

Livestock Manager

November/December 2008 Volume 3 Issue 5



Making the Most of Your Fiber

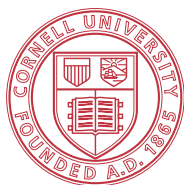
November 1st, 9:00 a.m. to 12:00 p.m.

Cornell Cooperative Extension of Broome County is proud to present Making the Most of your Fiber to be held on November 1st from 9:00 a.m. to 12:00 p.m. The workshop is for any producer that would like to learn about Wool Fiber, factors affecting fiber value, ways to improve fiber quality, Marketing of fiber options and what to look at when choosing a Fiber Mill. The presenter for the workshop will be Nancy Morey from Shadyside Farm of Oxford, NY. Nancy comes with a vast knowledge of fiber quality. She has taught several wool classes, has judged fleece competitions across the Northeast as a level 2 Wool Classer, and currently is a consultant for small flock producers for product development and processing alternatives. Nancy has also served for many years on the American Wool Council representing Region 1.

Participants will learn about Wool Fiber development, fiber structure and fiber properties. They will also learn about characteristics of Wool Fiber that affect the value of the fiber including yield, cleanliness, staple length, color, crimp, cotting and any other characteristics. The class will also cover how to improve wool quality including heredity, nutrition, and general management practices including shearing and feeding. Participants will also learn about Marketing Wool including wool pools, premium wool, festivals, direct marketing and craft shows. Finally Ms. Morey will cover some Fiber Mill options.

The class participants will have a hands on opportunity to evaluate 15 to 20 samples to determine the correct marketing stream for these samples. All participants are also encouraged to bring in the own wool to be evaluated.

The workshop will be held at Cornell Cooperative Extension of Broome County in Binghamton, NY. The cost of the workshop is \$15 per person or \$25 per farm. Pre-registration is required by calling Carol at 607-584-9966.



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Hay and Pasture Crop Insurance Meeting

November 19, 1:00 to 3:00 p.m.

If you rely on grass to feed your animals, then you understand how nerve-wracking a dry summer can be. Historically, 50% of crops lost in NY were lost because of drought. Come to a meeting Wednesday November 19th at Cornell Cooperative Extension-Broome County to learn about a new federally-subsidized hay and pasture insurance program being offered this year to Southern Tier NY farmers. The meeting will be from 1:00 p.m. to 3:00 p.m.

In other states where this federal Risk Management Agency program has been piloted, farmers have on average received \$1.40 for every \$1.00 they spent on crop insurance, proving the program to be an excellent investment. Anyone who grazes animals or makes hay is eligible to participate.

At this meeting, Cornell Cooperative Extension's Farm Business Management specialist Jim Grace will explain how the program works. Laurie Dandignac from the Farm Service Agency will also be on hand to describe other existing crop insurance programs such as NAP Coverage (Non-assured Assistance Program) and the new farm bill.

Please pre-register by Monday, November 17th. For more information or to pre-register call Carol at Cornell Cooperative Extension of Broome County at 607-584-9966.

How to Build a Website in a Few Hours

Saturday November 8th, 2008, 9 a.m. – 11 a.m. or 11 a.m. – 1 p.m.

Explore a quick and easy way to build a web site in a few hours yourself. This two-hour learning demonstration and workshop helps you identify your action steps to create your online marketing presence and allows you to explore all-in-one 1& 1 packages starting at \$4.99/month for a web site address, hosting and simple steps and templated selections through an online account you can access from anywhere. If you know how to use basic word document software, this course is great for you — entrepreneurs and small businesses — who want to launch and maintain a very cost-effective, professional-looking web site yourself. If you already have a web site address and but nothing else, you can take advantage of this class, too! No html, asp or other web site coding programming knowledge or experience is needed. Come with some of your initial thoughts and ideas. Come to a workshop on Saturday November 8th, 2008 at 9 a.m. or 11 a.m. at Cornell Cooperative Extension-Broome County, to get these and more questions answered. The instructor for this workshop will be Cheryl Fabrizi, owner of FabIdea. The cost will be \$15/business and pre-registration is requested. Please call Carol at (607) 584-9966 if you have any questions or would like to register.

Direct Marketing Producer Group Forming

Monday Nov 3rd, 7 p.m.

A direct marketing producer group is forming for those direct marketing their products. The goals are to: network, share information on successful techniques, and look at forming a marketing and distribution channel for their products. Please contact Laura Biasillo (607) 584-5007 or lw257@cornell.edu for more information or to register.

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December is Agricultural District Parcel Enrollment Period

Do you have parcels you are farming on, but they are not currently enrolled in an agricultural district in Broome County? December is the annual enrollment period for Broome County agricultural districts. Contact Laura Biasillo at (607) 584-5007 to get more information.

How to Build a Website in a Few Hours

Saturday December 6th, 2008, 9 a.m. – 11 a.m. or 11 a.m. – 1 p.m.

Explore a quick and easy way to build a web site in a few hours yourself. This two-hour learning demonstration and workshop helps you identify your action steps to create your online marketing presence and allows you to explore all-in-one 1& 1 packages starting at \$4.99/month for a web site address, hosting and simple steps and templated selections through an online account you can access from anywhere. If you know how to use basic word document software, this course is great for you — entrepreneurs and small businesses — who want to launch and maintain a very cost-effective, professional-looking web site yourself. If you already have a web site address and but nothing else, you can take advantage of this class, too! No html, asp or other web site coding programming knowledge or experience is needed. Come with some of your initial thoughts and ideas. Come to a workshop on Saturday December 6th, 2008 at 9am or 11am at Cornell Cooperative Extension-Broome County, to get these and more questions answered. The instructor for this workshop will be Cheryl Fabrizi, owner of FabIdea. The cost will be \$15/business and pre-registration is requested. Please call Carol at (607) 584-9966 if you have any questions or would like to register.

Restaurant Chef Panel

Look for this event to take place Wed, November 12th. This will be an opportunity for producers to interact with restaurants to learn the quantity and types of products that they are interested in purchasing. There will also be discussion on HAACP considerations for food picking, preparation and transportation. The cost will be \$10/farm. To register, or with questions, please contact Carol at (607) 584-9966.

Save the Date, Shearing school

March 7 & 8, 2009

The shearing school will be held at the Cornell Teaching & Research Center Sheep Farm near Harford, NY south of Dryden, NY off of Route 38 on Slaterville Road..

Instruction will include the shearing pattern, blade sharpening techniques, physical fitness, handpiece maintenance and more. The instructor is Doug Rathke from Minnesota. Rathke is one of the top shearers in the United States and has had extensive training from the New Zealand Wools. Rathke is skilled at both machine and blade shearing.

Class size is limited to 20 students. The registration cost is \$150 per person. Deadline for registration is February 20, 2009.

If you are unable to attend the shearing school, but are still interested in learning more about sheep shearing an instructional video tape or DVD is available. This 90-minute “how-to” video is filled with useful tips and information on shearing. The cost of the video or DVD is \$44.95 and may be obtained at the address below.

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To register for either shearing school or to purchase the video or DVD send your name, mailing address, phone number and a check or money order in US funds made payable to Doug Rathke and mail to Doug Rathke, 61231 MN Hwy 7, Hutchinson, MN 55350. Call 320-587-6094 if you have any questions..

Going Green

In an effort to cut down on our paper usage CCE is trying to obtain as many e-mails as possible. We would like to be able to send out as many of our publications electronically as possible to our clientele. By having e-mails it will not only allow us to send out our publications electronically but also be able to send out other information that is current and up to date. We receive many work-shops that are short notice and by having e-mails will enable us to share the information with you! Please call or e-mail Carol at clf62@cornell.edu or 584-9966. Include in your e-mail your name, farm name, phone number, e-mail, your area of interest, and what publications you would like to receive (Livestock Manager, Market Basket, Compost Notes or Horticulture Classes).

Publications from SARE Outreach

SARE Outreach publishes free online bulletins on a range of topics-direct marketing, poultry and pork production, water conservation, pest management, cropping systems, and transitioning to organic, to name a few. To browse the selection of bulletins and other publications, go to www.sare.org/publications/index.htm. SARE all publishes books of interest to farmers and educators. Current offerings include:

How to Direct Market Your Beef

Building Soils for Better Crops, second edition

The New American Farmer, second edition

How to Manage the Blue Orchard Bee

Managing Cover Crops Profitably, third edition

Steel in the Field

The New Farmers' Market

Building a Sustainable Business

Manage Insects on Your Farm

You can also order all these publications by calling 301-374-9696. Bulk rates are available for books-call for more information on quantities and discounts. Shipping and handling costs will depend on the size and type of order.

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Meat: It does a body good, scientists say

By Tom Johnston on 9/16/2008, Meatingplace.com

Scientists at Oxford University in England have discovered that a meat-free diet may be bad for your brain. Researchers found that people who adopt a vegan or vegetarian diet are six times more likely to sustain brain shrinkage than meat eaters due to the former's lack of Vitamin B-12, which is found in meat, fish and dairy products including cheese.

"This study suggests that simply adjusting our diets to consume more Vitamin B-12 through eating meat, fish, fortified cereals or milk may...prevent brain shrinkage and so perhaps save our memory," said Anna Vogiatzoglou, a member of Oxford's Department of Physiology, Anatomy and Genetics at Oxford, in a prepared statement. "Research shows that Vitamin B-12 deficiency is a public health problem, especially among the elderly, so more Vitamin B-12 intake could help reverse this problem."

Oxford researchers linked diet and brain size by doing memory tests, physical exams and brain scans on 107 people aged 61 to 87. The volunteers were retested five years following the first exam, and researchers discovered that those with the lowest levels of Vitamin B-12 were more likely to have suffered brain shrinkage. In earlier research, scientists established a link between brain atrophy and low levels of Vitamin B-12.

GRAZING YOUR WAY TO FEWER PARASITES

– Written by Rachel Gilker, Ph.D., Program Coordinator for the Vermont Pasture Network, UVM Center for Sustainable Agriculture.

Originally written for the Small Ruminant Dairy Newsletter

– CENTER FOR SUSTAINABLE AGRICULTURE

A few months ago, Carol Delaney approached me to write an article for this newsletter based on the work I do with grass-based farmers. With her good recommendations in mind, I'd like to remind you that the way you manage your pasture affects your herd's health. Here are some strategies for pasture management to help reduce small ruminant parasite problems. Adding Other Plant Species Put chicory and birdsfoot trefoil in your pasture: Chicory (*Chicorium intybus* L.) has a daisy-style blue flower and is considered a – common roadside weed. It is a biennial plant, flowering in the second year and dying at the first frost. Birdsfoot trefoil (*Lotus corniculatus* L.) has a small yellow flower and is a perennial legume. Chicory and birdsfoot trefoil both have beneficial characteristics in the control of small ruminant parasites, as explained below.

A New Zealand study measured the effects of plant species on the presence of larvae that parasitize sheep. The researchers contaminated plots in pasture with feces containing *Trichostrongylus columbriformis* and/or *Ostertagia circumcincta* eggs (Niezen et al, 1998). Some of the forage plants in the plots being studied we also see here in the northeast: ryegrass, white clover, tall fescue and chicory. In the weeks after contamination, the researchers collected third stage larvae from the feces and the plants at a range of heights (third stage larvae are the ones that infect the animals when they eat them on the plant). There was a striking difference in the number of larvae on different plants. Ryegrass was among the species with the greatest number of larvae, while white clover and chicory were in the group hosting the fewest larvae.

Because the rate of fecal decomposition is linked to future potential infections (because worm eggs are destroyed), more rapid decomposition is desirable. Feces decomposition from grazing sheep was most rapid under chicory in a United Kingdom study comparing chicory, white clover, perennial ryegrass and birdsfoot trefoil. Feces breakdown was slowest in grazed ryegrass (Williams and Warren, 2004). This differs from the

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New Zealand study mentioned above, where fecal matter was applied by the researchers and decomposition was fastest under white clover. In the UK, when sheep applied the feces themselves it changed the measured rates of decomposition. In another study, lambs in the UK grazed plots of chicory, birdsfoot trefoil or a ryegrass/white clover mix. Fecal egg count after seven days and adult helminthes at 35 days were lowest for lambs on birdsfoot trefoil (Marley et al., 2003). Fecal egg counts from lambs on the chicory were not lower than those from the other two plots, but adult helminthes numbers were lower than those of the lambs on the ryegrass/white clover.

The underlying conclusion from these varied studies: Adding chicory and birdsfoot trefoil to your pasture can reduce parasite problems for grazing sheep and goats.

Herd Size and Type

In theory, lower stocking density (fewer animals per acre) could mean fewer parasite eggs present in a pasture. However, reducing stocking density isn't always an economical or realistic answer, especially if deworming is already necessary to decrease egg numbers in feces. Likelihood of infection is more a product of the concentration of eggs present in feces than slight changes in stocking density (Stear et al., 2007).

The more diverse your herd, the more your land can support—you get more bang for your buck. By grazing cows or horses along with your goats or sheep, the other animals will consume larvae with no ill effects, reducing the likelihood of infection to the small ruminants.

Soil Health

Soil with vigorous populations of different organisms will decompose feces more rapidly. Faster removal of feces translates to reduced risk of infection. Improvements in soil quality translate into a better soil ecosystem, with more soil organisms. Earthworms especially have an enormous impact on the rate of feces decomposition. A soil rich in organic matter (5% or more), at a pH which supports a healthy mix of pasture plants (6.2-6.8), with good structure (it crumbles nicely), will be a welcoming habitat for earthworms and other soil organisms.

Soil testing is a valuable tool for improving soil quality in pasture management. Whether or not you plan to apply amendments such as lime or wood ash, soil testing gives you some ideas of where and how to focus your energy.

When Williams and Warren (2004), UK researchers mentioned above, applied feces to the soil themselves, they found a direct relationship between the number of soil organisms and the rate of decomposition. More organisms led to faster feces breakdown. When the sheep grazed, they had more patterns to where they chose to deposit their feces, leading to differences in soil organism populations from area to area within the field. Ironically, soil can also host parasite eggs. As you continue to improve your soil, remember that healthy soil is not a cure-all, just one part of the solution.

Grazing Management

The goal in grazing with small ruminants is to keep animals off previously grazed land for as long as possible- in a dream world it would be at least a year between grazing periods. Move the herd between a large number of small paddocks frequently (daily is ideal) to keep them from returning to previous fecal patches, help provide more even application of nutrients and grazing of forages, and lead to better forage and soil quality. To plan your grazing strategy most effectively for your farm, start with a farm map. Get an idea of how much land and forage you have for grazing, and how you can divide it into paddocks. Calculations for paddock sizing based on herd needs and available forage are available at our website (www.uvm.edu/pasture).

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Trendlet: The New Kid on the Block

Long an outer-borough staple, the lowly goat is poised for the Manhattan big time.

By Robin Raisfeld & Rob Patronite

Reprinted from the NY Times Magazine, Published August, 10, 2008

Is goat the most popular meat you've never eaten? Could be. A dietary staple in most of the world, goat is prized for being as high in protein as beef, lower in fat than chicken, and relatively easy to raise. (They make good pets, too, apparently.) With a flavor that's earthy but not off-puttingly gamy, and a good local supply raised by a network of farms from Pennsylvania to Vermont, it should be an easy sell. But in New York, where haute chefs are increasingly embracing the offcuts and nasty bits of other animals, goat meat is still relegated to "ethnic restaurant" status. You'll have no problem finding Caribbean goat soup in Brooklyn or mountains of tacos de chivo in Queens, not to mention curried goats, stewed goats, and jerk goats sprinkled throughout the boroughs' ethnic enclaves. At many of these places, English is the second language. Think of it as the great high-low, ethnic-assimilated divide: There are restaurants that serve goat, and restaurants that serve goat cheese, and never the twain shall meet.

Until now. Thanks to the efforts of a few goat-loving crusaders, and a more intrepid fine-dining public, goat might finally be going mainstream. Exhibit A: Cabrito, a hip downtown restaurant actually named for a young goat, specifically the baby kid that is pit-barbecued in Texas, where the goat-eating tradition is as ingrained as the brisket-eating one. Chef David Schuttenberg, who last cooked at Fatty Crab, hadn't really cooked goat before, but was intrigued by the idea of it. "There's something a little bit edgy about it," he says. "It's a chef's food for sure. It has richness without being super-gamy. It definitely has some funk, and I think that that's kind of the allure for me." Schuttenberg buys whole kids mostly from boutique barnyard purveyor Vermont Quality Meats, marinates them for 24 hours, and "wet-roasts" them with a little water over a bed of onions, garlic, pineapple, and chiles, then serves the pulled meat with a stack of warm tortillas.

If Schuttenberg is an unlikely ambassador of the Texas cabrito tradition, Heather Carlucci-Rodriguez occupies the same improbable position in the realm of Indian keema paratha. As an Italian-American growing up on Arthur Avenue, she'd had goat at family gatherings, but it was only when she fell in love with Indian food and opened the pint-size Lassi in Greenwich Village that she started to cook with it. "Goat's lean," she says. "It carries flavor very well and can cook forever without losing its integrity."

Carlucci-Rodriguez buys her supply from Elly Hushour, who raises both dairy and meat goats on her thirteen-acre Patches of Star Dairy farm in Pennsylvania and sells them at Union Square Greenmarket. "Demand has gotten so high, I haven't been able to keep up," says Hushour, who has seen goat-meat sales triple in the past five years.

If a Greenmarket presence establishes goat's locavore cred, its trendiness potential is reflected by the meat's incursion into the wine-bar world at Blue Ribbon Downing Street Bar, where chef Sefton Stallard transforms it into curried goat sliders served on house-baked challah rolls with red-pepper aioli.

Still, if one man can take credit for the current mini-craze, it's Scott Conant, a chef whose career path is positively littered with the carcasses of baby goats he's cooked at Chianti, City Eatery, L'Impero – even at Carlucci-Rodriguez's wedding, which he catered. At his current restaurant, Scarpetta, he goes through twelve kids a week.

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Not everyone has been so prolific. John Fraser put blanquette of goat, a riff on blanquette de veau, on his first Dovetail menu. “The clientele wasn’t ready for it,” he says. But maybe it’s all in the packaging. Conant’s old haunt L’Impero has been reborn as Convivio, and Conant’s braised capretto is gone, but chef-partner Michael White has countered with a spectacular Molise-style baked pasta incorporating a savory goat ragù. Besides being delicious, it’s a great gateway goat dish. Some might not be able to tell exactly what kind of meat they’re eating, but it sure doesn’t taste like chicken.

Excerpts of the BEEF CATTLE COMMENTS VOLUME 17 NUMBER 5, September, 2008

Prepared by: Mike Baker, Beef Cattle Extension Specialist, Cornell University

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1. DESIGNING A RATION FOR THE COW HERD

The goal of a cow/calf operation should be to wean a calf at a given weight every 12 months. To maximize profit this production must be optimized to minimize costs per unit of weight sold. Developing an economical feeding system during the winter is the main driver to profitability as winter feed represents more than half the annual cost of beef production. The good beef producer knows the nutrient value of the feeds available and knows how to use these to meet the requirements of the cow at various stages of her reproductive cycle.

The nutrients of greatest practical concern to beef producers are energy (TDN or total digestible nutrients), crude protein (CP), calcium (Ca), phosphorous (P) and Vitamin A. Other nutrients such as salt and various trace minerals are certainly important, but their requirements are normally met by feeding trace mineralized salt. The major exception is the requirement for selenium, which can be met by injection or supplemental feeding.

The National Research Council is responsible for reporting the nutritional requirements of agricultural animals. These requirements are affected by stage of production, cow weight, milk production and environmental conditions.

Common sense dictates that higher production increases nutrient requirements, i.e. lactating cows have higher requirements than dry cows. Table 1 lists the effect of frame size and milk production on the weight of the calf. Use this table to determine the milk production of your cows.

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Table 1. Weight of male calves expected at different milk production levels			
Month since birth			
5	6	7	
Peak Milk, lb	Frame size 4 (1100 lb)		
12	374	431	492
18	404	464	527
24	433	495	562
Frame size 6 (1250 lb cow)			
12	396	457	523
18	429	493	558
24	457	523	592
Frame size 7 (1320 lb cow)			
12	407	469	537
18	442	508	573
24	469	537	607
Frame size 8 (1400 lb cow)			
12	418	482	552
18	454	522	588
24	480	550	621

Once you know the milk production of your cow herd you can determine the energy and protein requirements (Table 2). From this table we determine that a 1100 lb dry cow with a potential peak milk yield of 12 lb requires 11.2 lb of TDN and 1.6 lb of protein per day, or 53% TDN and 8% protein in the diet.

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Table 2. Daily TDN and crude protein (CP) requirements of beef cows				
Stage of production				
Dry			Early lactation	
TDN	CP	TDN	CP	
-----lb. (%)-----				
Peak Milk, lb	Frame size 4 (1100 lb cow)			
12	11.2 (53)	1.6 (8)	12.1 (56)	2.0 (9.4)
18	11.2 (53)	1.6 (8)	13.3 (60)	2.2 (10.9)
24	11.2 (53)	1.6 (8)	14.5 (65)	2.5 (12.3)
Frame size 6 (1250 lb cow)				
12	12.4 (53)	1.8 (8)	13.7 (55)	2.2 (9.2)
18	12.4 (53)	1.8 (8)	14.6 (59)	2.5 (10.2)
24	12.4 (53)	1.8 (8)	15.5 (63)	2.8 (11.3)
Frame size 7 (1320 lb cow)				
12	12.5 (53)	1.9 (8)	13.4 (55)	2.2 (9.1)
18	12.5 (53)	1.9 (8)	14.6 (59)	2.5 (10.1)
24	12.5(53)	1.9 (8)	15.9 (63)	2.8 (11.2)
Frame size 8 (1400 lb cow)				
12	13.1 (53)	1.9 (8)	14.0 (55)	2.3 (9.0)
18	13.1 (53)	1.9 (8)	15.2 (58)	2.6 (10.0)
24	13.1 (53)	1.9 (8)	16.5 (62)	2.9 (11.0)

Poor environmental conditions increase requirements due to extra energy expended to keep warm (Table 3). Using the previous example of a 1100 lb dry cow with a potential peak milk yield of 12 lb, her requirement of 11.2 TDN would be increased to 17.2 lb (11.2 lb x 1.54) if housed outside (30o F) with no wind protection and wet, muddy conditions. Adding a windbreak and a dry area to lay down only increases energy requirements to 12.0 lb/day (11.2 x 1.07). When the temperature drops to 10o F, TDN requirement increases 50% for wet muddy cattle with no wind protection and 20 % for those given wind protection and kept dry.

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Condition	TDN requirement multipliers
Outside, no wind protection, wet and mud covered	1.54
Outside, wind protection, wet and mud covered	1.33
Outside, no wind protection, dry	1.25
Outside, wind protection, dry	1.07
Inside, wind protection, dry	1.00

Once you know the requirements, then you can calculate the amount of hay needed to get through the winter.

Number of cows	25
1100 lb cow	
Dry matter intake	21.0 lb/day
Start feeding	November 1
Average calving date	April 1
Pasture turn out	May 15
Housed outside, woodlot, dry	
1st cut (90% DM)	55% TDN, 10% CP
2nd cut (90% DM)	60% TDN, 12% CP

The calculations to compute the amount of hay required until calving begins are shown in Table 4. Nutrient requirements are lowest during this phase of production, allowing the use of the poorer quality first cutting hay. This hay will supply 11.6 lb of TDN daily while the requirement is 12.0 lb. However, by monitoring intake and body condition score, no supplementation should be needed.

TDN requirement, with environmental multiplier	11.2×1.07	12.0 lb TDN
TDN intake	21.0 lb dry matter intake x 55% TDN	11.6 lb TDN
TDN to calving (151 days)	151 days x 12.0 lb TDN/day	1812 lb TDN
Lb hay required (dry matter)	1812 lb TDN + 55% TDN	3294 lb hay
		DM
Lb hay required (as fed)	3294 + 90% DM	3660 lb hay

The adjustment due to environmental conditions only affects the energy requirement; therefore the CP required is taken directly from the table. As stated earlier, protein is generally not the limiting nutrient. This hay easily meets the protein requirements of a cow up through calving (1.6 lb required vs 2.1 lb supplied; Table 5).

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CP requirement	1.6 lb CP	
CP intake	21.0 lb dry matter intake x 10% CP	2.1 lb CP

Using the same procedure, the requirements for energy and protein from calving until pasture turn out are shown in Tables 6 & 7.

TDN requirement, with environmental multiplier	12.1 x 1.07	12.9 lb TDN
TDN intake	21.0 lb dry matter intake x 60% TDN	12.6 lb TDN
TDN to calving (44 days)	44 days x 12.9 lb TDN/day	568 lb TDN
Lb hay required (dry matter)	568 lb TDN + 60% TDN	947 lb hay DM
Lb hay required (as fed)	947 ÷ 90% DM	1052 lb hay

CP requirement	2.0 lb CP	
CP intake	21.0 lb dry matter intake x 12% CP	2.5 lb CP

Fortunately, for those interested in an easier method of making these calculations, an Excel spreadsheet was developed at Oklahoma State University and can be downloaded at <http://www.ansi.okstate.edu/exten/cowculator/>. This software allows producers to evaluate their current feed supply for meeting the nutrient requirements of the cowherd. If deficient, the user can look at scenarios using different feedstuffs to choose the most economical ration.

With the increased cost of fertilizer, fuel and feed the profit minded producer will invest in the tools and time necessary to design a nutrition program that optimizes performance while reducing the unit cost of production.

3. LIVESTOCK PRODUCER COMPLIANCE WITH THE COOL INTERIM FINAL RULE

Livestock producers are not directly regulated by the COOL interim final rule as livestock are not considered covered commodities. However, only producers have first-hand knowledge concerning the origin of their animals. Definitive origin information must be provided to slaughter facilities so that meat covered commodities can be accurately labeled at retail.

Presumption of origin by packers and other entities in the marketing chain is not permitted. For example, it is not acceptable to assume that if an animal has no ear tag and/or brands identifying that the animal was born and/or raised in Canada or Mexico, the animal is of U.S. origin.

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The COOL law provides for the use of producer affidavits to provide origin information to packers. Thus, under the interim final rule, USDA will consider a producer affidavit as acceptable evidence on which a packer may rely upon to initiate an origin claim, as long as the affidavit is made by someone having first-hand knowledge of the origin of the animal(s) and identifies the animal(s) unique to the transaction. Evidence that identifies the animal(s) unique to a transaction can include a tag ID system along with other information such as the type and sex of the cattle, number of head involved in the transaction, the date of the transaction, and the name of the buyer.

With regard to what is considered first-hand knowledge, a subsequent producer-buyer (e.g., backgrounder, feed lot) that commingles cattle from several sources is authorized to rely on previous producer affidavits as a basis for formulating their own affidavit for the origin of the new lot. Such affidavits must also identify the animals unique to the transaction. In contrast, first-hand knowledge would not include an affidavit made by someone such as a truck driver whose knowledge would be limited to where he picked up the load. The driver would not have first-hand knowledge as to whether the animals were necessarily born at that location.

Other records that may be used to assist in a COOL verification audit include birth records, receiving records, purchase records, animal health papers, sales receipts, animal inventory documents, feeding records, APHIS VS forms, segregation plans, State Brand requirements, breeding stock information, Beef Quality Program papers, and other similar documents. In addition, participation in USDA Quality System Verification Programs (QSVP), such as the USDA Process Verified Program (PVP) and the Quality Systems Assessment (QSA) Program that contain a source verification component is also considered as acceptable evidence to substantiate COOL claims. These examples are not inclusive of all documents and records that may be useful to verify compliance with COOL, but they should provide a strong basis to substantiate a claim during a supply chain audit.

Ultimately, the packer, as the first handler of the covered commodity (meat), may require from their suppliers records or access to records in order to substantiate COOL claims made by the packer. However, if the producer participates in the National Animal Identification System (NAIS), that is considered sufficient documentation of an animal's origin. Participation in the NAIS program is voluntary, but does provide a livestock producer "safe harbor" for COOL compliance. The rule specifies that packers that slaughter animals that are part of a NAIS compliant system or other recognized official identification system (e.g., Canadian official system, Mexico official system) may rely on the presence of an official ear tag and/or the presence of any accompanying animal markings (i.e., "Can", "M") on which to base their origin claims. This provision also applies to such animals officially identified as a group lot.

(Source: USDA Agricultural Marketing Service <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5071200>)

4. DOCUMENT EXAMPLES FOR COOL VERIFICATION

The examples of documents and records listed in this table, although extensive, are not inclusive of all documents and records that may be useful to verify compliance with the Country of Origin Labeling provisions of the 2002 Farm Bill. Additionally, maintaining documents and records such as those listed as examples will not necessarily ensure compliance. The documents listed are examples only and are for the sole purpose of providing information for producers, processors, and retailers to consider when establishing records for verification purposes. During a compliance audit conducted by USDA, auditors will review any and all documents to the extent necessary to arrive at an accurate decision on the level of compliance.

Livestock Manager

Seed stock/ Cow-calf	Stocker/ backgrounder	Feedlot	Packer	Fabricator	Distributor
Responsibility					
Provide enough information for an auditor to verify the origin and ownership of the animals identified and to verify the stated designation . Properly identify and record all animals according to the designation	Identify and segregate animals as to the origin designation. Properly identify all animals sold. Maintain the integrity of the identification. Maintain ownership transfer.	Upon receipt properly identify animals according to their designation. Segregate and control animals. Properly identify all animals sold. Maintain ownership records.	Segregate animals according to the country designation. Segregate and control carcasses throughout the system and properly label product according to the country designation. Document origin of all product.	Transfer labels and identification of all products processed. Operate under a labeling program. Inventory all products according to the origin.	Maintain the integrity of labeled product. If repackaged, transfer the original identification .

Examples of Records and Activities that may be useful					
Birth records	Transportation records	Transportation records	Transportation records	Product inventory	Invoices
Receiving records	Receiving Records	Receiving Records	Receiving Records	Receiving Records	Receiving Records
Purchase records	Purchase Records	Purchase Records	Purchase Records	Purchase Records	Purchase Records
Cow/Calf tag ID system	ID system	ID system	Plant ID system	Production Records	Sales records
Sales receipts	Sales Receipts	Sales Receipts	Sales Receipts	Sale Receipts	Sales Receipts
Feed bills	Feed bills	Feed bills	Carcasses ID	Label Inventory	Affidavits
Feeding records	Transfer of ID System	Pen records	Shipping manifest	Labeling requirements	Labeling requirements
Animal inventory	Feeding records	Feeding Records	Packaging records	Yield sheet	Inventory
Acreage inventory	Declaration documents	Shipping records	Weight tickets	UIPC codes	Plant Establishment #'s
Site maps	Preconditioning Records	Rate of gain records –Yield records			
APHIS VS Forms	APHIS requirements	APHIS requirements			
Production estimates	VS Forms and Records	VS Forms and Records		VS Forms and Records	
Health records		Health Records			
Ownership records	FSIS labeling Reg	FSIS labeling Reg		FSIS labeling Reg	
Replacement Activities	Replacement Activities	Accounting Process for inbound animals			
Beef Quality Program	Beef Quality Program	Beef Quality Program			
Breeding stock information					
Source: "Examples of rules for COOL verification" http://www.ams.usda.gov/AMsv1.0/					

5. USDA DETAILS COOL RULES, COSTS

USDA's Agricultural Marketing Service has issued a five-page document summarizing the technical requirements and cost estimates of its interim final rules on mandatory country-of-origin labeling (COOL), which go into effect Sept. 30.

Livestock Manager

The rules cover meat products including muscle cuts of beef, veal, lamb, chicken, goat and pork, as well as ground beef, ground pork, ground lamb, ground chicken and ground goat. They also cover fish, shellfish, fresh and frozen fruits and vegetables, peanuts, pecans, ginseng and macadamia nuts.

Technical requirement highlights

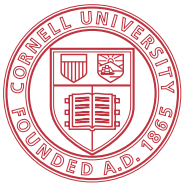
- The rule does not apply to covered commodities produced and packaged before Sept. 30.
- Animals present in the United States on or before July 15 that remain continuously in the United States will be considered of U.S. origin.
- Foodservice establishments are exempted by the statute.
- Processed food items (including those that are cooked, cured, smoked or restructured) are exempted from labeling by the statute. Examples include meatloaf, meatballs, fabricated steak, breaded veal cutlets, corned beef, sausage, breaded chicken tenders, teriyaki-flavored pork loin.
- Labeling rules regarding ground beef, ground pork, ground lamb, ground goat and ground chicken require listing all countries of origin that may be reasonably contained. In determining what is reasonable, when a raw material from a specific origin is no longer in a processor's inventory for more than 60 days, that country shall no longer be included as a possible country of origin.
- Records must be maintained for one year and available within five days if requested by a USDA representative.
- Slaughter facilities must possess or have legal access to records that substantiate their origin claims. A producer affidavit will be considered acceptable evidence, provided it is made by someone having firsthand knowledge of the animals' origin and identifies the animals unique to the transaction.
- If slaughtered animals are part of the National Animal Identification System, an official ear tag or the presence of any accompanying animal markings can be used as the basis of origin claims.

Costs

USDA estimates the total first-year implementation costs for all directly affected firms at \$2.5 billion. Costs per firm are estimated at \$376 for producers, \$53,948 for intermediaries and \$235,551 for retailers. It put the estimated cost to the U.S. economy in higher food prices and reduced food production in the tenth year after implementation of the rule at \$211.9 million. Source www.meatingplace.com 7/29/2008

10. TO/DO in Fall

- 1) Consider marketing options for feeder cattle:
Special feeder calf sales, contact local sale barn for details
Retained Ownership, contact Mike Baker, 607-255-5923
- 2) Line up supplies for fall roundup and weaning. Consider the following:
 - a) Enroll your herd in the Cow Herd Appraisal Performance System (CHAPS) record keeping system. This program provides important data on the productivity of your cows based on the performance of their calves. Contact your local Cooperative Extension Agent, or call 607-255-5923.
 - b) Buy ear tags to identify replacement heifers and cows.
 - c) If deemed necessary (consult your veterinarian to do a fecal egg count) worm cows and bulls.
 - d) Apply lice and grub control before November 5.
 - e) Vaccinate calf crop for IBR, BVD, PI3, BRSV, Pasteurella, Mannaheima, Clostridia spp., and Haemophilus somnus. If using a modified live vaccine, this must be done after calves are weaned. Killed vaccine products can be used on nursing calves.
 - f) Treat calves for worms and grubs and supplement with Selenium.
- 3) Pregnancy test and cull all open cows.
- 4) Cull problem cows and marginal producers. Production data is easily obtained using CHAPS.
- 5) Take forage sample for nutrient analysis. Depending on your locality, hay may be in short supply or of poor quality. Allocating the best feed to younger, higher producing animals will stretch out your supply. Contact local Cornell Cooperative Extension office for information.
- 6) Consider taking soil samples and top dressing fields requiring lime, phosphorous and/or potash.



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