# Central Star

### Fall 2019



## **Proven, Profitable Genetics**

Through CentralStar you have access to the best beef genetics, along with superior personnel, programs and tools to enable you to achieve your goals. The Select Sires and Accelerated Genetics product lines harness science and data to offer proven, profitable genetics. Take a look at a few of our Beef Specialists favorite sires.

7AR86 STOCKMARKET offers an outcross pedigree with an opportunity to improve multiple traits and add phenotype in one package. He is a high Calving Ease prospect that offers elite maternal value. He is moderate framed, long



bodied, with added depth of rib and excellent feet. He has individual ratios of 131 for IMF, 129 for Ribeye and 116 ADG in the Bieber Red Angus herd.

7AN531 ENTICE provides an excellent combination of performance, maternal value and elite carcass merit. ENTICE ranks in the breeds top 1 percent for \$Combined which



blends both maternal and terminal indexes. He offers a very pleasing phenotype in a growth oriented mid 6 frame score. He has a 4.94 IMF score with a ratio of 118 and a ribeye measurement of 17.0" with a ratio of 114.

**14AN545 WALL STREET** is a masculine young sire that captures your attention from every angle. WALL STREET is a true beef bull with tremendous depth of body and thickness throughout. He offers



excellent weaning and yearling performance with exceptional \$Values. He excels in the breed, ranking in the top 2 percent for WW, YW, CW, \$W and \$B.

Learn more about these sires at selectsiresbeef.com. Looking to order? Contact your CentralStar team member at 800.631.3510. **7AN466 RAINFALL** has established himself as a proven Calving Ease sire. He sets himself apart with his dominating hip and rear leg structure with added muscle shape with flawless phenotype. He



consistently sires sons with added length, soundness and unmistakable herd bull presence. His daughters are stunning in an elegant maternal package. He ranks in the very top of the breed for \$Maternal and \$Weaning.

**14AN502 TAHOE** is our top selling bull because he does everything right. His daughters are one of his greatest strengths with outstanding eye-appeal, doability and udders. Very few sires can match his

combination of Calving Ease, performance, maternal traits and carcass merit all while improving type and longevity. Use TAHOE to reduce mature size without sacrificing performance. TAHOE is ranked in the top 1 percent of the breed for \$Maternal with an EPD of 95.

7AN528 GROWTH FUND defies the odds for genetic merit! His elite EPD profile provides modest Calving Ease with off the chart growth, RADG and end-product values. He is structurally sound,



moderately framed with powerful hip and rear leg. His extra neck extension, smooth shoulder, wide top, based muscle expression and depth of body make him an easy choice.

#### 7SM104 BROAD RANGE is an

outstanding son of WIDE RANGE with potential for Calving Ease and Marbling. He was chosen from his phenomenal dam for these reasons, plus his stellar phenotype. First



calves will be born this fall and he was sampled in the A.I. industry and ET flushes. He offers very competitive EPDs and indexes.

### Meet Your Team...



**Greg Beavers** - Indiana 812.345.2299 greg.beavers@mycentralstar.com



**Ginni Sheridan** - Michigan 517.256.6190 ginni.sheridan@mycentralstar.com



**Scott Ellevold** - Northern Wisconsin 715.781.5635 scott.ellevold@mycentralstar.com



**Trevor Yager** - Southern Wisconsin 608.574.6142 trevor.yager@mycentralstar.com

### **Minimize stress at weaning**

Trevor Yager, Beef Specialist

Fall is upon us which means we will begin weaning calves. You know weaning is one of the most stressful times in a calf's life. Enduring a change of feed, new pen mates, and a new environment can all add up to a change in eating habits, which is often the key to calves getting sick.

Chances are you have practices in place to minimize stress-related sickness. I know we do in our cow-calf operation. One step we find valuable is to supplement calf nutrition with a direct-fed microbial and electrolyte. CentralStar offers a variety of these products, which can help keep cattle going in stressful times and protect the genetics you purchased allowing them to reach their genetic potential. We have used many of these products successfully in our cow-calf herd, and I feel confident you will see positive results as well.

Select BioCycle<sup>™</sup> is a direct-fed microbial that will improve rumen function and modulate the immune system. The goal of BioCycle is to change the rumen Ph to an environment for good bugs to strive, and not allow the gram-negative bugs to populate. BioCycle is made by Agrarian Solutions. the makers of our CONVERT<sup>™</sup> calf care line, and contains the same antibodies found in CONVERT to help prevent E.Coli, Salmonella, Rota I & II, and Corona Virus. Calves fed BioCycle should feel less stressed by not having to fight off gram-negative bugs in the digestive tract. Additionally, calves typically exhibit increased appetite, intakes, and performance.

Tri-Mic 1:50 provides a guaranteed direct source of live cell yeast, lactic acid bacteria, and fungal extracts which promotes rumen health and efficiencies, maximizing production. It creates a barrier against pathogens minimizing the negative effects of the leaky gut during high stress situations. Tri-Mic 1:50 aims to protect the gut by promoting beneficial bacteria and outnumbers the pathogens minimizing the effects of leaky gut. Moreover, it promotes maximum nutrient utilization by changing the fermentation pattern and the population of the rumen microbes. Tri-Mic 1:50 maximizes feed efficiency by promoting rumen fiber and starch digestion, increasing feeding efficiency to compensate for the reduced feed intake during stress situations while protecting the rumen against acidosis. Made by Form-a-Feeds, Tri-Mic 1:50 is a part of our Accelerated Genetics line.

Another major stressor during weaning is a lack of water intake. Dehydration and electrolyte imbalance at these times are always an imminent risk to the cells and tissues. Bovine Accellyte II is an easy to feed electrolyte that can be top dressed or mixed in feed to help with water intake. Replacing lost electrolytes and restoring the acid/base balance is critical for cattle to return to normal functions. It is formulated to enhance water absorption and water retention, restore electrolyte levels, and reduce the risk of acidosis. It has balanced levels of essential electrolytes Na+, K+, CI- and nearly neutral DCAD allied with osmolite technology for water retention and can be fed to all stages of animals. For more than two decades Bovine Accellyte II has shown to combat stress symptoms and establish electrolyte balance and cell hydration.

All three products are easy to administer. Simply top dress or mix the products directly into the feed the first few weeks of weaning.

The use of microbials during stressful times for cattle is the future of the industry. By populating the gut with good bugs, we can reduce the number of bad bugs that make an animal sick. By preventing sickness we can reduce the use of antibiotics and labor in the weaning pens. To learn more about BioCycle, Tri-Mic 1:50, Bovine Accellyte II or other calf care products, talk with your CentralStar team.

### **Beef Producer Profiles**

CentralStar works with over 1,000 beef producers to set and meet specific goals for their herds. Take a minute to learn about a few of the herds we work with.

### Feldun Purdue Agricultural Center, Bedford, Ind.

Brad Shelton, Superintendent

### Farm History

Gifted to Purdue University in 1914 by Moses Dunn and his aunt, Antoinette Fell, it is Purdue's oldest outlying research station. Like most farms of that era, they began with hogs, sheep, milk cows, laying hens, and an orchard. In the mid-1960s the focus turned towards beef cattle production, with the rest of the livestock being phased out. The large fruit orchards remained on the Center until the late 70's.

The Center is home to the Dark Hollow quarry, which provided large quantities of structural limestone used in places such as the Biltmore Mansion in Ashville, North Carolina. In 1989, the Center also became home to the Indiana Beef Evaluation Bull Test Program.

#### **Herd Info**

Research projects conducted over the last 50 years have utilized herd sires from various breeds. Today, the bulk of the herd utilizes Angus and Simmental sires for a two-breed rotation, with 50-head located off-site at a "composite" herd of SimAngus females, bred to SimAngus bulls. This herd is primarily utilized in a long term heterosis project.

#### **Notable Accomplishments**

There have been various breeding and genetic projects conducted at Feldun, however; a more noteworthy accomplishment was being able to provide decades of cow herd data to the American Simmental Association, which was used to help develop their crossbreed EPD's. Feldun still provides all cow herd data to the Association, allowing for continued improvement in their database as well as provide EPD's for Feldun cows.

In 2017, Feldun participated in the Simmental Association's Cow Herd DNA Roundup project providing DNA samples from across several generations. The Center also took part in a research trial utilizing the 5-day CO-Synch + CIDR protocol. Results of the study helped determine the best timing for administration of the prostaglandin injection(s).

#### **Breeding Program**

Feldun strives to develop a cow herd that is more heat tolerant, excels in tall fescue-based environments, and produces calves that grade well on the rail.

Various sire types have been utilized over the years for breeding projects. Nowadays, sire selection focuses on breed average bulls in growth traits such as WW, YW, and Milk and below average in mature size.

Over the past 14 years, Feldun has also participated in Select Sires Young Sire Program where they have helped sample more than 35 Angus, Simmental, and SimAngus bulls.

#### **Reproduction Program**

Cows at the Center are bred for a late winter, early spring calving season. All heifers and all cows located at Feldun headquarters are bred using the 7-day CO-Synch + CIDR protocol, unless part of a research project. Approximately 10 days following the A.I. protocols, herd sires are turned in with cows. Feldun relies on Select Sires technicians to breed both heifers and cows, and cows located off-site are naturally serviced.

#### **CentralStar's Role**

Greg Beavers, Area Sales Manager and Brian House, Vice President Beef Program and Product Manager for Select Sires provide phenotypic input on A.I. sires of interest as well as progeny of those sires. In addition, Feldun has worked in partnership with CentralStar and Michigan State University on a research study focusing on the effects of BLV on Picheef cattle longevity.

Brad Shelton, FPAC Superintendent and the Feldun Purdue Ag Center.

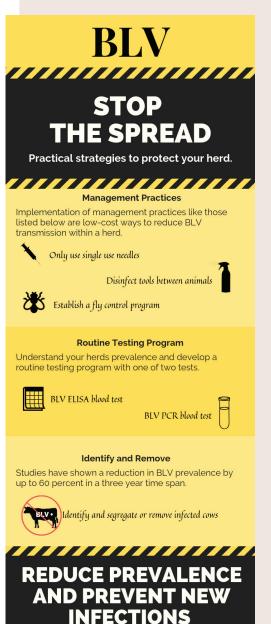


### What you can't see, can hurt you

Kelly Sporer, PhD, Research Scientist, AntelBio

Just because you can't see it, doesn't mean it's not affecting your herd. Bovine Leukemia Virus (BLV) is more common than you think. In fact, the USDA estimates that BLV has infected 38 percent of beef herds, and 89 percent of dairy herds.

Bovine leukosis is an infectious disease that left unmanaged can wreak havoc on your herd and the industry. BLV has been disregarded for years and as such, prevalence has grown from 10 percent in the 1960s to today's rates.



While most animals show no outward signs or symptoms, cows with advanced disease can develop lymphoma or tumors that result in condemnation at slaughter or even death. But even before it gets to that stage, BLV is affecting your herd's performance and profitability.

### BLV affects performance and profitability

BLV is a contagious retrovirus that infects a specific type of white blood cell in cattle, the B lymphocyte, or B cell. B cells play key roles in the immune system. They identify invading pathogens and signal other cells to kill them. They also produce specific antibodies that help the immune system to "remember" pathogens that it has met before.

This memory is a key concept in vaccination. Research at Michigan State University has shown that BLV-infected cows do not mount as strong of a response to common vaccines as their healthy herd mates (Frie et al., 2017). This means you may be spending time and money on vaccination programs that are less effective when BLV herd prevalence is high.

Compromised immune function isn't the only down-side. BLV infection has also been shown to negatively affect reproduction in dairy cows. While corresponding research in beef herds is not yet available, you should assume a similar pattern.

In the future, BLV could limit export opportunities for the U.S. Twenty-two other countries have already eradicated BLV, therefore its high prevalence in U.S. cattle may limit the export of bulls, genetics, and products to those countries. Another point to ponder is this. Research published by Olaya-Galán et al. (2017), reports the BLV sequence, but not necessarily the infectious virus, has been found in raw beef and milk. More research needs to be performed to determine if there is a definitive connection between the consumption of beef and milk from infected cattle and human health. Regardless, our industry needs to be aware of ongoing research in this area, and that much debate will continue.

#### **BLV** is easily spread

Infected B cells pass from animal to animal anytime blood is transferred. Management practices, like reusing needles, are likely the biggest culprit. However, hoof trimmers, ear taggers, gouge dehorners, or any other instruments that come in contact with blood, and are not disinfected between animals pose a risk.

Calves can also be infected by milk from BLV-positive dams. In utero transmission is less likely, but still presents the possibility of infection during the calving process. Another common method of transmission includes biting flies. As such a fly control program is beneficial to reducing BLV infection rates. While results are inconclusive, natural breeding service also poses a risk for spreading BLV.

#### Stop the spread

There is no cure for BLV, nor effective or commercially available vaccine. Even still, there are practical strategies to protect your herd by reducing prevalence and preventing new infections.

Implementing management practices that reduce the transmission of blood between animals is the most significant impact you can make for prevention. Using only single-use needles, disinfecting instruments (dehorner, hoof trimmers, etc) between animals, and establishing a fly control program are all simple and low-cost practices that will reduce BLV transmission between herd mates.

Understanding your herd's prevalence and developing a routine testing program is equally important. Establishing herd prevalence can be done by using one of two BLV blood tests, the BLV ELISA or BLV PCR tests.

The BLV ELISA is a cost-effective test (serum or red-top tube) that determines an animal's infection status. This test can conveniently be used in combination with other tests, such as pregnancy or Johne's disease, from the same blood sample. The flexibility of being a multi-use test reduces time and money for diagnosis.

The BLV PCR test (purple top tube) detects the actual virus in white blood cells and indicates how contagious a positive animal is. A longitudinal study in dairy cows has shown that by identifying the most contagious cows, or "super-shedders," and aggressively segregating/removing them from the herd is an effective way to reduce BLV herd prevalence. In this study, three herds effectively reduced disease prevalence by up to 60 percent over a three-year period (Ruggiero et, al, 2019).

Although research in U.S. beef cattle has been much less than in dairy cattle, BLV should be considered a threat to farm profitability. The beef industry has a great opportunity to identify and halt BLV before it reaches the prevalence rate in today's dairy herd.

### **Beef Producer Profiles** continued

Woodhill Farms, Viroqua, Wis.

### Farm History

Woodhill Farms started in 1984 with 35 registered Angus cows, and has grown to calve around 300 head each spring. They have also developed three independent cooperator herds in Iowa, who have grown by purchasing a nucleus of Woodhill females. Woodhill is also well known for their annual spring bull sale.

### Herd Info

Woodhill currently breeds around 300 registered Angus cattle. The cow/calf operation functions primarily as a seedstock producer.

### **Notable Accomplishments**

Over the past 35 years Woodhill has managed to remain a viable business with 100 percent of their farm income from the sale of Angus breeding stock. Woodhill does not diversify into other commodities and the sole income is from the cattle.

### **Breeding Program**

The breeding program goals have not changed over the past

35 years. Woodhill has embraced a balanced breeding approach using Expected Progeny Differences (EPDs) from the very beginning. They concentrate on calving ease with as much performance and end-product merit as possible, without compromising fertility and female

longevity. Woodhill is continuously Brain McCulloh, Seedstock Producer monitoring convenience traits and structural soundness as well.

### **Reproduction Program**

Woodhill retains 95 percent of heifers each year. The heifers, along with the cow herd, are bred once using a synchronization program which incorporates CIDR's, GNRH and prostaglandin. Over a three-week period, Brian and the farm crew A.I. everything once before turning them out with the best bulls the farm can afford.

### CentralStar's Role

Woodhill works with CentralStar because of the integrated services they offer. Brian commented, "Select Sires has always been around, and I feel confident in knowing what their program stands for."

The farm utilizes CentralStar services to keep their nitrogen tanks full, providing breeding supplies, and herd management supplies, like CONVERT<sup>™</sup> Calf Gel. Above all. Woodhill appreciates that CentralStar has a local team of technicians that they can rely on for any last minute needs.



**Pictured:** Brian and Lori McCulloh of Woodhill Farms

### Maternal Weaned Calf Value (\$M)

Greg Beavers, Beef Specialist

Earlier this year the American Angus Association introduced its members to a new \$Value Index EPD, Maternal Weaned Calf Value (\$M). This index is expressed in Dollars/Head, and projects the profitability differences from conception to weaning.

If you are keeping replacement females and/or marketing purebred Angus sires to commercial producers, this is an index you will surely want to utilize. Traits included in the this index are: calving ease direct, calving ease maternal, weaning weight, milk, heifer pregnancy, docility, mature cow weight, claw set and foot angle.

The Select Sires and Accelerated Genetics product lines offer some of the most elite sires in the breed for \$M! Consider using these sires that are in the Top 3 percent of the Breed for \$M: 14AN502 TAHOE, 7AN369 UPTOWN, 7AN466 RAINFALL, 14AN500 FOXTROT, 7AN515 BALANCE and 7AN463 PLAYBOOK.

### **Easy Estrus Sync**

The latest feature on the Select Sires Beef website is the on-line Estrus Svnc Planner.

Try it for yourself!

- 1. Visit selectsiresbeef.com
- 2. Hover over the "Resources" tab
- 3. Select "Estrus Synchronization"
- 4. Click on "Estrus Sync Planner"



estrus synchronization planner



41W394 U.S. 20 Hampshire, Ill. 60140

11:00 a.m. - Welcome and presentation 11:30 a.m. - Self-guided tour of facilities 12:00 p.m. - Beef bull parade 12:30 p.m. - Lunch





- Tour MidAmerica's beef collection, fertility, and housing facilities.
- Connect with elite beef producers and gather the latest industry information.

There will be no bus provided for transportation to this tour.

RSVP by Oct. 18 to 800.288.7473 with: Name/farm name, number attending.