



Raising sheep the EASY way!

Barbados Blackbelly Sheep Association International

Blackbelly Banner

Don't Let Your Ram Cost You the Farm

By Carol Elkins

A civil lawsuit is playing out in the California Superior Court San Bernardino between a person selling an American Blackbelly ram and a person who was injured by the ram while on the seller's property. Although I'm not sure how much money the plaintiff is suing for damages, I'm sure it is significant—hundreds of thousands of dollars and perhaps millions.

Why should you care? Well, the circumstances surrounding this lawsuit may be something that has happened many times on your farm. The owner of the American Blackbelly ram had a flock of ewes, their lambs, and a ram. He kept the sheep as a hobby because his wife had fallen in love with a couple of blackbelly lambs that she had seen. The lambs grew up, bred, and the flock grew. He posted a sign at his farm gate announcing the sale of blackbelly lambs. One day a woman and her husband drove by. They had been thinking about buying a sheep to keep their horse company,

so they stopped by to see what lambs were for sale. They stood outside the seller's corral looking at the flock and pointed out a lamb they wanted to buy. Sound familiar? Most of us have experienced similar on-farm sales to people who are new to raising sheep.

Here is where the problem started: Seller went into the corral to try to separate the lamb from the flock. He didn't realize that the woman had followed him into the corral. While he was trying to bunch the flock together (often a bit of a rodeo with blackbelly sheep), the alpha ram circled behind him and approached the woman. She bent down to try to pet the ram and he rammed her in the face, knocking out teeth and breaking her nose.

This was a tragedy just waiting to happen.

The seller never had any reason to think his ram was dangerous. Because the seller had owned the ram and ewe lamb since they were weaned, the ram was treated as a pet. He was a friendly guy who enjoyed his owner scratching his head. Seller didn't have a lot of experience with sheep (he was a horse breeder), so he didn't expect the ram to become agitated when his group of ewes and lambs was being chased around the corral.

That was his first mistake. His second mistake was keeping the ram in the same corral as the ewes. He at least should have moved the ram out of the corral while the ewes were being rounded up.

His third mistake was not anticipating the utter ignorance of the general public about

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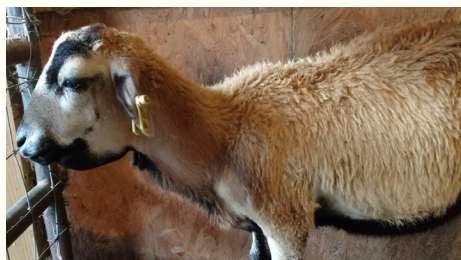
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Use of Copper Wire Particles for Controlling Barber Pole Worm in Sheep

By Pam Hand, Free Union, VA

I have read various reports about the use of copper wire particles to help control Barber pole worm (*Haemonchus contortus*) in sheep as either an alternative or as an adjunct to the use of traditional dewormers. This year was the first time I have had problems with parasites, probably for several reasons: I had 34 lambs this spring, the most ever, so I had many more sheep on my pastures; it was a very wet and warm spring with lush grass until the fall; and I neglected to regularly check FAMACHA scores until my favorite April 2016 lamb died suddenly in June and parasites were identified as the cause on post mortem examination. I continued to have anemia in some of the lambs and for the first time I had a bottle jaw lamb, so in September I decided to use copper wire particles in my entire flock.



Ram lamb with bottle jaw

I continued to use oral dewormers when I determined that anemia was present in any individual animal. I had no anemia in any animal after the administration of the copper wire. Bear in mind that Sept is getting to be near the end of the 'danger' period for parasites in grazing sheep in my area so I can't be sure of its efficacy. But I am heartened enough to plan to administer the boluses, perhaps at a slightly higher dose, next spring at the start of the heavy parasite season. As I understand it, the copper wire can be given about every 6 months without worry about copper toxicity as long as you are judicious in the dose and are cognizant as to how much

copper supplementation is in whatever you are feeding.

I purchased Ultracruz boluses from Santa Cruz Animal Health (www.scahealth.com/scah/home), the kind for goat kids. You get 25 capsules with 2 grams in each capsule, for about \$12 plus shipping.



San Juan Ranch Ultra Crus Copper Bolus

Each bolus capsule contains thousands of tiny copper oxide wire particles (COWP). The capsule needs to be divided into four parts to achieve the correct dosage for sheep. I opened each capsule onto a folded paper and used a knife to separate the particles into four equal piles. Then I dumped out the contents of some dog vitamin capsules and filled each empty capsule with one of the piles of copper wire. (You can also purchase empty capsules online or in some drug stores.)



Divide each capsule into four equal parts

The result was that each new capsule contained 0.5 gram of wire particles. I have seen a range of dosages and I wanted to be conservative.

I used a plastic balling gun to administer the capsules and had a learning curve until I could administer it on the first try. I always

followed up with a treat—I use Triscuit crackers so that the animals do not mind being handled the next time. Also, I could be more sure that the capsule actually was swallowed when I saw the sheep chew up and swallow the cracker.

I plan to do a fecal count in 2017 to determine the effectiveness of using copper wire particles for controlling barber pole worm. I will report my results to you then.

Here are a couple of good articles for you to read about copper wire particles in sheep:

"Using Copper Oxide Wire Particles to Increase Dewormer Efficacy," JM Burke, et al, Sept 2016.

www.wormx.info/cowpcombo

A list of additional articles is at www.wormx.info/copper-oxide-wire-particles

You can download a free digital copy of a relatively comprehensive guide at <https://attra.ncat.org/attra-pub/summaries/summary.php?pub=216>

New BBSAI Members

Taylor Abrams	Independence, LA
Patricia carpenter	Church Hill, TN
Brooke Hyleman	White Pine, TN
Mike and Trevor Orear	Yucaipa, CA

Proper Culling Improves Productivity

Reprinted from University of Maryland Extension's Wild & Woolly, Vol 15 Issue 4, Fall 2016
<http://www.sheepandgoat.com/fall2016>

Culling is one of a producer's most powerful tools. Culling is when an animal is removed from the breeding herd. It is customary to replace 15 to 20 percent of the herd each year. Culling rates tend to be highest in high-producing and purebred herds.

Age is the usually the primary reason why a female is removed from the herd. This is because ewes and does tend to be most productive between the ages of 3 and 6. After six years of age, their productivity tends to decline. Older animals may have difficulty maintain their body condition. For this reason, culling based on age, is generally a good management practice.

On the other hand, some females are productive well beyond the age of 6. Females that maintain their productivity for a longer period of time should be retained, and their offspring should be favored, as longevity is heritable. In fact, on some farms, keeping older productive ewes may be a

way to increase productivity, while reducing the costs of replacement.

Females that prolapse their vaginas should be culled. Some producers cull females that experience uterine prolapses. Animals which are chronically infected with footrot or scald or fail to respond to treatment should be culled. Animals with abnormal or excessive hoof growth should be culled. Animals which require frequent deworming should be culled. Fecal egg counts can aid in selection and culling decisions. Some disease eradication programs (e.g. OPP, CAE, CL, and Johne's) will require rigid culling standards.

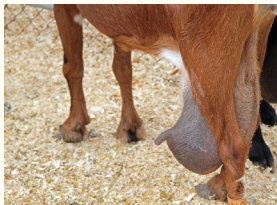
Another important criteria for culling is performance. Females that fail to produce offspring should be culled, with no second chances given. Females that lamb/kid late in the season are prime candidates for culling. In accelerating lambing/kidding systems, females that miss one or more breeding opportunities should be culled.

Some producers will cull females that require assistance at parturition, along with their

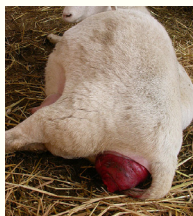
offspring. Females that reject or harm their offspring should be culled. Females whose offspring are small, weak, and/or slow to suckle should be culled. Single births, especially more than once, are a reason for culling, especially in highly productive flocks and herds.

Records are essential to making sound culling decisions. In fact, good records will identify poor producers regardless of the reason(s): age, health, or genetics. Ranking females according to the pounds of offspring they wean is a good way to identify candidates for culling.

Proper culling will reduce the cost of maintaining the herd, as unproductive females take up space, eat feed, and require labor, while producing less profit than their more productive contemporaries, maybe even costing the farm money. Proper culling makes sheep and goat production more profitable and sustainable. If you find you're making too many excuses for an animal, get rid of it. You'll be glad you did. 🌿



Bad udder



Vaginal prolapse



Old age



Footrot



Single birth

The Benefits of Rotational Grazing for the Small Holder

By Joanne Vaughn, Rochester, NY

It's that time of year again to make up a list of New Year Resolutions. Now is the time for you to consider putting *rotational grazing* to work on your small farm**. Rotational grazing is a pasture management practice where the stock is moved to, or rotated between, fresh pasture according to some plan. In practice, the flock may be moved as often as once a day or as infrequently as twice a week. The number of graze areas will be determined by the size of your flock and the productivity of your pastures.

What are the benefits?

The benefits of this type of management depend on the plan and the execution of the plan. The plan must take into account factors you can control, such as herd size and graze area, and factors you cannot control, like soil moisture and temperature.

Benefits of rotational grazing include reduced costs, healthier stock, and improved pastures. Rotational grazing requires that you think of your pastures as a solar collector. Free solar energy is converted to free feed for your stock. Hay and grain are expensive. And the inputs required to process and transport these feeds are only going to become more expensive as the price of fuel increases. Anything you can do to increase the amount of feed the sheep gather for themselves is bound to benefit the bottom line. Benefits to the stock come in the form of (1) decreased exposure to gastrointestinal parasites and (2) increased rates of gain. Exposure to gastrointestinal parasites (e.g., Barber pole worm) is reduced when the graze time in a given area is limited to less than 3 days during warm temperatures (>60 °F). All stock, and especially lactating ewes and their lambs,

gain weight faster when they are moved regularly to fresh pasture because they learn to compete to consume more forage quickly and because untrodden forage enables more efficient bites. Benefits to the pasture manifest as (1) increased growth, (2) improved fertility, (3) reduced compaction, and (4) reduced erosion. Short, high-intensity grazing, especially when it is timed to the maturation of the grasses, stimulates forages to grow. It helps to maintain the vegetation in the "growth stage" and it helps to return more mature (less nutritious) material to the soil as cover and nutrients through trampling. The shorter period of grazing reduces the amount of travel over the area, which reduces the amount of compaction. The possibility of erosion trails becomes reduced and, as a by-product, the transmission of organisms that cause foot rot is reduced.

On the downside, rotational grazing requires an initial cost of buying portable fencing plus an energizer and the investment of time to move the fences. One must plan ahead to consider how to supply water, which pastures will be ready, and when. It is not a trivial skill to be able to estimate how long your pastures will need to recover and to plan how many you will need to reach your goals. It takes observation and backup plans to deal with the conditions drought or deluge may present.

How might rotation grazing practices be applied?

All of these benefits will add to the value of your farm and reduce costs. But, as in all things, the devil is in the details. Each farm must make choices that work best for the particular operation constraints and climate.

Figure 1 shows a simple rotational grazing plan. Assume that the area

involved and the productivity of the total pasture matches the size of the flock that will be carried over the growing season. In this figure the flock has just grazed a paddock for 3 days and will be moved onto the paddock that is "Ready". Meanwhile the other 3 paddocks are capturing solar

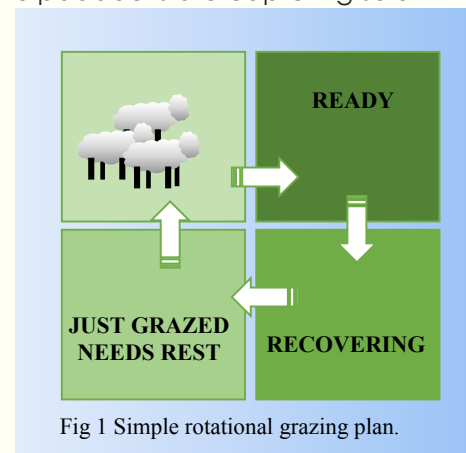


Fig 1 Simple rotational grazing plan.

energy and converting that into sugars to fuel regeneration of the forages. With 4 paddocks and a 3-day graze period, the rest interval is 9 days. This flock is on a 4-paddock rotation.

Figure 2 shows a more productive graze plan. Now the flock is on a 12-paddock rotation. They are rotated through the same pasture but the paddocks are further subdivided into 4 sub-paddocks. Clearly the flock will spend less time in each, perhaps only 1 day. There is less waste due to trampling over

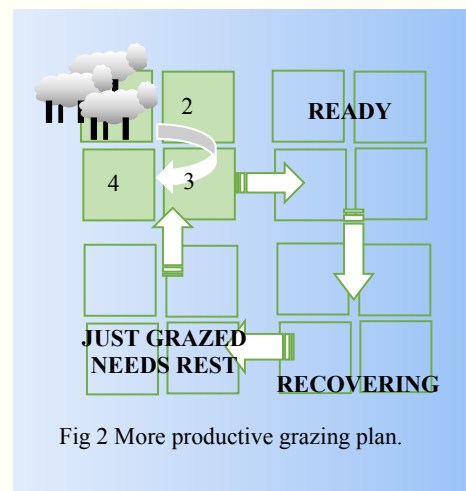


Fig 2 More productive grazing plan.

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Ram Liability

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how to behave around livestock on a farm. This woman not only went into the corral with the sheep, she bent down at the approach of a ram. It is easy to think that she only had herself to blame, but a jury may not see it that way. The judge will instruct the jury that the seller had a legal duty to warn a visitor about the potential danger of injury from the ram.

It is important that you consider the liability you are exposed to when you allow anyone other than your immediate family to be around your farm's livestock. Your property insurance will usually protect you from claims alleging bodily injury or property damage caused by an incident involving the premises. For example, if someone trips over your tractor or falls into your watering hole. But when you decide to sell livestock, you expose your farm to a different level of liability because

you are operating a business. Most farm insurance policies require expensive riders to cover damages resulting from the sale of a farm's livestock or consumption of its products.

Even if your insurance covers these things, it can be expensive defending yourself against claims made by lawsuit-happy parasites. It is far better to take extra measures to protect you and your family from ever being in a position of having to defend yourself.

- Never allow strangers inside an enclosure with your livestock.
- Never allow unauthorized visitors to be in an area protected by a livestock guardian dog.
- Post a sign warning about the possibility of injury on your property
- If you have employees or operate heavy equipment,

make sure you have good safety procedures in place.

- Understand that ALL livestock can be potentially dangerous and especially male animals, such as rams, bucks, bulls, boars, stallions, and roosters.
- Take responsibility for your visitors' safety. Don't assume they know how to behave. Watch them as carefully as you watch your livestock.
- Make sure your farm is adequately insured.

Understand that although your ram may be your best buddy, he may not be a gentleman around your family, friends, or visitors. The defendant in this California lawsuit may end up losing his entire farm because his insurance did not cover personal injuries resulting from aggressive livestock. Don't let that be you. ☒

The Benefits of Rotational Grazing for the Small Holder**

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the entire paddock. There is also less waste because the animals will be less selective in the forages they choose so the "plane of nutrition" will be more level over the entire graze period. In this configuration, the paddock supports 4 days of graze. But most importantly the sub-paddocks now provide a longer rest interval. With 12 paddocks and a 1-day graze period, the rest interval is now 11 days. Your subdivision pays dividends as it allows more time for your pasture to recover and grow additional forage.

Clearly the numbers can change to adjust to your conditions. Just as an example, this year our animals were on a 40-paddock rotation with an average graze period of 1.7 days. Some paddocks were less productive and the flock was moved in a short graze period. Some paddocks, particularly during

the flush, were very productive and the graze area could be made small. The flock could still graze there for 3 days and leave a useful residual. Then we had a long drought and they were moved more quickly. At the point when the grasses shut down due to lack of moisture we realized that we had to supplement with hay and, in addition, ask permission to use a neighbor's idle field. We wanted to have a long rotation to minimize the flock coming back onto pasture while infective larvae might still be viable. But at the same time we did not want to leave them in a pasture for longer than about 3 days when the infective larvae would start to hatch.

In a short space as this, it is difficult to cover all the reasons that rotational grazing may be beneficial to your operation. For more information I highly

recommend the book by Jim Gerrish, "Management-intensive Grazing: The Grass Roots of Grass Farming." He has many informative videos on You Tube as well.

**Note: When reading about different Rotational Management techniques it is easy to become confused. Commercial stock men talk about thousands of acres and hundreds of cow days. There is often a deluge of terms such as Mob Grazing, Set Stocking, Managed Intensive Grazing, Stock Density, and so forth. In this discussion, we set those terms aside and look at some farm situations that might look like our small holding. A small holding is often considered to be less than 50 sheep. There is still a lot to be gained from rotational grazing practices even with far smaller numbers. ☒

Ask the BBSAI

Q: What is the maximum coefficient of inbreeding (COI) score that I should allow in my flock of Barbados Blackbelly?

A: I'm not sure there is a 'correct' answer because of two issues: 1) our breed has a very limited gene pool, and 2) it depends on what your goal is.

1. We have a limited gene pool to begin with so we do not have the same luxury in making decisions about COI's that other breeds do. All our registered sheep go back to a hundred or so individuals. And while it is important to understand COI's and what they mean, it is not the only criterion by which to make a breeding decision.

For a pretty good explanation of what COI does from a dog breeder's perspective, see <http://www.dogbreedhealth.com/a-beginners-guide-to-coi/> Sometimes it is nice to read how we grapple with this issue in another species.

2. If your goal is to set up and maintain different lines within your flock in order to follow the ABC breeding scheme, then you might breed two animals that will produce an offspring with a slightly higher COI than you would otherwise. That is because in order to maintain those separate lines, you have to continue to breed closely related animals within those lines. That way when you do plan your line crossing you have more 'distantly' related animals in your

flock from the other lines.

- When you do that line crossing, you might aim to produce offspring that have the lowest COI possible, to get as much hybrid vigor as is available in your flock.
- When you do the line breeding, you would tolerate a higher COI.

But that is your question, is it not? How high a COI is 'good' and how high is 'too high'?

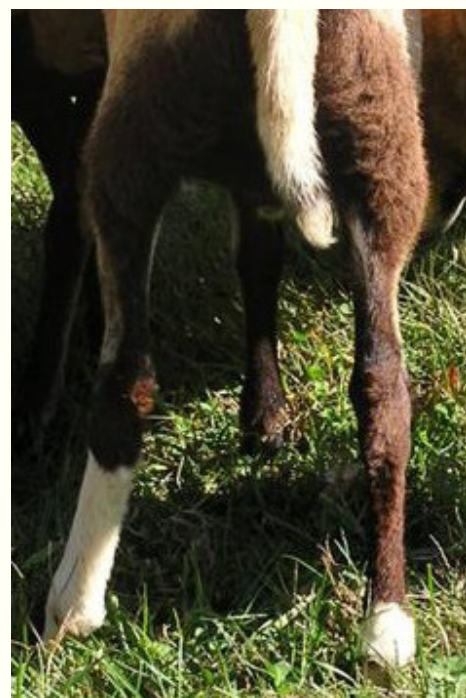
If you read about the benefits of line breeding in our species and others, you can see that the half-brother to half-sister pairing is commonly acceptable, which produces a COI of 12.5%. There is an excellent article at <http://www.barbadosblackbellysheep.com/read-this/articles/linebreeding/> entitled "Line Breeding—an Ancient Breeding Tool" by Barbara Webb, that I encourage you to read.

I am just guessing here but because a line breeding of half-brother to half-sister produces an animal with a COI of 12.5% I would think that you would want to keep your numbers below 20-25% in all cases. That is what I aim for

An article at http://abri.une.edu.au/online/pages/inbreeding_coefficient_help.htm states, "There is no defined limit as to what is an acceptable level of inbreeding in domestic animal populations. However, inbreeding depression is

likely to be more apparent once inbreeding levels get to above 10%. As a very rough guide, there is often a 2-20% decrease in performance of the trait per 10% of inbreeding coefficient."

Q: We sold a ram lamb from 4th or 5th generation registered American Blackbellies to someone who bred him to registered ewes and got some lambs with white socks. I checked back with the breeders we bought our registered foundation stock from and they



have never had white socks in their flock. Neither have we. What is known about color dominance in American Blackbellies? Do we know if white socks are a dominant or a recessive trait? I'm assuming it's a recessive trait or they'd all have them. Do both parents have to carry the gene for white socks for the white socks to come through?

Obviously these lambs can't be registered. Is this common? We've been really diligent in only registering lambs with 100% American Blackbelly genetics so this is really disappointing. I guess

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Relationship	Inbreeding Coefficient (%)*
Parent/offspring Full brother/sister	25%
Half brother/sister Grandparent/grandchild Uncle/neice	12.5%
First cousins	6.25
Uncle/nephew	6.25
Animal has a single common great grandparent	3.1%

The Barbados Blackbelly Sheep Association International is a non-profit organization registered in the State of Missouri



Raising sheep the EASY way!

The BBSAI Newsletter is a benefit of membership in the BBSAI and is published quarterly. The BBSAI Newsletter welcomes articles, photographs, and business cards that relate to American Blackbelly and Barbados Blackbelly sheep. Publication of articles or advertisements does not necessarily constitute an endorsement by BBSAI. No part of the BBSAI Newsletter (including photographs) can be reprinted, put on Web sites, or used in any manner without written permission of the BBSAI.

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Back issues can be downloaded from

<http://www.blackbellysheep.org/association/newsletters/>

Newsletter Editor: Carol Elkins

Ask the BBSAI

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my biggest concern is that I want to be sure I'm registering good stock so hoping your expertise can shed some light on this issue.

A: I'm afraid I can't be very helpful because we just don't know anything about color genetics except that the typical blackbelly coloration and facial barbs are persistent when crossbred. As you indicated, the coloring on the socks may be recessive in both flocks and, when bred, expressed in the phenotype. Breeders do report, however, that white socks, white tail tips, and white crowns are very difficult to breed out, so I'm sure that something more is going on genetically than we can understand—or control.

We see color aberrations in genetically stable lines every

once in awhile. One long-time breeder reports having a Barbados Blackbelly lamb who was born of multi-generation pedigreed parents but had an entire white hip. Where did THAT come from? We also see horns and scurs crop up unexpectedly in otherwise polled bloodlines.

I know it will be difficult to explain the "we don't know" to your buyers, but there simply is no guarantee in the genetics of these, or any, animals. Your buyer could probably breed the white-socked sheep and not see white socks again; or they may be so fixed genetically that they will persist across generations now. We don't know. However, your conscientious breeding of good registered stock is the best way to try to control your genetics. 🌱

Lambulator Cut-Yield Calculator

from University of Maryland Extension's Wild & Woolly,
Vol 15 Issue 4, Fall 2016

The LAMBULATOR is a Cut-Yield Calculator for the Lamb Direct Marketer. It has been designed with the small direct marketer in mind. It is easy to understand and use, even if you have no experience with Microsoft Excel. Just plug in your cut weights and prices and let it do the calculating for you. In an instant, it will calculate carcass yield percentages, individual and average net profit per lamb, and your overall gross and net profit. It will even allow you to try different pricing scenarios should your production or marketing costs increase. The Lambulator was developed by Dave Scott, a livestock specialist with NCAT-ATTRA. It is a free download.

<https://attra.ncat.org/attra-pub/summaries/summary.php?pub=548>