, and wean, 4-5 kids/16 month period if proper management is closely adhered to. It is challenging, but doable, no matter what occasional naysayers say.

I kid goats thrice yearly: Jan, Apr, and Sep and, yes, the winter kidding requires hardy does and hardy, *aggressive* kids—and equally hardy, dedicated owners. Different does will become pregnant and wind up in one of the three groups, on their own volition or through planned breeding of replacement animals. The does that do not conceive 'on time' will do so on the next mating period, or they will be gone. (April-kidding does have the lowest conception rate at rebreeding time).

The key to intense breeding is proper body condition that is controlled though diet and early weaning; they just don't lose appreciable condition in this scheme. My does perform on alfalfa and water—no grain, but they do have access to Bovatec 2.2 blocks and loose mineral at all times. Loose

minerals are a key to herd health, and I use a custom cattle blend containing 3000ppm of copper/lb and higher levels of the other key minerals. A month prior to kidding the does are switched to a mineral containing Bio-Mos, an ionosphere that has about eliminated scours in kids. We continue feeding this product to does for 30-days post-parturition and to kids for 30-days post-weaning. Kid mineral is offered in low feeders in creep areas remote from the doe mineral feeders. As noted above, weaning kids at 7 to 9/10 weeks of age keeps the does in good condition which promotes maximum conception rates and many triplets.

I now describe my schedule for accelerated kidding:

1) To follow a breeding/kidding year, I will start at mid January when the kids from Group 1 will be born. These kids will be among the biggest and healthiest of the year because the does will have been on alfalfa pasture during all but the terminal month or so of gestation when they go on alfalfa hay. Scheduled weaning will be approximately Mar 15-21 (this avoids warmer weather and thus promotes better rebreeding). Once kids are weaned, I put in enough bucks to cover all does in a 14-day period (this is likely their only estrus cycle); I recommend one buck/25 does.

Group 1 weaned-kids are fed my best quality alfalfa hay and some creep feed containing Chlortetracycline/Aureomycin (CTC) and Deccox at maintenance levels and to increase growth rates; they will also have Bovetec 2.2 blocks available. Kids are separated into 3 pens: one for doelings, one for small bucks, and one for larger bucks. These kids will reach market weight of 60 lb or so by mid April (and usually draw higher winter prices).

2) Group 2 kids will be born late Mar/early Apr. These are notoriously the worst kids born during the year, due, I think, to the dams being dry-lotted with reduced exercise and possibly some does being somewhat over-conditioned because of ad lib feeding of good alfalfa hay. Because I don't intend to market these kids until the fall upturn in prices, I do not 'push' them... minimal supplements are offered before weaning (just enough to deliver Deccox and CTC for coccidia or respiratory issues) and none after weaning.

Group 2 does are the hardest to get rebred in a timely manner; a considerable percentage will slip to fall breeding. I have tried to improve rebreeding success by introducing the bucks a bit before weaning, and I have also tried synchronizing them using Valbazen dewormer. I worm the kids with it and give the does a 5cc dose to, hopefully, induce estrus. (FP: I can find no research to 'prove' this works). We also provide multiple bucks and never less than 1:25 ratio. We hope for a Sep/Oct kidding over a 14-day period.

3) Group 1 does will begin kidding mid Sep and finish within 14 days... very nice kids, usually born unassisted since the does are in good shape, still on pasture, and well exercised. I usually pick my replacement doelings from this crop. When I see the does start estrus cycling, I put the bucks in, sometimes as early as 39 days after the last kid is born, but no later than Nov 15th. If the number of does is under 50, I may use only one fullblood buck to get doelings to keep or sell. I usually don't use crossbreed bucks on this breeding since I am not after high ADG kids to be born in Apr (they would be too heavy for the late fall rising market). Most of the kids are weaned in Nov or somewhat earlier; I put the bucks in and leave them in until they are next needed. Their

kids will be born in Apr of the second year, but some might be born in Mar or even Feb.

4) This group kids in Jan of the second year. It consists of animals bred in Aug as cooler weather arrived and some does that did not rebred 'on-time' after the previous Apr kidding. These kids will be weaned March for dams to be bred for Sep kidding.

As you can see, this can get a bit complicated. Not every doe is going to rebred in a timely manner. My experience is that, early on, about 55% conceived as scheduled, but after the first 2-3 rounds, over 75% conceived as expected. I try to select replacements from such does. There can also be a problem when the does do breed but do so some 30 days later than expected. This throws the program off-schedule and may skew efficient management and marketing.

Fall breeding is not a problem, but spring and early summer breeding will see lower conception rates, for sure. (FP: Some owners feel that goat breeds such as Savannah, Boer, and Kiko, which 'originated' in the southern hemisphere, have higher frequencies of 'out-of-season' breeding in the northern hemisphere. Some individual does do, some do not; insofar as I know, the heritability of this genetic trait has not been investigated. Contrarily, in my work assignments in the Caribbean and northern South America in the eighties, it was said that year-round estrus cycling in native goats increased the closer they got to the equator.

Accelerated breeding does two things for me: it puts 50/75% more kids through the sale ring and it enables me to hit (twice) the higher-priced marketing period. With planning

and decent execution, the does, and thus this program, will work for you.

I feel that maintaining does in good condition, at every stage, is the crucial management strategy. If you don't have this management capability, this program is probably not for you.

I give 2-3 CD&T shots to our does per year and Selenium with Vitamin E before breeding again after kidding. We start the kids off with a C&D anti-toxin shot as well as a dose of Selenium with Vitamin E (gel form). Does are dewormed in the spring if/as needed, and any that need re-worming may be culled. The longest I have gone without de-worming is 18 months. Feet are trimmed once/year and any that need more than two trimmings go to the Sale. Udders are not allowed to have more than two teats. The biggest thing that will get a doe culled is attitude; she needs to fit the program.

I use gestation and length of lactation as a 'governor' to maintain proper doe condition. *Leaving kids on does for more than 90 days is, I feel, counterproductive. Early-weaned kids do better on high quality hay than by staying on the teat. Once the kid's rumen is developed at 3 weeks or so, the need for milk become a lesser concern and the doe can be dried off and rebred. The only thing I have seen when does lactate over 75 days is a loss of condition in the doe and lowered performance in the subsequent lactation. Longer lactations also seem to lower rebreeding success.*

Concerning breed composition, most of my does are $\frac{3}{4}$ Savannah and the balance either Boer or Spanish. I prefer does with balanced conformation and functional udders and teats. However, looks are not as important as production; some of my ugliest does have made me the most money year in year out. My best ever doe, Quasi Goato, a Boer/

Bad River Spanish, had 30 kids in 6 years and raised every one of them... had quints once followed by quads 6 months later. Unfortunately, her offspring were not as prolific as she was. I retired her at 9 years after she had, and weaned, a set of quads—a moneymaking mama!

I used a lot of Savannah blood here to replace the Boer and straight Spanish we started with. The Spanish could hold up to the intense breeding much better than the full-blood Boers (they just seemed to fall apart—body condition and udders—after about 2 cycles. When I started my intense breeding program, I had already replaced most of the Boer does with their half-Savannah daughters. Curiously, the remaining (10%) good Boer does were black-headed, not the traditional red colour. All I know is that these blacks just out-performed my reds.

I do not have a buck pen as they are in with a group of does all the time. I run a closed herd for the most part and have brought in only two bucks in the past 5 years; no outside does are purchased, ever. I raise my own replacement bucks and maintain two 'lines' so as to have the option of crossbreeding. (FP: the more unrelated these lines, the more hybrid vigour will be demonstrated in the crosses.).

With regard to marketing my kid crops, I am limited to selling directly. All doelings since introducing the Savannah blood have been sold private treaty, as also a few bucks per year. So I have two sales options, either on-farm (my choice) or taking my chances at area auctions up to 150 miles away. Our prices hinge on Texas auction prices that, in turn, depend in large part on numbers of goats on offer from producers at any given time. (FP: Texas producers typically run the bucks year round, and this results in seasonal kid

crops, Dec, Jan, Feb with a smaller wave in Apr. These kids move to market as availability of summer forage lessens. This recurring pattern lowers prices in Jul, Aug, Sep, and Oct, but raises them from mid Nov to just before Easter; thereafter prices decline. Many NE auction goats are congregated in small lot and trucked to San Angelo TX for resale to the east or west coasts. Packers are located in CO, IL, MN, and SD, but only one buys goats at the site).

I sell my Jan kid crop by/before May, and I 'hold' my Apr crop to near Thanksgiving. Obviously, my Sep crop draws the highest winter prices. Essentially, the recurring seasonal price gyrations dictate my kidding schedules. My sale kids range 55-75 lbs but are mostly around 65 lb. Producers selling only into the Jul/Oct price troughs are seriously disadvantaged.

I would like to see southern goat producers kid at least half their herd in Sep/Oct for spring sales and the other half in late Mar/early Apr for Nov/Dec sales. I believe this might well help smooth out the 25-35% differences in seasonal market prices. It might even raise the summer lows by some margin.

I choose to do accelerated kidding, but I admit it takes more time and effort than annual crops or spring/fall crops. I do it because it pays me to do so. Nebraska winters are not kind to goats or to goat owners, but they can be tolerated provided one has adequate facilities, the right kind of goats and consistently good management.

(FP: an understanding, well-employed wife with one or more teenagers needing money for the latest, absolutely required electronic devices and apps can be quite helpful, too. I appreciate Neal's willingness to share this story which he

has reviewed, corrected, and approved. He may be reached at 308.651.0327 or nealamsberry@hotmail.com for clarification of this or that point. Should you need more marketing information on this topic, I can email you a copy of my book article, 'Target Marketing of Slaughter Goats'; you can reach me at akathegoatman@icloud.com.