Virginia Cooperative Extension

A partnership of Virginia Tech and Virginia State University

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College of Agriculture and Life Sciences

VSU VIRGINIA STATE

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Livestock Update

Beef - Horse - Poultry - Sheep - Swine

May 2013

This LIVESTOCK UPDATE contains timely subject matter on beef cattle, horses, poultry, sheep, swine, and related junior work. Use this material as you see fit for local newspapers, radio programs, newsletters, and for the formulation of recommendations.

IN THIS ISSUE:

Scott P. Greiner, Extension Project Leader
Department of Animal & Poultry Sciences

Dates to Remember

HORSE

JULY

29 thru 8/3 Southern Regional 4H Horse Championships. West Monroe, LA. ***Contact:*** Celeste Crisman, (540) 231-9162; email: ccrisman@vt.edu

SEPTEMBER

12-15 State 4-H Championship Horse & Pony Show. Virginia Horse Center. Lexington, VA. ***Contacts:*** Celeste Crisman, (540) 231-9162; email: ccrisman@vt.edu or Jessica Tussing, (540) 231-6345; email: jessit07@vt.edu

SHEEP

AUGUST

24 Virginia Performance Test Ram Lamb Sale. Shenandoah Valley AREC. Steeles Tavern. ***Contact:*** Scott Greiner, (540) 231-9159; email: sgreiner@vt.edu

May Herd Management Advisor

Scott P. Greiner & Mark A. McCann
Extension Beef Specialists, VA Tech

Although the first official day of summer is a month away, May signals the beginning of warm days. In most of the region it also represents the best time to harvest high-quality grass hay. Weather during this period often interferes with the best of harvest plans. Remember a couple of facts as you dodge showers: 1) rain does less damage (nutrient and dry matter loss) to fresh cut forage as compared to forage almost ready to bale, 2) hay quality is always changing and does not improve with time.

Spring Calving Herds (January-March)

General

- Calving season winding down. Continue to observe late calving cows frequently.
- Calving records should be complete and up to date.

Nutrition and Forages

- Continue to offer a high magnesium mineral to prevent grass tetany. Monitor intake to insure cows are consuming the recommended amount. No other source of salt or minerals should be available.
- This is the time to put into place a rotational grazing management system which will provide a rest period for pastures. During rapid growth move more quickly to the next paddock and leave some residue.
- Make plans to store your high quality hay in the dry.
- Collect and submit forage samples for nutrient analysis.

Herd Health

- Consult with your veterinarian concerning pre-breeding vaccination schedule for cow herd, yearling heifers, and bulls. Plan early to allow 30-day vaccination window prior to breeding season.
- Plan parasite and fly control program for herd, and begin planning vaccination and preconditioning protocol to be used for calf crop.

Reproduction

- Finalize plans and protocols for breeding season. Establish calendar to establish timing of synchronization program to be used during breeding season. Have supplies and semen on hand.
- Breed heifers 2-4 weeks ahead of mature cows to allow longer post-partum interval prior to second breeding season.
- Schedule and conduct breeding soundness exams on herd sires, including annual vaccinations.
- Manage bulls properly during the breeding season. Observe frequently to confirm breeding activity and soundness, and monitor cows for repeat estrus. Avoid commingling mature and young bulls, as older bulls will be dominant. As rule of thumb, yearling bulls should be exposed to number of cows equal to their age in months (ie. 18 month old bull with ~18 cows).

Fall Calving Herds (September-November)

General

- Schedule and conduct pregnancy diagnosis with veterinarian following breeding season. Plan a marketing strategy for open cows. Cull cow prices typically peak mid-spring through mid-summer, and prices generally stronger for cows in good body condition vs. thin cows (evaluate forage availability and potential feed and management costs to increase BCS of cull cows if warranted).
- Evaluate potential options for marketing of calf crop, including timing of weaning to meet operational goals. Calculate break-evens on various marketing options and consider risk management strategies.
- Reimplant commercial calves.

Nutrition and Forages

- As calves are weaned move cows to poorer quality pastures.
- Use palatable feeds during the weaning period to bunk train calves and minimize weight loss.
- Reserve high quality hay and a pasture area for calves post-weaning.

Herd Health

- Consult with veterinarian on vaccination protocol for calf crop. Design vaccination and weaning program around marketing goals and objectives.
- Plan parasite and fly control program for cows and calves.

Genetics

- Collect weaning weights on calf crop at optimum time (typical age range 120-280 days), along with cow weights, hip heights and body condition scores (cow mature size data taken within 45 days of calf weaning measure).

May is Forage Month

Dr. Mark A. McCann
Extension Animal Scientist, VA Tech

May is the month which provides forage for Virginia cattle for much of the year. Part of this abundant growth we use to feed the herd and a portion most cattlemen harvest as hay and feed at various times through the upcoming winter. Economic records and budget analysis clearly show that maximizing the grazing portion and minimizing the hay portion are major contributors to increasing profitability in a cow-calf enterprise. Equipment, fuel and fertilizer costs are the major cash cost contributors to hay production costs. This is not considering the labor involved in the harvest and feeding of the hay; or the loss associated with its storage and feeding. There are important strategies that cattlemen can utilize for both the grazing and preservation portions of their forage crop to increase the impact. This month I would like to focus on hay production and next month I will focus on grazing.

By all rights hay production is expensive regardless of the quality of the hay. One way to increase the return on your hay investment is to strive to produce high value hay which means high quality hay. Given the comparative value/lb of TDN and protein in corn and soybean meal, the difference in feeding value from poor to very good quality grass hay can be as high as $50-60/ton. Generally there is some sacrifice in tonnage/acre to produce high quality hay but most costs are not impacted by tons produced. Beyond the feeding nutrient value of the hay, each ton of grass will also remove $60-70/ton in nutrients in the form of N, P, and K. This cost in nutrients is there whether you fertilized or not.

Bottom line- Hay is expensive. Minimize how much you need; work to keep its nutrient content high and store it like it is a valuable commodity (it really is). The following points are a few keys to succeeding:

1) Cut the hay when it is still vegetative- Maturity at harvest is the primary determinant of hay quality. Each day of added age decreases quality by adding fiber and decreasing in digestibility.

2) You can't always avoid the rain- Rain on cut hay will lower its nutrient content. The amount of change is related to how much rain and how dry the hay was when rained on. One of unknowns is we never know how much rain to expect. However, it is guaranteed that if you wait an additional week to ten days, nutrient content and digestibility of the hay will decline.

3) Take advantage of drying conditions- Begin cutting the crop early in the day (immediately before or soon after the dew is off) so that you take advantage of all the drying weather. Plant sugars rise later in the day but I am not sure that is an even trade for a day of drying weather.

4) Don't overuse the tedder- A hay tedder can increase the drying rate by inverting and spreading out the hay crop. However, overteddering or teddering when the forage is too dry can result in leaf loss.

5) Check the mowing height- Cool season grasses can be sensitive to mowing height. Cutting below 3" can negatively impact your stand. Orchardgrass is probably more sensitive than fescue. Although that extra inch of lower stem might contribute to weight and volume it adds very little in regard to nutrients and digestibility.

6) Don't bale it too wet- All hay will go through a few days of heating following baling. The amount of moisture will affect how high the temperature goes and how long. The use of round bales has reduced some of the dangers of burning a barn down. Most of the risk reduction is that most round bales don't go into a barn. The heating is really molds using available sugars in the hay. If the heat is high enough (above 115 F)or extended, the TDN content will be reduced. If the temperature is high enough (130-140 protein availability can be reduced. A target would be under 20% moisture with 15% moisture close to ideal.

Hay production is a costly, time consuming enterprise. It important for cattlemen to focus on harvesting as many nutrients as possible, rather than weight or volume.

Little Windy Hill Farms Named Virginia BCIA 2013 Outstanding Seedstock Producer of the Year

Dr. Scott P. Greiner
Extension Animal Scientist, VA Tech

Virginia BCIA is proud to present the 2013 Virginia Outstanding Commercial Producer Award to Little Windy Hill Farms. Little Windy Hill Farms, owned and operated by Doug and Sue Hughes and family, is located in the lush green hills of Southwest Virginia in the Blue Ridge Mountains near the town of Wytheville.

Doug and Sue Hughes have been breeding seedstock cattle for the purebred and commercial cattlemen all their lives. After being raised on a Polled Hereford operation and then having registered Charolais from the late 1970's until 1993, the Hughes family entered into the Gelbvieh seedstock business for the growth, maternal characteristics and black hide color the breed offered. As the Gelbvieh operation grew and demand for Gelbvieh Balancers increased, Angus were added to the operation which presently consists of 125 fall-calving registered Gelbvieh, Balancer, and Angus cows. A whole-herd AI program is implemented, and prominent AI sires owned by Little Windy Hill are used as natural service sires.

Little Windy Hill Farms hosts an annual on-farm bull sale each November, and have participated in the Virginia BCIA central bull test program since 1983. Elite seedstock are marketed through consignment sales, including the bull futurity at the National Western which Doug has provided leadership for serving two terms as chairman. Doug was also a founding member of the Virginia Gelbvieh Association, served as President of Virginia BCIA, and been an active member of American Gelbvieh Association committees.

Berk-Mar Farm Named Virginia BCIA
2013 Outstanding Commercial Producer of the Year

Dr. Scott P. Greiner
Extension Animal Scientist, VA Tech

Virginia BCIA is pleased to present the 2013 Commercial Producer of the Year to Lin and Brenda Jones of Rapidan, Virginia. The Jones' own and operate Berk-Mar Farm near New Canton, VA in Buckingham County.

Berk-Mar Farm was established in 1968, and Lin and Brenda Jones began managing the farm in 1980. It is an Angus x Gelbvieh cross beef cattle operation, currently running approximately 200 head of brood cows. The farm totals 555 acres- 300 acres of pasture with 255 acres of hayland. Berk-Mar's breeding program consists of first service by artificial insemination and natural service clean-up; resulting in a 90 day calving season beginning in October.

Berk-Mar Farm has been a member of the Buckingham Cattlemen's Association (BCA) since 1990. Lin and Brenda both serve on the Board of Directors, and Brenda fills the office of Treasurer. Berk-Mar Farm believes strongly in best management practices and value-added marketing which is accomplished through the Virginia Quality Assured Feeder Cattle Program and Virginia Premium Assured Heifer Programs. Berk-Mar participates in the BCA's fall feeder calf sale and their annual Bred Heifer and Young Cow sale. Their herd health program has resulted in consistent, healthy animals in the feedlots and provides the buyers with a uniform and quality beef product. Pasture and hayland management includes 50 acres of fescue stockpiled for late fall/winter feeding; 17 acres of alfalfa, in addition to the orchard-grass/fescue hay mixtures.

The Jones' have been recognized with the Clean Water Farm Award from Peter Francisco Soil and Water Conservation District in 2000, the High Cow Conception Rate Award from ABS Global in 2011, and are active 4-H supporters and volunteers.

Virginia BCIA is proud to recognize Linda and Brenda Jones as the 2013 Virginia Commercial Producers of the Year.

Performance Feeds Recognizes Jack Gibson with Bull Credit

Joi Saville
Extension Associate, VA Tech

Performance Livestock and Feed Company of Lawsonville, NC is a family owned company. Performance Feeds was the supplier of the ration fed at the Southwest Bull Test in 2012-13. Along with the selling feed, Performance Livestock and Feed Company is also in the cattle business. Since they are involved in several aspects of the cattle industry they realize the importance of superior genetics. If all producers utilized proven genetics in their herds, it would improve the overall quality of the product and be beneficial to all aspects of the industry. With this thought in mind, Performance Livestock and Feed Company sponsored a $2000 credit towards the purchase of a bull for one Southwest Virginia beef cattle producer. This credit was applied toward the purchase of any bull selling in this year's Virginia BCIA Southwest Virginia Bull Test Sale.

This year's recipient was Jack Gibson of Castlewood, Virginia. Mr. Gibson has a unique farming operation that includes a cow/calf operation. With the dissolution of tobacco in Southwest Virginia, Gibson has become more aggressive in managing his 150 head cow herd. With a predominately Angus and Angus-Charolais cross, Gibson's goal is to improve weaning weight by improving his genetics. In addition, Mr. Gibson keeps replacement heifers that have been sired from bulls with known genetic merit. Mr. Gibson, through a partnership with Natural Resource Conservation Service, installed a livestock feeding barn to help winter a portion of his cow herd, as well as serving as a weaning facility for the calves that he raises. Gibson markets most of his calves through the Virginia Quality Assured Program.

This program is for eligible producers that own at least 20 cows, and not have purchased a performance tested bull from a Virginia BCIA bull test sale (Culpeper or Southwest station) in the past ten years. Producers are to be nominated by their county Virginia Cooperative Extension agent. The producer will be expected to use the bull for three years, at which time the producer has the option to purchase the bull at salvage value or sell the bull, with the proceeds going to the Virginia Cattlemen's Foundation to support scholarships, leadership development, and other industry activities.

The Virginia BCIA program would like to thank Scott Jessee, Extension Agent in Russell County for his nomination of Jack Gibson as well as Performance Livestock and Feed.

2013 Virginia BCIA Southwest Bull Test & BCIA-Influenced Virginia Premium Assured Plus Bred Heifer Sale Report

Dr. Scott P. Greiner
Extension Animal Scientist, VA Tech

The 34th Annual Southwest Virginia Performance Tested Bull Sale sponsored by the Virginia Beef Cattle Improvement Association was held Saturday, March 23, 2013 at Wytheville. The 134 bulls offered commanded an average price of $2779 per head. Breed averages were as follows: 82 Angus averaged $2705, 15 purebred Simmental averaged $3000, 12 Simmental Hybrids $3133, 6 Charolais $3083,
5 Gelbvieh Balancers $2680, 7 purebred Gelbvieh $2443, and 7 Polled Hereford at $2714. The BCIA-influenced Virginia Premium Assured plus Bred Heifer Sale held in conjunction with the bull sale sold 30 heifers for an average price of $1562 per head.

The top selling Angus bull went to Anson Minton of Gate City, Virginia for $6000. Angus Lot 133 is a January 2012 son of GAR New Design 5050 and was bred by J & M Windy Acres and Mike Connatser of Maryville, Tennessee. He had a test YW of 1229, ratio 102, along with +11 CED EPD, +0.6 BW EPD, +0.61 MB EPD, +1.01 RE EPD, ratio 109 RE, and a +$35.26 $W. The second-high selling Angus bull was Lot 132 and was also consigned by J & M Windy Acres and sold to S. Roger Meek of Marion, VA for $5800. This bull another calving ease son of GAR New Design 5050 had CED EPD +10, YW EPD +103, in addition to ADG ratio of 108, test YW ratio of 107, and REA ratio 119.

The high-station indexing Angus bull, Lot 42, was bred by Freddie Mullins of Mullins Angus Farm in Clintwood, VA. This senior Angus bull is a December 2011 son of WAR Alliance 9126 6006 and posted an ADG of 4.24, ratio 118, test yearling weight of 1298, ratio 116, and an overall station index of 117, along with a YW EPD of +106 and sold to Mark Givens of Newport, VA for $3500. The senior Angus high-sale order indexing bull was bred by Mt. Yoe and John Archer of Darlington, MD. Lot 28 is a December 2011 son of Weaverland Objective 0T26 909 and had an ADG of 4.69, ratio 131, test YW of 1214, ratio 109, along with +55 WW EPD, +101 YW EPD, and WW ratio of 112. This bull sold to Mark Hoke of Pickaway, WV for $3600. The high-indexing junior Angus bull was Lot 107 bred by Baird Angus Farm and Bill Baird of Bluff City, TN and sold to J. W. Melton of Galax, VA for $3000. This SAV Bismarck 5682 son posted an ADG of 4.20, ratio 114, test YW of 1399, ratio 116, WW ratio 120, along with +62 WW EPD, +104 YW EPD, and +$34.33 $W.

Demand was very strong for the Gelbvieh and Gelbvieh Balancer bulls, which included a sale favorite- Lot 615 consigned by Little Windy Hill Farms of Max Meadows, VA. This September 2011 ½ Gelbvieh homozygous black, homozygous polled son of KCF Bennett 208 S102 brought $5000 and sold to Rolling Vale Farm of Accident, MD. He posted at test YW of 1186, ratio of 105, along with CE EPD of +12, BW EPD of -0.9, Milk EPD of +33, and a carcass ratio of 116 for %IMF. Little Windy Hill also had the second highest selling purebred Gelbvieh, Lot 606. This homozygous black, polled son of DCSF Post Rock Granite 200P2 which commanded $3000 was sold to Bell Plain Farm of Orange, VA. This September 2011 bull had a WW ratio of 110, Milk EPD of +32 and a %IMF ratio of 160.

The high selling Polled Hereford bull was bred by Potts Creek Farm, Jasper and Alice Persinger of Covington, VA and commanded $3300 from Sally Run of Wytheville,VA. This February 2012 son of RRH Mr Felt 3008 posted test ratios of 103 and 117 for YW and ADG, respectively, as well as EPDs of +4.3 CE, +54 WW, +97 YW, +0.38 MB and %IMF ratio of 115 and a BMI of +$32 and CHB of +$35. Virginia Tech of Blacksburg, VA consigned the second highest selling Hereford, Lot 208 sired by TH 122 711 Victor 719T, and also sold to Sally Run of Wytheville, VA for $3000. This calving ease bull posted EPDs of +5.0 CE, +66 WW, +92 YW +29 Milk, along with a 114 WW ratio and +$31 CHB.

The strong Charolais sale was led by Lot 307, consigned by Virginia Tech in Blacksburg, VA. This February-born son of VPI Free Lunch 708T commanded $4300 from Bamboo Road Farms of Marshallville, GA. He posted EPDs of +8.6 CE, -1.6 BW, +37 WW, +66 YW, and +0.38 RE, in addition to ratios of 108 WW and 104 RE. Muncy Charolais of Pipestem, VA consigned the second highest selling lot. Lot 308 commanded $4100 and was

sold to Louis White of Cedar Bluff, VA. This LT Southern Rio 3293 P son posted strong test ratios of 107 and 115 for YW and ADG, respectively, along with a carcass EPD of +0.36 for RE, and ratio of 110 for REA.

The Junior high-indexing purebred Simmental bull was consigned by Virginia Tech, Dr. Dan Eversole and Chad Joines, of Blacksburg, Virginia. Lot 410 was sold to KowPoke Cattle Company of North Tazewell, Virginia for $5000. This high performing bull had a test YW of 1319, ratio 108 and a test ADG of 4.11, ratio of 125, in addition to EPD's of +72 WW, +112 YW and +10.8 CEM, in addition to API in the top 10% of the breed and a TI within the top 5% of the breed.

Buster Hounshell of Hounsell Farms in Wytheville, VA was recognized with the Senior Breeder Group Award for their group of fall-born Simmental Hybrids. Their high-indexing Senior SimAngus bull commanded $4000 from Chip Ridge Farms of Abingdon, VA. This September 2011 son of PVF-J 4P14 HYB Rookie had test ratios of 111 and 109 for YW and ADG, respectively in addition to EPDs of +82 WW, +138 YW, +0.72 MB, +0.89 RE, along with API and TI of +135 and +92. Another strong Hounshell lot, Lot 433, commanded $4200 from Warner Gibson Farms of Dailey, WV. This calving ease son of GAR New Design 505 posted EPDs of +15.5 CED, -0.9 BW, and +107 YW, +0.77 MB and +0.96 RE, along with +158 and +85 for API and TI, respectively.

J & M Windy Acres, Mike Connatser and family, of Maryville, TN was recognized with the Junior Breeder Group Award for their consignment of spring-born Simmental Hybrid bulls. Their Lot 447 led this consignment group, selling for $4600 to Allen Chaney of Sunbright, TN. This son of PVF-J 4P14 HYB Rookie posted +74 WW EPD, +125 YW EPD, along with +72 TI. Lot 448 from J & M Windy Acres commanded $3600 and was sold to Warner Gibson Farms of Dailey, WV.

The BCIA-Influenced Bred Heifer Sale consisted of 30 fall-calving commercial bred heifers. All heifers were designated as Virginia Premium Assured Plus females. Demand was strong and prices steady, as the heifers averaged $1562 per head. Hillwinds Farm of Dublin, VA consigned Lot 1 to top the sale at $1800 selling to Terrill Smith of Abingdon, VA. This pair of SimmAngus heifers is due to calve in September and was bred to Edgewood EXT 9108. Lot 14 also from Hillwinds Farm sold for $1750 and went to Mt. Vista L & L of Eggleston, VA. These heifers were also bred to Edgewood EXT 9108 and due to calve in September.

All bulls and heifers were consigned by members of the Virginia Beef Cattle Improvement Association. Bulls were developed at Hillwinds Farm at Dublin, VA owned and operated by Tim Sutphin. The sale was managed by Virginia BCIA and the Virginia Cattlemen's Association, and the auctioneer was Mike Jones.

Virginia BCIA and the Southwest Bull and Heifer Sale consignors would like to thank Abingdon Equipment, ABS, Baker Cattle Company, Brown Insurance, Century 21, Contractor's Equipment, Farm Credit, Farmer Bob's Campground, First Bank & Trust, Friendship Ford, G & G Livestock, Genex, Giles Farm Bureau Cooperative, Handfula Gelbviehs, L & L Construction, Lucas Farms, Mt. Airy Equipment, Performance Feeds, Potts Creek Farm, Select Sires, Snuffy's General Store, Virginia Gelbvieh Association, and Wythe Livestock Exchange for their sponsorship and support.

Update: On-Farm Experiences With CIDRs for Fall Lambing

Scott P. Greiner and Mark McCann
Extension Animal Scientists, VA Tech

Interest among sheep producers to have fall-born lambs is on the rise. Fall-born lambs typically are well-suited to take advantage of strong early spring market prices. Additionally, there is strong demand for fall-born lambs to meet the needs of youth which have spring market lamb shows. Favorable weather and forage production associated with fall lambing compliment these marketing opportunities. The primary limitation to fall-lambing is the ability to get a suitable percentage of ewes pregnant during a spring breeding season. Among the options producers have to enhance spring breeding success is hormonal control of the estrous cycle to induce ovulation in ewes. The sheep EAZI-BREED CIDR provides producers a user-friendly, readily available option to enhance spring breeding. The CIDR is a vaginal insert which releases progesterone, and is labeled to induce estrus in ewes during seasonal anestrus. The CIDR is a simple, easy-to-use device that is inserted into the ewe for five days, with ram introduction to immediately follow. Following is a summary of results of on-farm applications utilizing CIDRs.

Virginia Tech Dorset Flock

The use of CIDRs to enhance fall lambing in the VT Dorset flock was initiated in Spring, 2011. In 2011, a total of 59 registered Dorset ewes were synchronized with CIDRs. CIDRs were administered in late April or late May, and removed after 5 or 7 days following insertion. Ewes were mated to Dorset rams in single-sire breeding pastures. A control group (no CIDR) of 32 ewes were introduced to rams the same day as the synchronized ewes. All ewes lambed either fall 2010 or winter 2011. Open ewes from the Spring, 2011 breeding were bred August-September for subsequent lambing in spring, 2011. The following table summarizes breeding and lambing information for each lambing season. (complete details published in the 2012 Sheep Symposium Proceedings available on the VT Sheep Extension site at http://www.apsc.vt.edu/extension/sheep/programs/shepherds-symposium/proceedings.html)

	Fall Lambing 2011		Winter Lambing 2012
	CIDR[a]	Control	
No. Ewes	59	32	36
No. Ewes Lambing	35 (59%)	14 (44%)	34 (94%)
Lambs born/Ewe lambing	1.44	1.23	1.82
Lambs born/ewe exposed	0.88	0.67	1.72
[a] Includes ewes receiving CIDR for 5 or 7 days.			

In 2012 a total of 40 Dorset ewes were synchronized with CIDRs. All synchronized ewes lambed January 15 – February 15 and were weaned on April 5. CIDRs were inserted on May 3 and removed after 5 or 7 days. Ewes were mated to Dorset rams in four single-sire mating groups. A control group of 41 Dorset ewes were introduced to rams the same day as the synchronized ewes. All control ewes lambed fall 2011. Control ewes received no CIDR. All rams had passed a breeding soundness exam. Ewes had been isolated from rams since lambing. Pregnancy status was assessed via ultrasound on August 17. Results are presented below.

	Spring Breeding 2012	
	CIDR[a]	Control
No. Ewes	40	41
No. Ewes Pregnant	24 (60%)	20 (48%)
[a] Includes ewes receiving CIDR for 5 or 7 days.		

There was no difference in pregnancy rate among the four sires utilized in Spring, 2012. Overall pregnancy rate (54%), and pregnancy rate for CIDR and Control ewes was very similar to that observed in Spring, 2011. At breeding, all ewes were weighed and Body Condition Scored. There was a tendency for thinner ewes (BCS = 2)

to have slightly lower pregnancy rates than ewes in BCS 3 or 4 (50% vs. 56%). Pregnant ewes weighed an average of 170 pounds at breeding compared to 157 pounds for open ewes. Pregnancy rates were similar across ewe ages. The cost of synchronization is associated with the cost of the CIDR as well as additional labor and management required. Assuming a CIDR cost of $5 each, cost per pregnancy for synchronized ewes was $8.33 (CIDR cost only considered).

Farm B, Giles County, Virginia

A total of 32 Hampshire x Suffolk crossbred ewes were synchronized. Twenty two of these ewes lambed February, 2012 and ten lambed fall 2011. Spring lambing ewes were weaned in early May. This flock had only exposed ewes for fall lambs in the previous year. Ewes were dewormed and shorn in late May. Ewes were synchronized using a CIDR removed at 6 days (n = 10), 8 days (n = 11) or 10 days (n = 11). The ewes received limited grain supplementation one week prior to CIDR application and during the breeding period. Ewes were placed in single-sire breeding pasture with 2-year old Hampshire x Suffolk crossbred ram at the time CIDR application (late May). Ewes remained with the ram for ~20 days. Pregnancy was determined by ultrasound on August 12. Results are presented below.

2011	Ewes Marked	Ewes Pregnant	Ewes Open	Fall Lambing %	Spring Lambing %
CIDR (6, 8 or 10 d)	19 (76%)	10 (40%)	15 (60%)	130	200

2012	Ewes Marked	Ewes Pregnant	Ewes Open	BCS pregnant ewes	BCS Open ewes
CIDR (6, 8 or 10 d)	19 (59%)	9 (28%)	23 (72%)	4-	3-

Assuming a CIDR cost of $5 each, cost per pregnancy in Flock B was $12.50 for 2011 and $17.78 in 2012 (CIDR cost only considered).

Farm C, Montgomery County, Virginia

A total of 69 Hampshire x Suffolk crossbred ewes were synchronized. These ewes lambed either fall 2011, or late January through February, 2012. Ewes were synchronized using either Synchromate-B implant for 9-15 days followed by PMSG injection (n = 49), CIDR removed at 5 days (n = 10), or CIDR removed after 5 days followed by PMSG injection(n = 10). Ewes were placed in single-sire breeding pasture with Hampshire x Suffolk crossbred rams (n = 6) at the time of implant or CIDR removal (early June). Rams were subjected to breeding soundness exams prior to placing with ewes. Ewes remained with rams for ~30 days to allow for breeding on a repeat estrus following synchronized estrus. Pregnancy was determined by ultrasound on August 23. Results are presented below.

	Ewes Lambed Fall 2011	Ewes Lambed Winter 2012	
Synchronization Strategy	Synchromate B	CIDR[a]	Synchromate B
No. Ewes	29	20	20
Ewes Pregnant (%)	22 (76%)	10 (50%)	6 (30%)
[a] Includes ewes receiving CIDR and CIDR + PMSG.			

Pregnancy rates favored ewes which had lambed the previous fall. Pregnancy rates were similar for the CIDR and CIDR + PMSG strategies. For ewes lambing in the spring, there was trend for more CIDR to be more effective than Synchromate B. Overall pregnancy rate for the flock during spring breeding in 2012 was 55%, which compares favorably to a pregnancy rate of 58% in the same set of ewes in spring, 2011.

Collectively, these on-farm experiences underline several key points when synchronizing ewes for spring breeding:

- Whiteface/Dorset ewes will probably respond more favorably to spring synchronization than blackface ewes
- Ram fertility and libido is critical, conduct BSE on rams and observe closely; use of a marking harness will increase accuracy of monitoring

- Ewe:ram ratio should not exceed 18:1 and may need to be lower depending on the age and capacity of the ram. Single ram flocks should stagger CIDR removal (every 2-3d) to avoid overworking the ram
- Ewes should be in good body condition, weaned and recovered from the weaning process
- Ewes should not be exposed to rams prior to synchronization
- Minimize stress on ewes during and immediately following breeding season (heat, transportation)
- Lambing rates will be significantly lower for fall vs. winter/spring lambing ewes

For additional information and details on CIDRs, see the 2011 Shepherd's Symposium Proceedings paper by Dr. Keith Inskeep from West Virginia University. This document is available on the VT Sheep Extension site at http://www.apsc.vt.edu/extension/sheep/programs/shepherds-symposium/proceedings.html .