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CORNELL COOPERATIVE EXTENSION OF ONEIDA COUNTY

The Livestock Extension

Economic News

Iowa State University's Center for Agricultural and Rural Development has released a study analyzing the long-term effects of the growing demand for corn due to ethanol production. Researchers analyzed the effects of increasing corn prices on the grain, oilseed and livestock sectors.

According to the study, at breakeven price of \$4.05 per bushel (bu.), corn-based ethanol production would reach 31.5 billion gallons per year, or 15.6 billion bu. compared to 11.0 billion bu. today. Corn exports and production of pork and poultry would be reduced in response to higher corn prices and increased utilization of corn by ethanol plants.

For the full report, go to:

www.card.iastate.edu/publications/synopsis.aspx?id=1029



To Do: November → January

1. Pregnancy test and cull all open cows.
2. Cull problem cows and marginal producers. Production data is easily obtained using CHAPS.
3. If you have access to corn stalk fields you can reduce feed costs to less than \$0.10/hd/day.
4. Wean calves less than 120 days old before hard winter weather sets in. They will do better on grain plus hay, than if left on their dams.
5. Calves kept over the winter should be fed to gain 1.3-1.5 lb/day. Full fed legume/grass hay plus 5-6 lbs. of grain will support this level of growth.
6. 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. If practical feed and manage separately: 1) weaned heifer calves 2) first and second calf heifers and old thin cows, 3) the rest of the dry herd, 4) lactating cows and their calves, and 5) herd sires.

Effect of Castration Method on Gains

A relatively recent introduction of a new castration method appears to reduce stress compared to surgical castration. Banding via surgical tubing (e.g. Calicrate™ and Bloodless Castrator™) can be easily administered and has been used successfully for several years. Because this is a non-surgical procedure, it seems to be a more humane method of castration. **What affect, if any, is there on the use of banding vs. surgical castration?** The table below shows the results of several studies.

Weight at castration, lb.	Castration method		Reference
	Banding	Surgical	
460	1.21 ^a	1.45 ^b	Ratcliff, et al.
562	1.20	1.37	Knight, et al.
686	1.71	1.76	Kreikemeier, et al
875	2.07	2.23	Knight, et al .

¹ Values in row with different superscripts differ at P < 0.05.

Clearly, the results on animal performance are the same regardless of castration method used.

In terms of animal welfare, the answer is less clear. Cortisol (“stress hormone”) has been used as an indicator of stress. Chase et al. (1995) reported an immediate and greater increase in cortisol levels in surgically castrated animals compared to banded animals. On day 2 the difference was still significant and by day five, while the pattern was similar the difference was not statistically significant between castration methods and the controls (steers). In studies that evaluated banding within 48 hours of birth to surgical castration, the results were similar. Surgical castration increases stress as measured by cortisol levels to a greater extent than banding. Castration by either method increases cortisol levels for a short period of time, but surgical castration increases cortisol more acutely.

The importance of castration on the sale price of feeder calves is well understood. At the same weight bulls can be expected to sell for \$0.05-\$0.10/lb less than steers. There is a real, measurable economic incentive to sell steers vs. bulls. From a performance viewpoint, the method of castration will not impact this incentive. When considering animal welfare and the public perception of knife castration without anesthesia, especially on older animals, consideration might be given to methods that minimize stress.

Literature cited

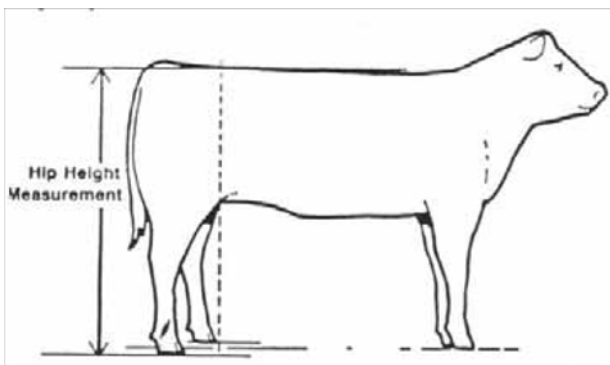
- Chase, C. C., Jr, R. E. Larsen, R. D. Randel, A. C. Hammond, and E. L. Adams. 1995. Plasma cortisol and white blood cell responses in different breeds of bulls: A comparison of two methods of castration. *J. Anim Sci.* 73: 975-980.
- Knight, T. W., G. P. Cosgrove, A. F. Death, C. B. Anderson, and A. D. Fisher. 2000. Effect of method of castrating bulls on their growth rate and liveweight. *New Zealand Journal of Agricultural Research* 43: 187-192.
- Kreikemeier, K. K., G. L. Stokka, D. A. Blasi, and T. P. Eck. A comparison of surgical vs banding castration methods in non-stressed stockers. Southwest Kansas Research-Extension Center, Manhattan, Kansas.
- Ratcliff, M. D., E. B. Kegley, S. L. Krumpelman, and J. A. Hornsby. 2005. Effect of method and timing of castration on newly arrived stocker cattle. Arkansas Animal Science Department.

Using Frame Score to Assess Mature Size

Hip height converted to frame score is a linear measurement that helps cattle producers evaluate lean-fat ratio potential of an individual animal in a performance program. No one frame size will be best for all feed resources, breeding systems, and markets. Large framed animals tend to be heavier at all weights, leaner, and later maturing. Small framed animals tend to be lighter, fatter, and earlier maturing. Frame scores can be monitored to maintain body size, fatness level, and maturing rate within the optimum ranges dictated by the resources, breeding system, and market specifications of a herd.

Frame score is a convenient way of describing the skeletal size of cattle. With appropriate height/growth curves, most animals should maintain the same frame score throughout their life, regardless of when they are evaluated. However, frame scores may change for animals that mature earlier or later than average for their breed.

The recommended site for hip height measurement is a point directly over the hooks. This measurement should be adjusted to a weaning age-endpoint of 205 days and to yearling age endpoints of 365, 452 or 550 days. The same age range guidelines as for weaning and yearling weights should be used. It is recommended that the actual hip height and adjusted hip height be printed in national cattle evaluations rather than the height ratio.



Height Measurement

The following tables give current estimates of cattle height, along with adjustment equations for bulls and heifers. Values for steers are not available; however, bull height estimates may be used as approximations for steers.

Hip Heights (inches) and Frame Scores for Mature Bulls

Age (months)	Frame Score										
	1	2	3	4	5	6	7	8	9	10	11
24	46.4	48.3	50.3	52.3	53.9	56.0	58.0	60.0	62.0	64.0	66.0
30	47.3	49.3	51.3	53.2	54.9	57.0	59.0	61.0	63.0	65.0	67.0
36	48.0	50.0	51.9	53.8	55.5	57.5	59.5	61.5	63.5	65.5	67.4
48	48.5	50.4	52.3	54.1	55.9	58.0	60.0	62.0	63.9	65.8	67.7

Hip Heights (inches) and Frame Scores for 5-21 Month-Old Bulls

Age (months)	Frame Score								
	1	2	3	4	5	6	7	8	9
5	33.5	35.5	37.5	39.5	41.6	43.6	45.6	47.7	49.7
6	34.8	36.8	38.8	40.8	42.9	44.9	46.9	48.9	51.0
7	36.0	38.0	40.0	42.1	44.1	46.1	48.1	50.1	52.2
8	37.2	39.2	41.2	43.2	45.2	47.2	49.3	51.3	53.3
9	38.2	40.2	42.3	44.3	46.3	48.3	50.3	52.3	54.3
10	39.2	41.2	43.3	45.3	47.3	49.3	51.3	53.3	55.3
11	40.2	42.2	44.2	46.2	48.2	50.2	52.2	54.2	56.2
12	41.0	43.0	45.0	47.0	49.0	51.0	53.0	55.0	57.0
13	41.8	43.8	45.8	47.8	49.8	51.8	53.8	55.8	57.7
14	42.5	44.5	46.5	48.5	50.4	52.4	54.4	56.4	58.4
15	43.1	45.1	47.1	49.1	51.1	53.0	55.0	57.0	59.0
16	43.6	45.6	47.6	49.6	51.6	53.6	55.6	57.5	59.5
17	44.1	46.1	48.1	50.1	52.0	54.0	56.0	58.0	60.0
18	44.5	46.5	48.5	50.5	52.4	54.4	56.4	58.4	60.3
19	44.9	46.8	48.8	50.8	52.7	54.7	56.7	58.7	60.6
20	45.1	47.1	49.1	51.0	53.0	55.0	56.9	58.9	60.9
21	45.3	47.3	49.2	51.2	53.2	55.1	57.1	59.1	61.0

Frame Score = $-11.548 + (0.4878 \times \text{Ht}) - (0.0289 \times \text{Age}) + (0.00001947 \times \text{Age}^2) + (0.0000334 \times \text{Ht} \times \text{Age})$, where Age = days of age.

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Hip Heights (inches) and Frame Scores for 5 - 21 Month-Old Heifers

Age (months)	Frame Score								
	1	2	3	4	5	6	7	8	9
5	33.1	35.1	37.2	39.3	41.3	43.4	45.5	47.5	49.6
6	34.1	36.2	38.2	40.3	42.3	44.4	46.5	48.5	50.6
7	35.1	37.1	39.2	41.2	43.3	45.3	47.4	49.4	51.5
8	36.0	38.0	40.1	42.1	44.1	46.2	48.2	50.2	52.3
9	36.8	38.9	40.9	42.9	44.9	47.0	49.0	51.0	53.0
10	37.6	39.6	41.6	43.7	45.7	47.7	49.7	51.7	53.8
11	38.3	40.3	42.3	44.3	46.4	48.4	50.4	52.4	54.4
12	39.0	41.0	43.0	45.0	47.0	49.0	51.0	53.0	55.0
13	39.6	41.6	43.6	45.5	47.5	49.5	51.5	53.5	55.5
14	40.1	42.1	44.1	46.1	48.0	50.0	52.0	54.0	56.0
15	40.6	42.6	44.5	46.5	48.5	50.5	52.4	54.4	56.4
16	41.0	43.0	44.9	46.9	48.9	50.8	52.8	54.8	56.7
17	41.4	43.3	45.3	47.2	49.2	51.1	53.1	55.1	57.0
18	41.7	43.6	45.6	47.5	49.5	51.4	53.4	55.3	57.3
19	41.9	43.9	45.8	47.7	49.7	51.6	53.6	55.5	57.4
20	42.1	44.1	46.0	47.9	49.8	51.8	53.7	55.6	57.6
21	42.3	44.2	46.1	48.0	50.0	51.9	53.8	55.7	57.7

Frame Score = $-11.7086 + (0.4723 \times \text{Ht}) - (0.0239 \times \text{Age}) + (0.0000146 \times \text{Age}^2) + (0.0000759 \times \text{Ht} \times \text{Age})$, where Age = days of age.

Hip Heights (inches) and Frame Scores for Mature Cows

Age (months)	Frame Score										
	1	2	3	4	5	6	7	8	9	10	11
24	43.1	45.0	46.9	48.8	50.7	52.5	54.5	56.4	58.2	60.1	62.0
30	43.8	45.8	47.5	49.4	51.3	53.1	55.1	57.0	58.9	60.8	62.5
36	44.2	46.1	48.0	49.8	51.8	53.6	55.5	57.2	59.2	61.0	62.8
48	44.6	46.5	48.2	50.0	52.0	53.9	55.8	57.5	59.4	61.2	63.0

Frame score provides an indication of an animal's growth curve, which can be used to project expected finishing weight for slaughter cattle, or mature weight for breeding cattle. Table 3 provides an estimate of mature cow weight and expected slaughter weight at finish for steers and heifers by frame score. These projections are for average cattle; actual weights will also vary due to differences in muscling, body length, condition and other factors.

Table 3. Relationship of frame size to projected mature cow weight and slaughter weight at Choice Quality Grade.

BIF Numerical Frame Score	USDA Feeder Calf Frame Size	Mature Cow Weight	Steer Slaughter Weight	Heifer Slaughter Weight
2	Small	955	850	700
3		1030	950	800
4	Medium	1100	1050	900
5		1175	1150	1000
6	Large	1250	1250	1100
7		1320	1350	1200
8		1395	1450	1300
9		1470	1550	1400

Table 3 adapted from Boggs, South Dakota State University, 1991

(Source: *GUIDELINES For Uniform Beef Improvement Programs, Eighth Edition*, www.beefimprovement.org)

BQA—General Injection Recommendations

Correct administration is important for the proper use of animal health products. You can help to avoid product discounts as a result of abscesses and lesions by following these simple procedures:

- Use well designed cattle restraining facilities to make the job of giving injections in the proper location safer and easier.

- Provide proper restraint to avoid breaking needles in animal tissue.
- Use the needle size proper for the situation. Use the smallest needle possible to complete the injection, but large enough to prevent the needle from breaking off in the muscle. (For intramuscular or sub-Q injections a 1 inch needle is generally adequate).
- Administer animal health products with single-use, high quality needles.
- Give injections according to label instructions. Route: Subcutaneous (SQ) means under the skin; intramuscular (IM) means in the muscle, intravenous (IV) means into the blood; orally (PO and/or O) means in the mouth or in water, and (MF) indicates medicated feeds.
- Always use SQ or IV routes of administration when permitted by the product's label. Check product labels closely and administer the product as specified on the label. Select products that have subcutaneous (SQ) as an approved route of administration. Remember to "tent" the skin for SQ injections. Ask suppliers to find products that have SQ, IV or oral routes of administration rather than intramuscular (IM).
- All injections must be administered in front of the point of the shoulder only, no exceptions
- Administer less than 10 cc per IM injection site. If 24 cc is the calculated dose, use three, 8 cc injections instead of two, 12 cc injections. Properly space injections with a minimum of three inches separating injection sites. During bad weather, take extra care to see that the injection site is free of manure and dirt and that syringes and needles are clean and disinfected. Injecting cattle during wet weather increases the potential for carrying a contaminant into the injection site.
- Wetting the area around the chute will reduce the chance of contamination by dust and other foreign material of injection sites and open incisions.
- Overall sanitation of equipment and the working area, as well as the cleanliness of your employees and coworkers will reduce injection site defects. A sound educational effort directed toward the people handling the cattle offers great potential for helping eliminate these problems.

Proper administration of products increases animal performance, reduces injection site blemishes and enhances animal well being. Each is a tenet of Beef Quality Assurance (BQA). BQA is a voluntary program focused on increasing the quality, taste and safety of beef. Certification demonstrates your commitment to the principles of BQA.

To find out how you can participate, contact Mike Baker, Cornell Beef Extension Specialist, 607-255-5923, mjb28@cornell.edu or Carol Gillis, NY Beef Industry Council Executive Director, 800-292-6922, cgillis@nybeef.org.

Forage-Produced Beef: Challenges and Potential

An interest in predominantly forage finished beef is re-emerging. Historically, negative fluctuations in grain and cattle prices and, more recently, enhanced public awareness of environmental concerns have fueled interest to have cattle forage fed on open pasture to market status. An emerging consumer demand for beef finished on grass could provide an additional market for beef producers and increase consumption by satisfying the consumer's desire for value-added, lean, flavorful beef.

Many geographical regions of the US are capable of producing forage exclusively for grazing cattle. Certain areas of the US combine favorable climates, sufficient rainfall, and adequate cow-calf numbers to create the opportunity to produce beef that is profitable to the producer, palatable, available, and affordable for the consumer.

Assuming that forage-fed beef can be produced economically and be readily accepted by consumers, its price, palatability, and quality must be similar to grain-fed beef. Value-added muscle processing technology commonly utilizes tenderization and marination techniques and pre-cooked, portion-sized cuts to produce tender, juicy, flavorful, and convenient retail or food service products. Processing methodology could be applied to forage-produced beef products; thereby creating opportunities for new beef products that should improve their marketability.

The apparent trend exhibited by major retailers toward single muscle cuts, presents opportunities for value-added enhancement of forage produced beef products that could expand this potential new market outlet. (J. M. MARTIN, et al., *The Professional Animal Scientist* 20 (2004):205–210).

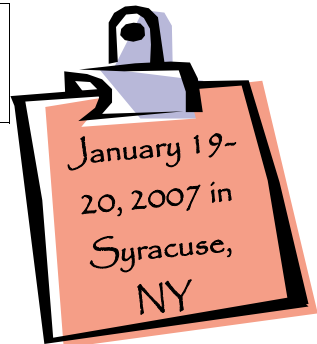
Beef Feeder's Conference & Winter Management Meeting

Focus on record keeping for improved performance and profitability.

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Impact of Group Marketing Feeder Calves From Small Producers

(Editor's note. The benefit of selling in larger groups is noted at local feeder calf auctions. While not documented as precisely as in this study, groups of 5 or more cattle can be expected to bring \$0.03-\$0.05/lb than similar quality calves sold as singles. MB)

In a collaborative project, Fort Valley State Univ. and ABS Global, worked with small cow-calf producers in Georgia in putting together truckload lots of feeder calves. The objective was to assist small producers in achieving greater returns by selling in load lots of uniform, source-verified calves. The calves were backgrounded on a corn silage diet formulated to support a daily gain of 2.2 lb per day.

In August, 2004, 168 calves were marketed for an average return per calf of \$108.77 over the local auction market. Avg. daily gain was 1.78 lb per day, and cost of gain was \$1.62 per day during the backgrounding period. In November, 2004, 430 calves were marketed for an average return per calf of \$23.93 over the local market. Avg. daily gain in the November group was 2.01 lb per day with an average feed cost of \$0.98 per calf per day.

There was no sickness or mortality during backgrounding in the August group. Twelve calves became sick in the November group, but there were no mortalities. No calves were rejected in August, while in November there were 17 no-loads. Health of the calves after sale was reported to be excellent. These results suggest that it is possible to work with small beef producers and make a positive impact on enterprise profitability. *(Freeman and Getz. 2006. Southern Section ASAS. Abstract 130).*



Sheep Breeding Systems

Purebreeding

Purebreeding is the mating of rams and ewes of the same breed. A purebred flock can be managed as a single flock because all ewes and rams are of the same pure breed. The goal of purebred sheep production should be to supply genetics (seedstock) to the commercial sheep industry. Seedstock are marketed as rams and replacement ewes to other seedstock producers or to commercial sheep operations.

Within purebreeding, there are several types of mating systems.

Outbreeding is the mating of animals of the same breed but which have no closer relationship than at least 4 to 6 generations. Outbreeding is the recommended breeding practice for most purebred sheep breeders.

Inbreeding is a system of breeding in which closely related animals are mated. This includes sire to daughter, son to dam, and brother to sister. Technically, inbreeding is defined as the mating of animals more closely related than the average relationship within the breed or population concerned. The primary genetic consequence of inbreeding is to increase the frequency of pairing of similar genes.

Inbreeding is essential to the development of prepotent animals — animals that uniformly "stamp" their characteristics on their progeny. Inbreeding may also be used to uncover genes that produce abnormalities or death — genes that, in outbred herds, are generally present in low frequencies. Inbreeding is suggested for only highly qualified operators who are making an effort to stabilize important traits in a given set of animals. In general, inbreeding results in an overall lowering in performance: vigor, disease resistance, reproductive efficiency, and survivability. It also increases the frequency of abnormalities.

Linebreeding is a system of breeding in which the degree of relationship is less intense than in inbreeding and is usually directed towards keeping the offspring related to some highly prized ancestor. The degree of relationship is not closer than half-brother half-sister matings or cousin matings, etc. Line breeding is a mild form of inbreeding.

Crossbreeding

Crossbreeding is the mating of rams and ewes of different breed compositions. However, it does not denote indiscriminate mixing of breeds, but rather is a systematic utilization of different breed resources to produce crossbred progeny of a specific type. Crossbreeding is used extensively in the commercial sheep industry and the majority of slaughter lambs are crossbred.

Crossbreeding offers two distinct advantages: 1) heterosis; and 2) breed complementarity. **Heterosis** or hybrid vigor is the superiority of the crossbred offspring. Mathematically, heterosis is the difference in performance between the crossbred and the average performance of the purebred parent. There are effects of heterosis in the crossbred offspring, crossbred dam, and crossbred ram. In general, crossbred individuals tend to be more vigorous, more fertile and grow faster than purebreds. Effects of heterosis tend to be large for traits that are lowly heritable (e.g. reproduction) and small for traits that are highly heritable (e.g. growth, carcass, and wool). The effects of heterosis are cumulative. Heterosis can be maximized by mating crossbred ewes to a ram of another breed to produce crossbred offspring. Composite breeds such as the Katahdin and Polypay capture most of the benefits of heterosis.

The second major advantage of systematic crossbreeding lies in the ability to utilize breed complementarity. All breeds have strengths and weaknesses. No one breed excels in all relevant traits. Thus, production can be

optimized when mating systems place breeds in roles that maximize their strengths and minimize their weaknesses.

Mating Polypay ewes to Suffolk rams is an example of matching complementary strengths of breeds to optimize efficiency of a production system. This cross takes advantage of the reproductive efficiency and moderate maintenance costs of Polypay ewes while producing Suffolk-sired lambs to meet market requirements for fast-growing, heavy muscled lambs. The efficiency of this cross would be much greater than the reciprocal mating of Suffolk ewes to Polypay rams. The latter cross would produce genetically equivalent market lambs (half Suffolk and half Polypay), but fewer lambs would be sold and production costs greatly increased due to higher feed requirements of heavy Suffolk ewes compared to Polypay ewes.

Crossbreeding Systems

There are several systematic crossbreeding systems. **Terminal crossing** makes maximum use of both heterosis and breed complementarity. It may utilize two, three, or four breeds, and can be as simple as crossing two purebreeds. In terminal crossing, all of the crossbred offspring are sold and replacement ewe lambs must be purchased or produced in the flock by mating a proportion of the flock to rams of the same breed. In a three or four breed terminal crossbreeding system, crossbred ewes and crossbred rams can be utilized in the system to maximize heterosis.

Rotational crossing will also maintain high levels of heterosis. Rotational crossing involves alternating the use of rams of two, three, or more breeds. Ewes are mated to rams of the breed which they are least related. It works best when breeds which function acceptably as both ram and ewe breeds, are utilized.

Roto-terminal crossing involves both terminal crossing to produce market lambs and rotational crossing to produce ewe lambs. The best ewes in the flock would comprise the nucleus flock. They would be used to produce replacement ewes. The rest of the ewes in the flock would be bred to a terminal sire to produce market lambs.

Grading up denotes the repeated crossing of ewes and their female progeny to rams of a single breed, with the ultimate objective of creating a flock that is indistinguishable from purebred flocks of the ram breed. It is used when only rams of the breed of interest are available or affordable.

Crossbreeding is also used to form new or "**composite**" breeds. Once the crossbred base population has been formed, the flock is managed as a purebred flock. This is how many new breeds are created.

Many of the aforementioned crossbreeding systems are difficult to accomplish in a small flock, which may only have the option of one or two breeding groups. The purchase of replacement females would enable the use of a terminal crossing program. Alternating the use of ram and ewe breeds would maintain maternal and growth characteristics in the flock.

Taken from "Breeding Systems", by Susan Schoenian; www.sheep101.info/201/breedingsystems.html

Diarrhea in Young (Neonatal) Lambs & Kids

Infectious causes of diarrhea in sheep and lambs	
Bacterial	E. coli <i>Salmonella sp.</i> <i>Clostridium perfringens</i>
Viral	Rotavirus Coronavirus
Protozoa	Cryptosporidia Coccidia (<i>Eimeria sp.</i>) <i>Giardia sp.</i>
Non-infectious causes of diarrhea in sheep and lambs	
Parasitic	Gastro-intestinal worms (not <i>Haemonchus</i>)
Nutritional	Dietary changes Overfeeding Simple indigestion Poor quality milk replacers Inadequate intake of colostrums Poor quality colostrums Poor quality or stagnant water Lush or wet pasture Inadequate dry matter intake Plant and fungal toxins Allergies
Management (Poor environment)	Overstocking/Overcrowding Poor sanitation
Stress	Weaning Handling Weather extremes Shipping/Transportation

For additional information:

E.Coli Scours – “Watery Mouth”; Michigan State University, Dr. Joe Rook
<http://cvm.msu.edu/extension/Rook/ROOKpdf/Msbecoli.PDF#search=%22watery%20mouth%20lambs%22>

Cryptosporidiosis and Kid Care; Washington State University, Gary Fredericks
<http://kinne.net/crypto.htm>

Coccidiosis in Lambs [PDF] – Michigan State University, Dr. Joe Rook
<http://cvm.msu.edu/extension/Rook/ROOKpdf/coccidia.PDF#search=%22coccidia%20lambs%22>



Genetic Research Helps Scuttle Scrapie

More accurate genetic tests for diagnosing scrapie disease in sheep have been developed by Agricultural Research Service (ARS) scientists in Clay Center, Neb. They believe this achievement will promote scrapie's eventual eradication.

Contagious, incurable and fatal, scrapie is the sheep industry's chief disease priority, costing U.S. producers an estimated \$20 million every year. Scrapie's name reflects the disease's most distinctive symptom—an uncontrollable itching sensation that causes afflicted sheep to compulsively scrape their bodies against nearby objects.

In a diseased animal, abnormally folded prions--proteins that occur in all mammals--cause the naturally produced prions to fold abnormally as well. As the misfolded proteins amass, they cause neurological problems and death. Most sheep die one to six months after symptoms appear, although they may be infected for years without showing any signs.

Genetic predisposition to the disease is related to variations in amino acid sequences coded within each sheep's DNA. Selective breeding for resistance could one day reduce the genetic risk of developing scrapie and may eventually eradicate it. Essentially, this research is improving the speed, cost and quality of anti-scrapie breeding methods. In short, the ARS researchers have amassed a detailed body of knowledge allowing them to test sheep for scrapie susceptibility with great accuracy. With that information, breeders can select less-susceptible sheep and breed more scrapie-resistant flocks.

Read more about the research in the November/December 2006 issue of Agricultural Research magazine, available online at <http://www.ars.usda.gov/is/AR/archive/nov06/scrapie1106.htm>

ARS is the USDA's chief scientific research agency.

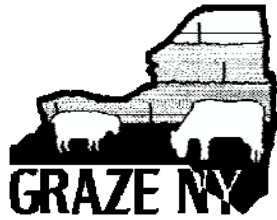
Goat Dairies—Milk Buying

NY Licenses Milk Hauler will be picking up goat's milk for fluid and cheese processing from western, central and northern New York counties. This will be an established milk pick up route every week. If you have goats milk to sell or wish to be involved in the 1st of its kind goats milk dairy processing, please contact Don Robinson at (315) 952-2176 or fax (315) 568-1720.



Hello Oneida County Beef & Livestock Producers!

My name is Bill Paddock and I was recently hired as the Graze-NY, grazing specialist in Oneida County. My position is through the Soil and Water Conservation District of Oneida County.



I am from Remsen in northern Oneida County, my family runs a registered Holstein dairy farm that has been using intensive rotational grazing since 1991. Since then we have added or modified the system to fit our needs and also to meet the criteria of some cost-share programs through, NRCS and Oneida County Soil and Water.

For those producers who may still be grazing or continue to graze through the winter, here are three things to keep in mind this winter. According to three experts from Wisconsin, West Virginia and Montana; Dan Undersander, Edward Rayburn and Janna Kincheloe.

Supply Supplements-

Supplements may be needed along with winter grazing depending on the type of cattle. They suggest for dry beef cows, supplementation is only needed if temperatures fall below 0 degrees F. Lactating cows and growing animals will have the highest nutritional requirements.

Cross-fencing Critical-

Another key is "Winter grazed areas should absolutely be cross-fenced or kept to a small size for best utilization," says Undersander. As a rule, allow access to only as much forage as the cattle will clean up in 3-7 days.

Monitor forage conditions-

Winter grazing may not be an option every year. Monitor growth and how fast animals may be cleaning up any supplemental hay, grain, silage or other forage that is fed. Also, the pastures used for winter grazing should be rotated from year to year to ensure plant diversity.

I hope to meet all graziers throughout the winter and spring. Please feel free to call if you have any questions about doing more with your grazing system. Also if you are interested in some technical assistance with NRCS and Oneida County Soil and Water Conservation District through any of the cost-share programs please call me at (315)736-3334. I look forward to hearing from you and seeing as many of you as I can this year.

Thank you,
Bill Paddock

Ten Do-Ahead Holiday Tips

A little planning will ensure your holiday meal is done and beautifully presented with minimum fuss:

- **Menu Mania** -- Be realistic when selecting recipes. Choose foods that suit your taste and can be done ahead. After planning your menu, survey the pantry to determine what items need to be purchased. Create a detailed shopping list; noting items that can be purchased a week or two ahead and last-minute perishables.
- **Phone First** -- Make sure to place your orders at least a week in advance. The holiday is a busy time for butchers, bakers and florists and ordering early will ensure you get the selection you want.
- **Quantity Counts** -- When serving boneless ham, plan on four to five servings per pound. Count on two to three servings per pound with a bone-in ham. Also, your side dishes will determine how much ham to serve.
- **Leave It Out** -- Make cornbread the night before and let stand loosely covered overnight for a dry bread stuffing. Any bread used for stuffing should be a day old, but not stale.
- **No Searching for Shells** -- Use pre-made pie shells and bake your family's favorite pie -- pumpkin, mince or other fruit -- the night before.
- **Create Real "Couch Potatoes"** -- Have football fanatics peel potatoes while they watch the games. Then gently boil potatoes for 30-40 minutes before they are ready to mash.
- **Can-do Cranberries** -- Make homemade cranberry sauce or relish a day before the holiday. Boil cranberries until skins pop or grind cranberries with other ingredients to flavor. For ultimate ease, freshen up canned cranberry sauce with additions of orange zest or minced jalapeno pepper.
- **Chop and Save** -- Start chopping and mixing ingredients for side dishes the night before the big meal. Once the ingredients are combined, store in the refrigerator for up to a day before baking. Survey recipes for necessary common ingredients and combine tasks where appropriate.
- **Clean and Press** -- Don't wait until the last minute to pull out your favorite tablecloth only to find a cranberry stain from last year's celebration. Survey, wash and iron linens early in November.
- **Ready, Set, Go** -- Setting the table a day in advance will eliminate last minute surprises. Look for unpolished silver, empty salt and pepper shakers or broken china.

Taken from: <http://www.theotherwhitemeat.com/userdocs/allaboutpork/10DoAheadHolidayTips.doc>

Mark Your Calendars...



Alternative Pork Opportunities—Saturday, December 2, 2006; 9:00 AM to 2:00 PM. Four videoconference sites: Cornell Cooperative Extension Offices of Clinton County, Dutchess County, or Tompkins County, and in Jordan Hall at the NYS Experiment Station in Geneva.

Speakers: John Stowell from Northeast Family Farms and Dole & Bailey of Woburn, MA; Mike Yezzi from Flying Pigs Farms of Shushan, NY; Jeff Arner from Leidy's Nature's Traditions of Souderton, PA; Pat Kilcoyne from Kilcoyne Farms of Brasher Falls, NY; and SPECIAL SPEAKER—Keith Thornton of Des Moines, Iowa.

For more information, contact Bill Henning (585)728-5783.

Livestock Marketing Meeting—WNNY Session—

Saturday, December 9, 2006, 10:15 AM to 3:30 PM. Cornell Cooperative Extension of Lewis County Offices located on Outer Stowe St., in Lowville, NY. \$10 first person, \$5 each additional (includes lunch and materials).

Topics & Speakers: BOOTSTRAP MARKETING—Tips, ideas & suggestions for connecting with customers; Cheryl Gnade-McGrattan, NYS Dept. of Ag & Markets. WONDERING WHERE YOUR CHECK-OFF DOLLAR GOES? - Carol Gillis, Director of NYS Beef Industry Council. LIVESTOCK MARKETING TOOLKIT AND PROMOTIONAL KITS—Bernadette Logozar, Rural & Ag Economic Development Specialist, CCE Franklin County.

For more information, contact Michele Ledoux (315)376-5270.

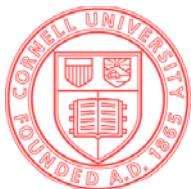
Beef Feeders Conference & Winter Management

Meeting—January 19th to 20th, 2007, Syracuse, NY. See page 7 for more details & contact information.

National Grass-Fed Beef Conference - The Art & Science of Grass-Fed Beef Production & Marketing.

February 28th to March 2nd, 2007, Holiday Inn Harrisburg-Hershey in Grantville, PA.

For more information visit www.das.psu.edu or call Dr. John Comeford at (814)863-3661.



Cornell University Cooperative Extension

Oneida County

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