The BBSAI Newsletter

Winter 2016

Raising sheep the EASY way!

Barbados Blackbelly Sheep Association International

Blackbelly Banner

Finding and Choosing Hay

By Steve Schmidt, Burns, OR

Recently, a few Barbados Blackbelly breeders were discussing the availability and price of hay, the kinds of hay to feed, and the protein content. I was surprised that alfalfa is not more available for everyone. It is widely used for many livestock breeds; working horses and dairy cattle are big users all across the U.S. So I wanted to mention a few things to think about when it comes to looking for (and then finding) hay. The subject of what to feed sheep is a huge topic, and could probably take up an entire book. These are just a few tips to help with your hay needs.

There are different kinds and qualities of hay. When I think about what I'm going to feed my sheep, I also consider the needs of my horses and burros. I want one type of hay that will suit everyone. Although our sheep can survive and grow on poor forage, it seems that they do better on a higher quality and higher protein content feed. Seems to make sense since I grow faster when I eat better food too. Just in the wrong direction.

Typically horses do well on grass if they are not doing a lot of work. Mine don't work much at all, but since we have cold winters here, they do need extra protein to keep their weight up over winter. The same can be said for sheep. So I want hay with more protein than a straight grass hay.

The next step up from grass hay is grain hay. I have used two different grain hays. Alfalfa/grass and Barley/grass. I don't know what the grass in the mix is, and I'm not sure it's horribly important. The alfalfa mix is typically 20% to 24% protein, and the barley mix is closer to 19% protein. Barley is just fine for our sheep.

Because the growers around here export most of their hay, I'm stuck paying market prices.


Square Bales


Round Bales


Alfalfa Cubes and Pellets


Alfalfa Hay


Orchardgrass Hay


Oat Hay

continued on ***page 2*** ➢

Inside this issue:

Choosing Hay

continued from ***page 1***

But I don't have to pay transport costs since I'm only 2 miles away from the fields.

What I think is most important here is how you compare hay costs when there are so many varieties and bale sizes. It's a good idea to think of hay not in terms of price per bale, but rather price per ton. Generally, when the price is calculated by bale, the cost goes up dramatically.

Someone recently mentioned to me that she had purchased 125 bales of beautiful orchard grass/ rye mix for $8 a bale. That may sound reasonable, but you should ask a few more questions before handing over your money. How many bales to a ton with this hay? Are they heavy bales or light? If you can toss them around fairly easily, then they are probably only 40-50 lb. If they are 50 lb bales then there are 40 bales to a ton. If you pay $8/bale, then you are paying $320 a ton. At that price you can probably truck in alfalfa.

If you can barely handle a bale yourself, then the bale's weight is probably in the 75 lb range. At 75 lb, there are 26.6 bales to a ton, and you are paying $213 a ton. That's a bit more reasonable. Does the seller have any idea how much protein is in the hay? Rye grass hay is in the 8% range, about the same as straight grass. But note that protein content depends on when grass and alfala are cut. Unless it has been tested, it is hard to know the protein content for sure.

Also the size of bale will make a dramatic difference in cost. If you can handle big bales, the cost per ton will be lower. Using big bales doesn't necessarily have to be any harder than using small bales. Although I stock up in the fall for winter, I can buy one big bale at a time if I need to. I have a medium-duty, single-axle trailer that can easily hold two bales, and I can feed directly off of it.

When it comes to locating a source for hay, try to avoid the middleman. Feed supply stores add quite a bit to the cost, so locate a grower instead.

How do you find a grower? I would start by searching your area for livestock operations where you see lots of cows or better yet, horses. Working horses require good quality hay. Ask the farmers where they get their hay from. Where there is one grower, there are bound to be more.

I found two websites recently that might be handy to know:

- http://www.hayexchange.com
- http://www. haynearyou.com

Also try Google and the yellow pages for local growers. Your local Cooperative Extension office is also a good resource. Finally, take a drive into your local agriculture community and ask around to learn where the local farmers and ranchers have lunch. Ranchers know one another, and they know who grows what. Not only will they know sources, they'll know who are reputable growers.

All Hay Sun-Cured	%Crude Protein
Alfalfa—All	16
Alfalfa—Prebloom	20.2
Alfalfa—Midbloom	17.1
Alfalfa—Mature	15.2
Barley	7.8
Bermudagrass	9.2
Bluegrass, Kentucky—All	9.1
Bluegrass, Kentucky—Mature	5.6
Bromegrass—All	8.7
Bromegrass—Prebloom	9.2
Bromegrass—Mature	6.1
Clover, Red—All	13
Clover, Red—Immature	18.7
Clover, Red—Mature	11.8
Clover, White	16.9
Fescue, Meadow	8.2
Fescue, Tall	7.2
Grass—All	8
Grass—Immature	14.5
Grass—Mature	14.5
Lespedeza, Common	13.8
Oats—All	8.6
Oats—Immature	12.6
Oats—Dough Stage	8.6
Orchardgrass	9.4
Prairie Grass, Midwest (Prairie Hay)	5.8
Prairie Grass, Midwest—Immature	7.9
Prairie Grass, Midwest—Mature	5.6
Quackgrass	9.5
Rye	7.9
Timothy—All	6.8
Timothy—Prebloom	12.4
Timothy—Early Bloom	9.5
Timothy—Midbloom	8.6
Timothy—Fullbloom	6.8
Wheat	7.7
Wheat, Crested	10.3
Wheat, Intermediate	7.7
Wheat, Slender	8.1

(Source unidentified)

Price per Ton of Hay in Oregon in Fall, 2015

(from http://www.hayexchange.com)

	Cubes	Small Sq	3-String Sq	Square 3X3	Square 4X3
Grass/Legume		$175		$200	$200
Mixed Grass		$200			
Timothy		$230		$140	$195
Orchard		$250	$240		$176
Oat				$160	
Alfalfa	$300	$250	$220	$200	$180

Are You Feeding Your Sheep Enough Protein?

By Carol Elkins

One of the marketing points for blackbelly sheep is that they can do well on lower quality diets. I think it would be more accurate to say that blackbelly sheep DON'T DIE given lower quality forages that would kill a wooled sheep. But not dying is not a measure of performance. I believe that most of the problems that breeders describe their sheep as having can be traced back to poor nutrition. Low birth weights, poor milk production, lack of twinning, small sheep, low parasite resistance—all these issues might be eliminated by simply increasing the protein content of your sheep's diet.

The American Sheep Industry Association sponsored a webinar in late September entited "Dietary Supplements: A Necessity or Folly?" It was a beneficial hour that yielded a couple of surprises. You can watch the recording at http://www.optimalag.com/webinars/2015-09-22_DietarySupplements.wmv

The data that Dr. Robert Van Saun (Penn State U) presented supported the position that most of us are not meeting our sheep's protein requirements, especially during gestation and lactation. Improper feeding during late pregnancy can result in

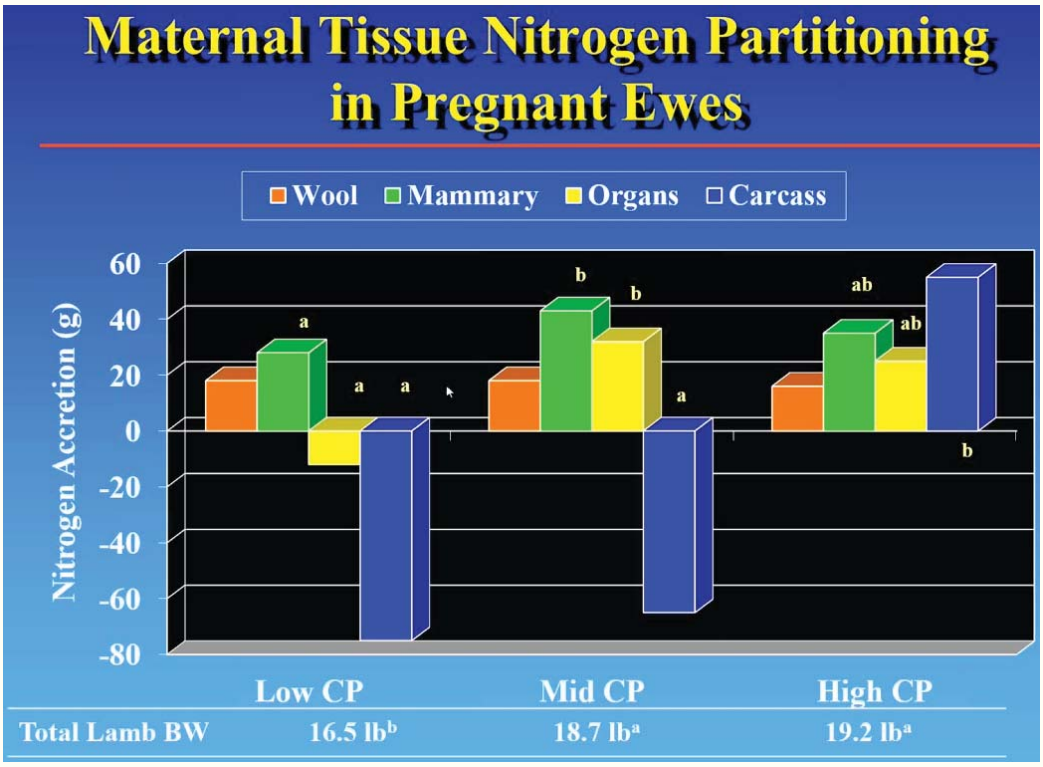
- metabolic disease in ewes, such as pregnancy toxemia
- poor supply of colostrum
- poor milk yield
- small weak newborn lambs
- high newborn lamb deaths

I was most surprised by the slide shown below.

The colored blocks represent how much protein was deposited in wool, udder, organs, and carcasses of pregnant ewes fed varying amounts of crude protein in their diets during gestation. There wasn't much difference between sheep fed low, medium and high crude protein diets in the amount of protein that was deposited in wool, udder, and organs.

But those **big blue boxes** represent protein deposited in the carcass. Deposited protein equates to skeletal/muscle mass. While ewes are gestating, they need their protein reserves replenished in order to maintain their own muscle mass as well as to grow their fetal lambs. There is a HUGE loss of protein (skeletal/muscle mass) in ewes fed low and medium crude protein diets. Their bodies tried to compensate for the low protein intake in the diet by sacrificing their own muscle mass in order to maintain fetal lamb weight. The ewes fed high protein diets were able to retain their body mass and still have heavy lambs. After the lambs were born, the ewes still had enough protein to support milk and colostrum production.

The webinar describes protein levels in many grass and forage diets and spends quite a bit of time discussing forage trace mineral content. Those of you who are feeding only grass pasture and grass hay should consider getting it tested so that you know its protein content. The slides that were provided in this webinar indicate that NO grass diet will provide sufficient protein for lactating or gestating ewes. You absolutely MUST supplement with additional protein.



The best sources for supplemental protein are soybean meal, canola meal, whole cottonseed, cottonnseed meal, distiller grains, and corn gluten feed, ranging from 24% to 55% protein.

This is such a valuable webinar. Yes, it can bury you in data, but at the end, you'[ll have a better understanding of how to measure your forages and how those forages affect the health of your adult sheep and their unborn and nursing lambs.

How Do the New Proposed USDA Scrapie Rules Affect YOU?

By Gregory A. Hession J.D.

Here is a review of the proposed U.S. Dept. of Agriculture (USDA) revisions to the National Scrapie Eradication Program and the consequences that the implementation of these rules may have on you and your sheep.

Key Practical Conclusion

Scrapie is a deadly transmittable disease to which sheep and goats are susceptible. It causes degeneration of the animal's central nervous system. It cannot harm humans. Scrapie gestates slowly—it can take 3 to 4 years for clinical signs to appear—so if an animal moves to another farm or to slaughter, it can infect many other flocks or facilities long before the sick animal shows symptoms.

This review looks at a major overhaul of the federal scrapie eradication regulations, which now focus on genetic testing to determine resistance and establishment of a national registry to centralize information about flocks and their movement.

Until now, if an animal was discovered as scrapie-positive, APHIS (the Animal and Plant Health Inspection Service arm of the USDA) would try to back-trace the animal's movements and identify its farm of origin. APHIS would often demand immediate slaughter of any potentially exposed animals, after which it could learn by autopsy if the order was justified.

Inexpensive testing is now available to identify an animal's genetic resistance to scrapie (about $11 per sheep), and this may change everything. Under the new rule, if the flock owner can show tests that prove all of his or her sheep are resistant, there will be no need to destroy the flock.

Big takeaway: **Get the testing done!** A certain gene in the sheep has a segment that, when tested, can show scrapie resistance. If the test shows an "RR" marker, then the animal is fully resistant to scrapie. Some have QRs, which make them somewhat resistant, or QQs which are not at all resistant.

This regulation trashes those critical {Constitutional} rights by demanding that government employees be able to enter, search, inspect, and seize your records and maybe your entire flock, without a warrant.

I won't go into all the details of the testing protocol here, but I think that this new USDA rule, and the new opportunities afforded by cheap testing mean that every owner should probably get every animal tested, so if the USDA or the state Dept. of Agriculture shows up one day with some bad news about a possible trace of an infected animal back to your farm, you can survive the experience. If you have the test documentation to show resistance, and you have bred to achieve RR, RQ, and RK animals and eliminated the QQ animals from your flock, you will probably be able to save your flock from destruction.

General Issues with the New Rule

Like all federal regulations, this one moves a lot of power from persons and states to the Federal government. This is a process that is ongoing in many areas of law, not just agriculture, and is frankly alarming.

While a central registry of sheep may be helpful to more quickly identify and eliminate scrapie outbreaks, the downside is that it creates yet another massive federal bureaucracy, along with more powerful action against farmers when it wants to don the jack boots and enforce it.

Further, these are agency regulations, not laws, meaning that Congress has declined to do its duty to make the laws, and has delegated that key power to agency wonks, some of whom may have political agendas, and none of whom are elected.

The states could have set up an interstate cooperation protocol to do the same thing: i.e., keep track of sheep movement, without having the Feds involved at all. After all, no state wants diseased animals on its farms!

Because of the new ease of genetic testing, the Feds will now centralize information and become much more involved and active in categorizing and regulating sheep on a local level. Prior to this, they could only confirm scrapie by post-mortem testing. Now, they will know animal susceptibility quickly, have iron-clad rules and risk assessment protocols, and impose hard-edged enforcement.

Relevant Provisions of New Proposed Regulations

The proposed regulations are written in agency-ese and abbreviations, but this brief review puts it in plain English. If you require assistance in falling asleep, read the proposed regulations themselves at http://www.regulations.gov/#!docketDetail;D=APHIS-2007-0127.

continued on ***page 5*** ➢

Scrapie Rules

*continued from **page 4***

The proposed regulations create a "big brother" type character in charge of all of this stuff and call him "The Administrator." The Administrator is the stand-in for the more thuggish aspects of the rule and appears as a specter to enforce every rule. In reality, it will be The Administrator's minions who carry out the regulations on a day-to-day basis.

Here are some of the key provisions of the proposed regulations:

A. **New "trace-back" and "trace-forward" rules.** If an animal is diagnosed with scrapie, the USDA will try to identify where the animal came from and where it went, and will investigate every stop along the way. Exposed sheep who are not provably resistant by testing may have to be destroyed. [Pg. 54660–54661 of reg.]

B. **Categories of risk when sheep are exposed to scrapie.** The rule creates four categories of risk:

1) Genetically resistant exposed sheep (RR);

2) Less susceptible exposed animals (AA, QR, or AV/QR)

3) Low-risk exposed animal, which is fuzzy-wuzzy in the regs.

4) Genetically susceptible exposed animals, which includes ALL goats, plus sheep with QQ, HH, QH, QK, KK, or KH at codon 171.)

Each of these are dealt with differently. If your flock ends up in category one, they—and you—survive without a slaughter order. [Pg. 54663 of the reg]

C. **Allows the USDA to control the movement of animals and slaughter of high-risk sheep**. The above categories lead to a complicated set of rules that may force you to relinquish control of your flock and its transport. If one of your animals is implicated, your farm becomes a "flock under investigation." If the farmer won't do testing or won't remove genetically susceptible animals, then the flock becomes an "exposed flock."

Then, if the farmer continues to resist The Administrator, the farm gets the designation "non-compliant flock" and opens the farm to drastic oversight by The Administrator. [Pg. 54664–54665]

D. **RED ALERT: Record Keeping and Entry without a warrant!!!**

The agency will now be able to force you to keep records about each animal and to make those records available to bureaucrats upon demand.

The U.S. Constitution and all state constitutions protect citizens from entry on property and searches and seizures without a warrant issued by a court or magistrate based on probable cause that a crime has been committed. This proposed regulation trashes those critical rights by demanding that government employees be able to enter, search, inspect, and seize your records and maybe your entire flock, without a warrant. [Pg. 54669]

Gregory A. Hession J.D.
93 Summer Street
P.O. Box 543
Thorndike, MA 01079

(413) 289-9164 office
(413) 433-7508 cell
greg.hession@massoutrage.com
www.massoutrage.com

E. **Creates a required State Surveillance of your farm—the Snitch Network.**

The proposed regulations require the states to set set up "scrapie surveillance" (their term), which is actually a snitch network (my term) to report any lack of compliance with the regulations to The Administrator and his USDA henchmen. The "surveillance network" has complicated reporting requirements of various metrics and compliance targets. [Pg. 54672]

F. **They Don't Know What This Will Cost You.**

All regulations now have to disclose the costs vs. benefits that they impose on their target victims. In this case, APHIS admits it has no idea of what costs it will impose, especially on small farms. Hmmm.. [Pg. 54674]

G. **Lastly, this proposed regulation overrules state and local law.**

"All state and local laws and regulations that stand in conflict with it will be preempted." The iron fist in the velvet glove.

Scrapie Testing—What Is It and Why Should I Bother?

By Carol Elkins

Many labs across the U.S. can perform an inexpensive blood test to identify if a sheep is susceptible or resistant to scrapie. The test is performed at codon 171 and generally costs about $11 per sheep. The lab provides everything you need to get a blood sample from your sheep. The test needs to be done only once in a sheep's lifetime.

What is codon 171? It is the location on a segment of a gene's DNA where proteins are encoded in such a way as to convey scrapie resistance. There are two basic forms of a gene (called alleles) that are related to scrapie susceptibility or resistance:

- The "R" allele produces proteins that are *resistant* to scrapie
- The Q allele produces proteins that are *susceptible* to scrapie (The USDA regards K as susceptible and it is lumped in with Q in this description. However, see BBSAI member Mark Wintermute's comments to the proposed revisions to scrapie legislation at http://www.regulations.gov/#!documentDetail;D=APHIS-2007-0127-0045 in which he describes the significance of K to Barbados Blackbelly sheep and argues against eliminating it.)

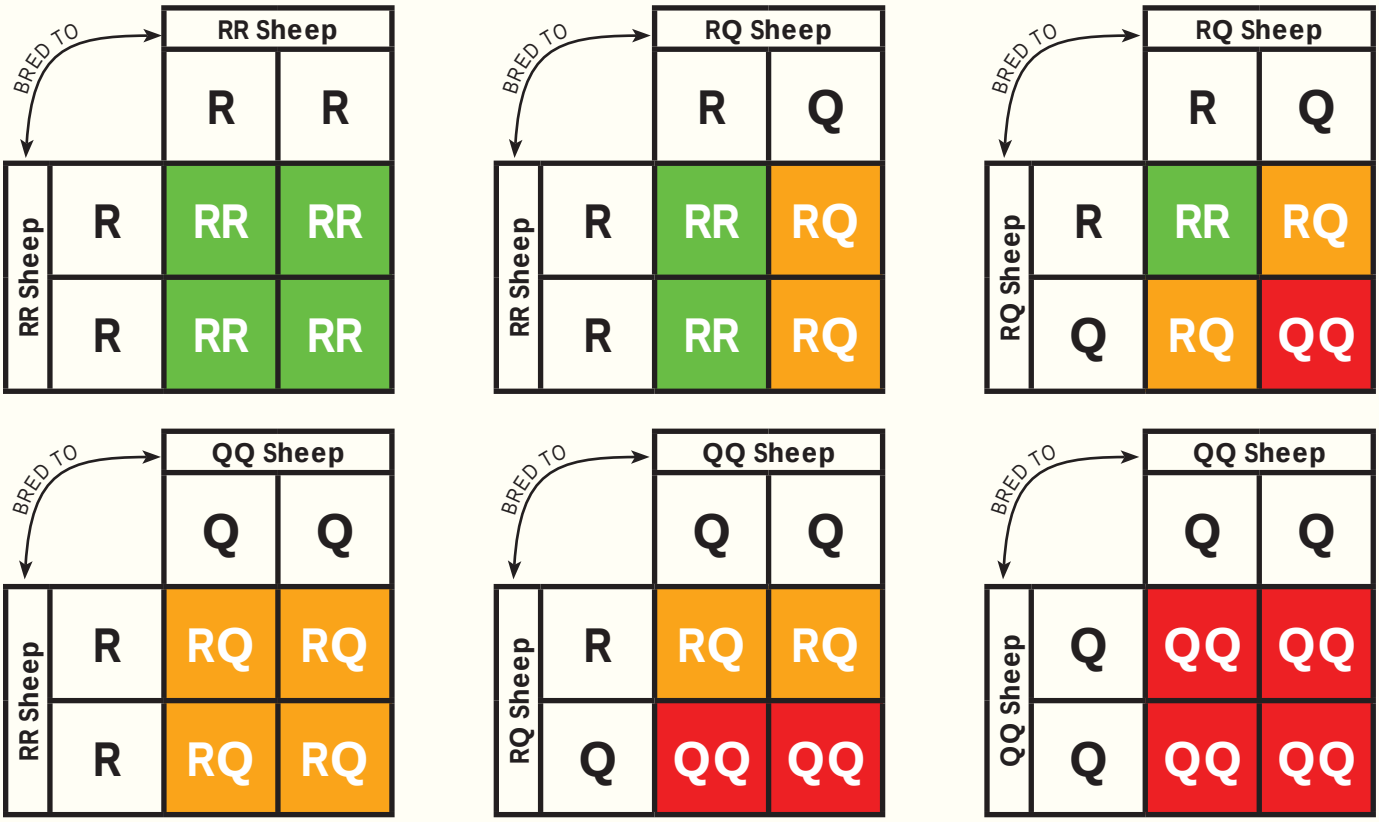
DNA is made up of pairs of chromosomes—one chromosome comes from a sheep's sire and one from its dam. A pair of chromosomes can have one of three combinations of R and Q, depending on what its sire and dam passed to it when breeding. Here are the possible combination where

R+R =	Resistant
R+Q =	Moderately resistant
Q+Q =	Highly susceptible

You can see by the combinations shown that it is best to breed an RR sheep to another RR sheep to ensure that *all* lambs are scrapie resistant. If you breed an RR sheep to an RQ sheep, then half of the lambs will be resistant and half susceptible. But that at least will give you SOME chance of breeding a scrapie-resistant lamb. Selecting an RR or RQ ram to breed your ewes is the best way to gradually breed scrapie resistance into the entire flock. Keep RR and RQ lambs for replacement stock.

It is important to NOT select against QQ alone. If you have a good animal that is QQ, don't cull. You could be throwing away a lot of other excellent genetics. Instead, breed the sheep to an RR sheep *every time* so that all of its offspring are RQ.

Make this gradual change to your flock and it will end up resistant to scrapie—and to the danger of USDA slaughter.



American Blackbelly Horn Types

By Carol Elkins

Damien, owned by Anna Querbach, Cranbrook, BC

Supracervical Horns

Heart shaped; curving above and behind the neck to form a semi-circle.

The supracervical horn is a trait inherited from the Mouflon influence in American Blackbelly sheep.

Gavin and Snickers, owned by Gerry Krause, White Lake, WI

Although the American Blackbelly breed has been standardized for many years, the breed was created by crossing many different sheep breeds, including Mouflon, Rambouillet, Merino, and even Jacob. The shape of your ram's horns is influenced by these other sheep breeds' genetic presence in his lineage.

There are two types of horn configurations in American Blackbelly sheep: supracervical and homonymous. Neither type is easily remembered or pronounced.

Although supracervical horns are the more common horn type in American Blackbelly rams, they also present more frequent health issues because they often grow too close to the face. This is rarely a problem in rams having homonymous horns because the horns sweep away from the face. It is important to select for wide-spaced horns regardless of type when choosing breeding stock.

Red Rider, owned by Lynn Buescher, Rocklin, CA

Homonymous Horns

Spiraling out in a cork-screw twist, with the left horncore twisted clockwise from the base up. This is not a common horn configuration in sheep breeds and I can find no information to help explain where it might have come from.

Horatio, owned by Mark and Lin Storey, Nehalem, OR

New BBSAI Members

Tina Andreatos	Alexandria, ON
Steven Bossie	North Stonington, CT
Caroline Devin	Gaston, OR
Sarah Harbaugh	Emporia, KS
James Lund	Umatilla, OR
Wm & Geraldine McAlonan	Woodstown, NJ
Mark Miller	Yucaipa, CA
Alison Peeler	Liberty, NC
Bruce Prine	Hearne, TX
Amanda Procter	Corrigan, TX
Diana & Mike Todd	Brashear, TX
William Ward	Inverness, FL

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.

Issue deadlines are
January Issue – December 15
July Issue – June 15
April Issue – March 15
October Issue – September 15

Please send changes of address to
BBSAI
808 30th Lane,
Pueblo, CO 81006

or email
newsletter@blackbellysheep.org

Back issues can be downloaded from
http://www.blackbellysheep.org/association/newsletters/

Can You Do Any of These Things?

The BBSAI has lots of great ideas of how to better serve its members. But we are sorely short on talent and time. Here's our wish list of members who, by volunteering a LITTLE BIT of time, could bring some great services to the BBSAI membership.

1. A **database/Web programmer** who can add to our Web site the ability to join and renew online, including paying dues. GOT HIM!

2. A **graphic designer** who can create fun artwork for t-shirts and other products we sell.

3. **Cub reporters** who can track down interesting information for the newsletter. How-to articles, farm updates, hair sheep industry news. Write articles yourself or find them and get copyright permission. NEED MORE!

4. A **lawyer or paralegal** who can occasionally help with legal questions. GOT HIM!

5. A **marketing or PR expert** to help with advertisements, membership campaigns, promotions, fundraising

6. A **SEO expert** who can keep the BBSAI's Web site at the top of the search engines.

7. A **YouTube guru** who can help produce short how-to video clips that teach viewers sheep-related tasks.

8. A **desktop publisher** who'd like to format the newsletter.

9. A **veterinarian** who can answer sheep health questions.

10. A **teacher** who can help develop educational materials for adult and student shepherds.

11. A **sketch artist** who can draw cartoons of blackbelly sheep to illustrate BBSAI publications.

Hanna Carpenter

By Joan Eubank

BBSAI member Hanna Carpenter of Homosassa, FL, was chosen as "Miss Florida Sheep 2016" by the Meat Sheep Alliance of Florida. She will be presenting all of the awards at all of their shows next year and representing the MSA at all other shows that she attends.

Hanna will be showing four Barbados Blackbelly Sheep at the 2016 Florida State Fair. The BBSAI is so proud of her!