88th Indiana Beef Evaluation Program
Performance Tested

BULL SALE

Angus and SimAngus

Held in conjunction with

Springville Feeder Auction Market
Special Heifer & Cow Sale

Saturday, October 16, 2021
Bulls sell starting at 2:00 p.m.
Females will sell immediately following

Springville Feeder Auction
10 miles northwest of Bedford, Indiana
on State Road 54-58

LIVE Broadcast on CattleUSA.com

SPONSORED BY:

Indiana Beef Evaluation Program
1117 State Rd 458
Bedford, IN 47421
Office: (812) 279-4330
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Springville Feeder Auction Association
PO Box 94
Springville, IN 47462
(812) 279-1282

PURDUE UNIVERSITY | Animal Sciences

PURDUE UNIVERSITY | Extension

Welcome to the 88th Indiana Beef Evaluation Program (IBEP) sale.

Thank you to the 16 cooperators who consigned bulls to the 2021 Summer Test chose to offer these genetics in the 88th IBEP Performance Tested Bull Sale.

The IBEP appreciates the opportunity to work closely with seedstock and commercial beef producers in identifying potential herd bulls with superior genetics for growth and carcass merit, and to assist in making those genetics available to the beef cattle industry.

During the past 44 years, 12,115 bulls and 1,340 get-of-sire groups have been performance tested by IBEP. While most bulls have come from Indiana breeders, cooperators from the four states bordering Indiana and from as far away as Texas, Montana, Kansas, Maryland, Alabama, Minnesota, and Canada have tested or are now testing bulls at IBEP.

In 87 sales, 6,225 bulls have sold to buyers in 21 states. Ninety percent of bulls sold have been purchased by Indiana producers, 8% by producers in bordering states, and the remainder by producers from sixteen other states.

Of 47 bulls tested in the 2021 Summer Test, the 28 bulls offered for sale represent the top performance indexing bulls of their breed, and have passed a rigorous evaluation for disposition and structural and breeding soundness. In addition, cooperators have invested in genomically enhanced EPDs and parent verification on all bulls. Furthermore, birth dams of all bulls on test have tested negative for johnes between the time the bull was born and arrival at IBEP and all bulls have tested negative for BVD and tuberculosis.

The IBEP and its cooperators strive to be a leader in providing all necessary information needed for its customers to select and invest in their next herd sire.

We believe that with the information gathered and provided on these bulls, both seedstock and commercial producers can make sound decisions in the area of beef improvement, value, and profitability.

We look forward to seeing you on October the 16th.

Sincerely,

IBEP Board of Directors

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An explanation of Sale Order can be found on page 7.

Sale Day: COVID Details and Bidding on Sale Bulls

Safety measures in respect to COVID must still be implemented

COVID-19 Details

In all sincerity, we ask that **ONLY** individuals seriously interested in active bidding, attend the sale in person. For viewing and bidding purposes, the sale will be broadcast live on CattleUSA.com.

We respectfully ask that you social distance to the best of your ability. Also, we respectfully ask for your patience and cooperation in the sale and settlement office as the number of individuals in the office at one time will be limited.

Please take a moment and review the information on the next page entitled "*Recommendations for Livestock Sales During COVID-19*."

Options for Bidding at the 88th IBEP Bull Sale

- Attend in person
- Bid on CattleUSA.com
- Place a designated bid amount on a specific bull prior to Sale Day

For designated bid amounts, contact Nick Minton at 812-279-4330 or 812-797-7944.
NOTE: cell phone service is limited at the Springville Feeder Auction Association facility. The Springville Feeder Auction Assoc. phone number is 812-279-1282.

Viewing and Bidding on CattleUSA.com

The 88th IBEP Bull Sale will be broadcast **LIVE ON** CattleUSA.com (https://www.cattleusa.com/).

If you are a first-time user or bidder on CattleUSA.com, a user name and password must be established prior to viewing a sale or placing a bid.

On the CattleUSA.com homepage, under the tab titled **Help Center** click on *Frequently Asked Questions* and you'll find several *How To Videos*. Videos explain how to establish an account, request bidder approval and place bids. We suggest watching the following *How To Videos* on the CattleUSA.com website prior to Sale Day:

- ***CattleUSA Demonstration Video*** explains how to establish a viewer account.
- ***How to get approved to bid?*** explains how to become an approved bidder on CattleUSA.com.
- ***How To Bid Video*** explains how to place a bid on CattleUSA.com.

If you experience difficulties in receiving bidder approval, please contact Nick Minton at 812-279-4330 or 812-797-7944.

We recommend registering with CattleUSA.com to view or bid by **Friday, October 15, 2021**. Every attempt will be made to complete your application, even if it is on the day of the sale.

Note: You must have high speed internet access (DSL, T-1, or Broadband) to be able to bid during the sale.

If you purchase bulls:

- Bulls must be picked up on October 16, 2021 from the Springville Feeder Auction Association. Payment is required when bulls are picked up, unless arrangements have been made with Nick Minton before the sale.
- *CattleUSA.com does not take any form of payment, and IBEP cannot accept credit or debit cards.*

You need to bring a check when you pick up the bull.

- Make checks payable to **Indiana Beef Evaluation Program** or **IBEP**.
- Arrangements for payment can be made by contacting IBEP at 812-279-4330 or 812-797-7944 prior to the sale.

Recommendations for Livestock Sales During COVID-19

Last Updated: March 24, 2020

For Those Hosting Sales

- ✓ restrict general public access
- ✓ ***limit attendance to a maximum of current local, state, and federal guidelines***
- ✓ consider online photos and videos as an alternative to in-person viewing
- ✓ make animals available for viewing by only "small" groups prior to the sale
- ✓ do not shake hands, and maintain a social distance of at least 6 feet
- ✓ restrict access to "pets" that could be coughed on and touched by multiple hands
- ✓ make online, or phone bidding available where possible
- ✓ provide information to employees on COVID-19
- ✓ provide hand sanitizer in common areas
- ✓ provide space for hand washing
- ✓ consider not providing food; if food is provided, consider individual packages and serving to avoid surfaces being touched by multiple hands
- ✓ frequently sanitize workstations and eating areas, including special attention to telephones, computer keyboards, calculators, desks, photocopiers, counters and common areas shared by more than one person on a regular basis
- ✓ avoid check-out/payment line congestion areas

For Those Purchasing Livestock and Attending Sales

- ✓ where possible only view animals in "small" groups ahead of the sale
- ✓ consider online photos and video as an alternative to in-person viewing
- ✓ utilize sale manager, auctioneer, ringmen and consultants to help with purchase
- ✓ allow only one person per farm operation to attend
- ✓ do not attend sales without a serious intent to purchase
- ✓ do not attend a sale if you are sick (even mild symptoms), or have been exposed to anyone sick, and/or positive for COVID-19 in the last 2 weeks
- ✓ do not shake hands, maintain at least 6 feet social distance
- ✓ do not take your dog/cat that could be coughed on and touched by multiple hands
- ✓ consider online bidding, and sign up for online platforms ahead of time
- ✓ consider phone bidding, call ahead to make arrangements with sales staff
- ✓ avoid check-out/payment line congestion areas
- ✓ wash hands thoroughly and frequently

This is not an exhaustive list, and businesses should stay up-to-date on their local, state, and the federal government recommendations and requirements. By working together, with good preparation, we can keep our families, customers and employees safe, while also providing stability within the U.S. beef supply chain.

This document was originally developed by the Livestock Markets Association of Canada, Canadian Beef Breeds Council and Canadian Cattlemen's Association, and then adapted and approved by the Indiana Board of Animal Health, Purdue Veterinary Medicine, Purdue Animal Sciences, and the Indiana Beef Cattle Association.

Rules and Regulations

Rules for this 88th performance test and sale were the responsibility of the IBEP Board of Directors. This performance test was conducted at the Feldun-Purdue Ag Center at Bedford. Bulls were fed a total mixed ration once daily. The main diet ingredients included silage sorghum sudan baleage, mixed grass hay, pelleted soyhulls, whole shell corn, corn gluten feed, dried distillers grains with solubles and a rumen by-pass protein supplement and trace-mineral and vitamin supplement. An ionophore and insect growth regulator (IGR) was included in the diet. Dietary energy levels did not exceed 0.45 mcal/lb NEg. Bulls were delivered April 27, on-tested May 18 and off-tested Sept. 20, 2021. Bulls must have met the following requirements:

GENERAL:

- Born on or between April 1, 2020 through September 30, 2020.
- From a herd participating in official breed performance testing program.
- Verified to both the sire and dam listed in this catalog.

PERFORMANCE:

- Have recorded birth weight and official adjusted 205-day data, plus EPDs for birth weight, weaning weight, and maternal milk.
- Weigh at least 450 lbs. and 2.45 lbs. per day of age on delivery at Station.

HEALTH:

- Tested at delivery and are negative for persistent BVD infection.
- Dam (gestating) tested negative for Johne's Disease between time of birth and delivery to IBEP.
- Vaccinated against the following diseases between 2 months and 3 weeks prior to delivery: Leptospirosis, IBR, BVD, PI3, BRSV, haemophilus somnus, pasteurella, and clostridial organisms (7-way vaccine for blackleg, malignant edema, overeating disease, etc.).
- Negative to tuberculosis and brucellosis tests within 30 days of sale.
- Have an official health certificate both at time of delivery and at this sale.
- Official Certificates of Veterinary Inspection will be furnished to buyers.

SOUNDNESS:

- Pass inspection by a screening committee for: health, structural soundness and disposition.
- Pass a breeding soundness exam including a physical exam and semen evaluation

BREEDING GUARANTEE: All bulls were examined for semen quality and breeding soundness on September 23, 2021, and were classified as satisfactory potential breeders. Any guarantee or terms and conditions endorsed by respective breed associations is between buyer and seller. Neither the Indiana Beef Evaluation Program, Purdue University, nor other persons associated with the sale will assume any liability, legal or otherwise, except to assist, if possible, to make adjustments.

BIDDING: All bulls will be sold to the highest bidder. The auctioneer will settle all disputes as to bids, and his decision will be final.

FLOOR PRICE: Bulls will be sold at a minimum of $2,100 each; the IBEP board reserves the right to adjust the floor price based on changes in market prices between the date of catalog printing and the sale date. Those bulls not reaching the floor price remain the consignor's property and may not be sold on the sale premises at private treaty.

TERMS: The terms of the sale are strictly cash. Make checks payable to: **Indiana Beef Evaluation Program** or **IBEP**.

HANDLING: All bulls are seller's risk until sold and buyer's risk as soon as sold. If not convenient for the buyer to remove his bull(s) the day of the sale, bulls will be cared for until 12:00 p.m., October 18, 2021, but at the buyer's risk of injury or loss. All bulls must be paid for or prior arrangements made before being released and loaded. Bulls must be removed by 12 p.m., Monday, October 18, 2021.

REGISTRY AND TRANSFER: Certificates of registry will be transferred to the buyer by the seller within a reasonable time period after the sale at the seller's expense.

LIABILITY: All persons attending the sale do so at their own risk. Neither the Indiana Beef Evaluation Program, Purdue University, nor any person connected with the sale will assume any liability, legal or otherwise in case of accidents.

ANNOUNCEMENTS: Any changes from information in the catalog will take precedence.

Interpreting Performance Information of IBEP Bulls

Donna L. Lofgren, Department of Animal Sciences, Purdue University

			Performance Index 111.4					
Birth Weight	87					Adj. REA	11.4	
Birth CE	UN	On Test Wt.	800			Adj. REA/cwt	0.91	
Dam Age	8	End Test Wt.	1215			Adj. Rib Fat	0.25	
205-d Adj. Wt.	723	ADG	3.32 (109)	Foot Angle	5	Adj. % IM Fat	4.12 (121)	
205-d PCT	108	WPDA	3.30 (115)	Claw Set	5	% Retail Product	64.7 (98)	
205-d NO	8	Frame Score	5.5	Adj. 365-day SC	33	Carcass Merit	109.5	

EPDs:	Birth Wt	Wean Wt	Year. Wt.	Mat. Milk	Direct CE	Mat CE	$ Indexes: $M	$W	$F
	0.8 (.56)	69.0 (.49)	117.0 (.40)	26.0 (.36)	8.0 (.37)	13.0 (.34)	60.0	79.0	92.0
	7	*9*	*9*	*7*	*7*	*10*	*6*	*10*	*8*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	$G	$B	$C
11.0 (.38)	50.0 (.44)	.75 (.40)	.76 (.40)	.010 (.38)	59.0	151.0	256.0
3	*8*	*8*	*9*	*6*	*9*	*9*	*9*

Birth: Birth Weight is the actual birth weight. **Birth CE** is calving ease: UN = unassisted; EP = Easy Pull; HP = Hard Pull; AB = Malpresentation. In the ID section, after the birth date is the **(Birth Code)**: S = Single; TW = Twin; TR = Triplet; ET = Embryo Transfer.

Dam Age is the dam's age at calving.

205-Day: Adj. Wt. is the 205-day weight adjusted for the age of the dam. **PCT** is the weight expressed as a ratio (percent of the average); this was determined within herd and not within breed at the Test Station. **NO** is the number of bulls of similar age (contemporaries) that were weighed at weaning.

On Test Wt. and **End Test Wt.** are the actual weights at the start of the test period (November 17, 2020) and at the end of the performance test (March 22, 2021).

ADG is the Average Daily Gain of the bull during the 125-day test. In parentheses is the ADG expressed as a ratio, which compares the ADG to the breed average. A ratio of 109 indicates the bull gained 9% faster than the average of his breed in this test. If there are fewer than 6 bulls of one breed, the ratio is based on the average ADG of all bulls on test.

WPDA is the Weight Per Day of Age on March 22. In parentheses is the WPDA expressed as a ratio, which compares the WPDA to the breed average. A ratio of 115 indicates the bull was 15% heavier than the average of his breed on test. If there are fewer than 6 bulls of one breed, the ratio is based on the average WPDA of all bulls on test.

Perf. Index is the IBEP Performance Index = .60(ADG Ratio)+.40(WPDA Ratio). In this example, the index is .60(109)+.40(115) = 111.4, indicating that his combined performance was 11.4% above the breed average. Bulls with higher indexes should add more growth potential to calves than bulls of the same breed with lower indexes. Calves with more genetic potential for growth should be heavier at weaning, gain faster in the feedlot, reach an acceptable harvest weight at a younger age, and be more profitable.

Frame Score: Hip height was measured on March 22 and was used along with the age of the bull on March 22 to calculate the Frame Score (BIF Guidelines, 9th edition).

Foot Angle and **Claw Set** were scored on every bull, utilizing the *Foot Score Guidelines* published by the American Angus Association. Scores range from 1 to 9, with 5 being ideal. See more details on Page 10 of this catalog.

Adj. 365-day SC is the scrotal circumference at the end of the test, in cm., adjusted to 365 days of age.

Adj. REA and **Adj. Rib Fat** are the Rib Eye Area and Rib Fat measured by ultrasound at the 12th rib, adjusted to 365 days of age. Breed-specific adjustments are used. ^ Denotes that the breed association does not adjust this ultrasound information to 365 days of age, so this is the actual record (unless otherwise specified). **Adj. REA/cwt** is the adjusted Rib Eye Area expressed per hundred pounds of live weight. The 365-day weight is used as the live weight measurement; if REA is not adjusted to 365 days, the weight at scanning is used.

Adj. % IM Fat is the % intramuscular (IM) fat measured by ultrasound, adjusted to 365 days of age.
^ Denotes that the breed association does not adjust % IM fat to 365 days of age, so this is the actual record (unless otherwise specified). In parentheses is the % IM fat expressed as a ratio, which compares the % IM fat to the breed average. A ratio of 121 indicates the bull had 21% more % IM fat than the average of his breed in this test. If there are fewer than 6 bulls of one breed, the ratio is based on the average % IM fat of all bulls on test. The % IM fat is a measure of marbling, which is one of the major factors influencing carcass Quality Grade. Comparing within a breed, bulls with higher % IM fat should sire calves with a greater ability to have a higher carcass Quality Grade than calves sired by bulls with lower % IM fat.

% Retail Product is estimated as 65.59 - 9.931*(Rib Fat) + 1.2259*(Rib Eye Area) - 0.013166*(Carcass Weight) - 1.29*(KPH). Rib Fat and Rib Eye Area are adjusted to 365 days of age. Carcass Weight was estimated as .60*(365-day Weight); if the breed association does not adjust ultrasound information to 365 days of age, the weight at scanning is used instead of 365-day weight. A KPH (kidney, pelvic and heart fat) value of 2.0% was used for all bulls. In parentheses is the % retail product expressed as a ratio, which compares the % retail product to the breed average. A ratio of 98 indicates the bull is estimated to have 2% less % retail product than the average for his breed in this test. If there are fewer than 6 bulls of one breed, the ratio is based on the average % retail product of all bulls on test. The % retail product is heavily influenced by rib fat thickness and rib eye area, and highly related to carcass Yield Grade. Lower rib fat thickness and larger rib eye area result in greater % retail product. Comparing within a breed, bulls with higher % retail product values should sire calves with carcasses having more desirable Yield Grades than bulls with lower % retail product values.

Carcass Merit is calculated as (% Retail Product Ratio + % Intramuscular Fat Ratio)/2. In this example, the carcass merit is (121+98)/2 = 109.5, indicating that his carcass merit is 9.5% above the breed average. Carcass merit is an attempt to provide an indicator of both carcass Quality Grade and carcass Yield Grade. Ideally, we would prefer bulls that were above average in both % retail product and in % IM fat. However, this is not always possible. Producers whose calves tend to have less than desirable Quality Grades need to place greater emphasis on % IM fat, while those with calves that tend to have poor Yield Grade (i.e., few Yield Grade 1 and 2 with some Yield Grade 4) need to place greater emphasis on % retail product.

EPDs: EPDs and (Accuracies) are given for several traits: Birth Weight, Weaning Weight, Yearling Weight, Maternal Milk, Direct Calving Ease, Maternal Calving Ease, Docility, Carcass Weight, Marbling, Rib Eye Area, Fat Thickness, Yield Grade, and Days to Finish. Exact traits will be different for each breed. **"Genomic EPDs"** means that the bull himself had a genomic test done, and this was incorporated into his EPDs. See the article **EPDs**

and $ Indexes for more information. The numbers in asterisks indicate the percentile group ranking of the bull in the breed, in 10% groups: *10* is in the top 1-10%, *9* is 11-20%, and so on; *2* is 81-90%; and *1* is 91-100% (the bottom 10%). Bulls are compared to non-parent EPDs from their respective breed associations; it is a ranking within the entire breed, not just the bulls in this test. It is only valid to compare EPDs of bulls within the same breed. Do not compare EPDs of bulls in different breeds.

$ Indexes: These are multi-trait selection indexes calculated by some breed associations. These combine EPDs for several traits into a single economic value, which can be used to make selection decisions. The index values are interpreted like EPDs; the difference in index value between two bulls is the expected difference in average dollar value per head of their progeny, when the bulls are bred to similar cows. Typical beef production and economic values are used in calculating the indexes. Indexes are expressed in dollars per head, and higher indexes mean a higher dollar value per head. An index value only has meaning when it is compared to the index value of another animal of the same breed. Currently, indexes are calculated for Angus, Gelbvieh, Gelbvieh Balancer, Hereford, Limousin, Red Angus, Shorthorn, Simmental, and SimAngus bulls.
Angus indexes are Maternal Weaned Calf Value ($M), Weaned Calf Value ($W), Feedlot Value ($F), Grid Value ($G), Beef Value ($B), and Combined Value ($C).
Charolais index is Terminal Sire Index (TSI).
Gelbvieh indexes are $Cow, Efficiency Profit Index (EPI), and Feeder Profit Index (FPI).
Hereford indexes are Baldy Maternal Index (BMI$), Brahman Influence Index (BII$), and Certified Hereford Beef Index (CHB$).
Limousin index is Mainstream Terminal Index ($MTI).
Red Angus indexes are Profitability and Sustainability Index (ProS), HerdBuilder Index (HB) and GridMaster Index (GM).
Shorthorn indexes are Calving Ease Direct ($CEZ), British Maternal Index ($BMI), and Feedlot ($F).
Simmental and **SimAngus** indexes are All-Purpose Index (API) and Terminal Index (TI).
See the article **EPDs and $ Indexes** for more information. The numbers in asterisks indicate the percentile group ranking of the bull in the breed, in 10% groups: *10* is in the top 1-10%, *9* is
11-20%, and so on; *2* is 81-90%; and *1* is 91-100% (the bottom 10%). Bulls are compared to non-parent indexes from their respective breed associations; it is a ranking within the entire breed, not just the bulls in this test.

HOW SALE ORDER IS DETERMINED

Each bull is given a within-breed percentile group ranking (in *'s) for many traits, including performance during the test, EPD's, and $ Indexes. These are in 10% groups, so a bull can get 1-10 *'s for each trait.

Sale Index is a weighted sum of the number of *'s for **six** of these traits:
30% ADG, 20% WPDA, 7.5% IMF, 7.5% REA/cwt, 20% Direct Calving Ease EPD, and 15% Weaning Weight EPD (Birth Weight EPD will be used if the bull does not have an EPD for Direct Calving Ease). The maximum Sale Index for a bull is 100.0.

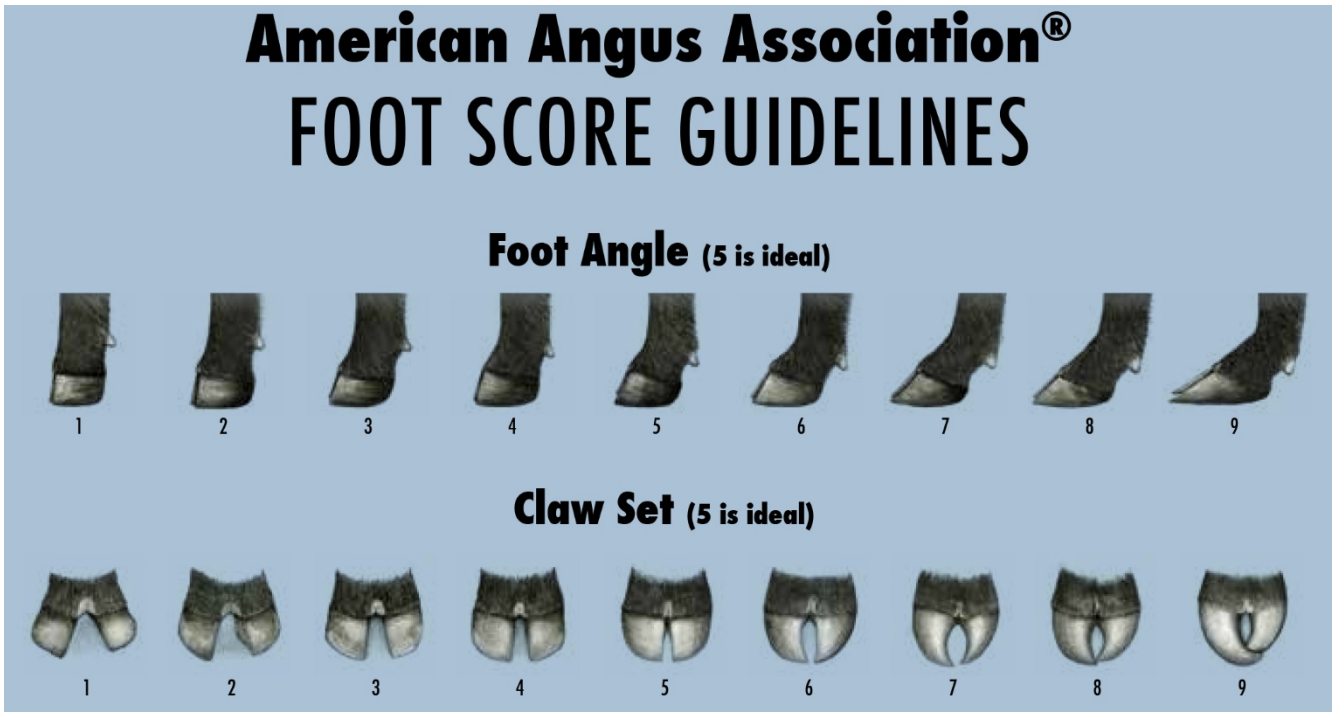
Sale Order is determined by Sale Index. A bull with a Sale Index of 100.0 would sell first. If two bulls have the same Sale Index, sale order for these bulls will be based on their Performance Index.

Soundness and Foot Score Evaluations

The IBEP board of directors accepted the motion in December of 2019 to utilize the *Foot Score Guidelines* published by the American Angus Association to score hoof angle and claw set on every bull on test. A diagram of the guidelines is shown below. Scores of 1 and 9 are considered “unsound”, and scores of 2 and 8 are considered “marginally unsound”. A score of 5 is considered and ideal score.

The structural soundness committee consists of three to five individuals that do not own a bull currently on test. As a committee, they discuss each bull and come to an agreement on the foot angle and claw set score for each bull.

As a committee, they make a decision on whether or not each bull is eligible for sale based on structural soundness and disposition.



Genetic Defects and IBEP Bulls

Currently, several genetic defects which have DNA tests are being tracked by breed associations. In the IBEP 2020 Winter Test, the status of bulls for defects was checked on the breed association web sites. The traits fall into three categories, which are handled differently by IBEP. Below are the traits, with their letter abbreviations and the breeds where they are found.

Lethal Defects - Bulls which are potential carriers must be tested free of the defect to be sale eligible. These include:

- AM = Arthrogryposis Multiplex, formerly called Curly Calf (Angus)
- CA = Contractural Arachnodactyly, formerly called Fawn Calf (Angus)
- MA = Alpha-Mannosidosis (Red Angus)
- MSUD = Maple Syrup Urine Disease (Hereford)
- NH = Neuropathic Hydrocephalus (Angus)
- OS = Osteopetrosis (Angus and Red Angus)
- PHA = Pulmonary Hypoplasia with Anasarca (Shorthorn and others)
- TH = Tibial Hemimilia (Shorthorn and others)

MD (Mandibulofacial Dysostosis) in Herefords has had a DNA test only since the fall of 2020. For this test, Hereford bulls were required to be tested for MD, but carriers are sale eligible.

Non-Lethal Defects - Bulls which are potential carriers must be tested, but carriers are sale eligible. These include:

- DD = Developmental Duplication (Angus)
- D2 = PRKG2 Mutation for Dwarfism (Angus)
- HY = Hypotrichosis (Hereford)
- IE = Ideopathic Epilepsy (Hereford)
- M1 = Myostatin nt821 Gene Deletion, also known as Double Muscling (Angus)

Color Defects or Information - IBEP does not track these, but if a bull is tested free, that information will show in the sale catalog. These include:

- CC = Coat Color - Red (Simmental)
- CCA = Coat Color - Wild Type (Simmental)
- DL = Dilutor (Hereford and Simmental)
- OH = Oculotaneous Hypo-pigmentation (Angus)
- HPS = Horns (Simmental)
- RD = Red allele (Angus)

The bull's information is listed below their registration number. An "F" after the defect abbreviation means that the bull was tested free; for example "NHF" means the bull was tested free of NH. A "C" after the defect abbreviation means that the bull was tested and is a carrier. If there is no notation for a defect, the bull is not a potential carrier.

EPDs and $ Indexes

Donna L. Lofgren, Department of Animal Sciences, Purdue University

Development of animal breeding models and advances in computer technology have provided beef producers with selection tools which allow animals within a breed to be compared for their genetic merit. These selection tools are Expected Progeny Difference (EPD) for individual traits, and $ Indexes which combine several EPDs into one economic value. Individual beef breed associations conduct National Cattle Evaluations (NCE) once or twice each year. The NCE combine individual records with pedigree and progeny data to calculate EPDs. Interim EPDs are calculated for young animals whose records are processed between the times of the NCE.

The difference in EPD of two bulls is the difference in expected progeny performance of their progeny, if the bulls are mated to similar cows and their progeny are in similar management and environmental conditions. EPDs are expressed in the same units as the trait. For example, Birth Weight, Weaning Weight, and Yearling Weight EPDs are in pounds, while Carcass Fat EPD is in inches. The sign of the EPD indicates direction; positive means larger (heavier weights), and negative (-) means smaller (lighter weights). Which direction is “good” depends on the trait. Positive EPDs would be good for weaning weight but may be bad for birth weight. EPDs are valid only for comparing bulls of the same breed. Do not compare EPDs of bulls in different breeds. (There is one exception. The Simmental, Red Angus, Chianina, Maine Anjou and Gelbvieh associations combine their data in one multi-breed evaluation. Therefore, EPDs from those breeds, including SimAngus and Gelbvieh Balancer, can be directly compared.)

Growth and Maternal Traits

- Birth Weight, in pounds, predicts the weight at birth of the bull’s progeny compared to progeny of other bulls. A bull with an EPD of -1 is expected to have progeny which average 3 lb lighter than progeny of a bull with an EPD of +2.
- Weaning Weight, in pounds, is a measure of the weaning growth of the bull’s progeny. Higher EPDs mean heavier calf weights.
- Yearling Weight, in pounds. Higher EPDs mean heavier weights for the bull’s progeny.
- Maternal Milk, in pounds, is measured by the weaning weight of the calves. It predicts the milking and mothering ability of the bull’s daughters, expressed as her calf’s weaning weight. Higher EPDs mean heavier calf weights due to the daughter’s milking and mothering ability.
- Direct Calving Ease is a measure of the ease with which a bull’s calves are born to first calf heifers. Higher EPDs mean fewer assisted births.
- Maternal or Daughters’ Calving Ease is a measure of the ease with which a bull’s daughters calve as first-calf heifers. Higher EPDs mean fewer assisted births.
- Docility is a measure of the temperament or disposition of the bull’s progeny. Higher EPDs mean more favorable docility.

Carcass Traits

Carcass traits may be measured at slaughter, or measured on live animals using ultrasound. Many breeds report EPDs for carcass traits, using one type of measurement or a combination of both. All measure the expected performance of the bull’s progeny. Different

breeds calculate EPDs for different traits. Most breeds use a constant age endpoint for carcass data; however, Gelbvieh use a constant fat endpoint. Some breeds update interim EPDs after the bulls are scanned during the test.

- Carcass Weight, in pounds. Higher EPDs mean heavier weights of the bull's progeny.
- Marbling is a measure of the marbling score of a bull's progeny. It is a subjective measure of % intramuscular fat. Higher EPDs mean higher marbling scores.
- Fat Thickness, in inches, measures the fat thickness at the 12th rib of the bull's progeny. Higher EPDs mean greater fat thickness.
- Ribeye Area, in square inches. Higher EPDs mean a larger ribeye area of the bull's progeny.
- Yield Grade is a measure of the relative proportion of closely trimmed, boneless retail cuts from the bull's progeny. Higher EPDs mean higher yield grades, and thus a lower proportion of retail cuts.
- Percent Retail Cuts is a measure of the percentage of closely trimmed, boneless retail cuts from the bull's progeny. Higher EPDs mean a higher percentage of retail cuts.

$ Indexes

These are multi-trait selection indexes, which combine EPDs for several traits into a single economic value, which can be used to make selection decisions. The index values are interpreted like EPDs; the difference in index value between two bulls is the expected difference in average dollar value of their progeny, when the bulls are bred to similar cows. Typical beef production and economic values are used in calculating the indexes. Indexes are expressed in dollars per head, and higher indexes mean a higher dollar value per head. An index value only has meaning when it is compared to the index value of another animal of the same breed. Currently, indexes are calculated for Angus, Charolais, Gelbvieh, Hereford, Limousin, Red Angus, Shorthorn, Simmental, and SimAngus bulls.

- Angus $M is Maternal Weaned Calf Value. This is the expected value of future progeny due to genetics from conception to weaning. It has the objective that commercial cattlemen replace breeding females with heifers from their herd, and remaining female and male progeny are sold as feeder calves.
- Angus $W is Weaned Calf Value. This is the expected average of future progeny for preweaning performance, within a typical beef cowherd. It accounts for the economic impact of birth weight, weaning weight, maternal milk, and mature cow size.
- Angus $F is Feedlot Value. This is the expected average of future progeny for postweaning feedlot performance.
- Angus $G is Grid Value. This is the expected average of future progeny for carcass grid merit. It assumes cattle are marketed on a carcass grid, so it focuses on both quality grade and yield grade.
- Angus $B is Beef Value. This is the expected average of future progeny for postweaning performance and carcass value. The $B value combines information from $F and $G.
- Angus $C is Combined Value. This combines maternal ($M) and terminal ($B) indexes. It has the objective that commercial cattlemen replace breeding females with heifers from their herd, and remaining female and male progeny are sold on quality-based carcass merit grid.

- Charolais TSI is Terminal Sire Index. It is the expected profit potential of terminal progeny. It incorporates growth and carcass EPDs.
- Gelbvieh $Cow is the value of an animal when retained as a replacement female. It includes maternal productivity, but also considers her future progeny's feedlot and carcass value.
- Gelbvieh EPI is Efficiency Profit Index. It aids producers in selecting for feed efficient cattle with acceptable amounts of gain.
- Gelbvieh FPI is Feeder Profit Index. This is the expected performance of progeny in the feedlot and sold on a grade and yield standpoint. It is a terminal index, including growth and carcass traits.
- Hereford BMI$ is Baldy Maternal Index. This is the expected average performance of progeny of Hereford bulls used in rotational crossbreeding programs on Angus-based cows and heifers, with the progeny marketed on a Certified Hereford Beef LLC pricing grid.
- Hereford BII$ is Brahman Influence Index. This is similar to BMI$, except that the bulls are mated to Brahman-influenced cows, and progeny are marketed on a commodity-based program. It puts more emphasis on cow fertility and longevity.
- Hereford CHB$ is Certified Hereford Beef Index. This is the expected average performance of progeny of Hereford bulls mated to mature commercial Angus cows, with all progeny sold as fed cattle on a Certified Hereford Beef LLC pricing grid. It is a terminal sire index, including growth and carcass information only, since all progeny are marketed and no females are retained in the herd.
- Limousin $MTI is Mainstream Terminal Index. This is the expected average profit per carcass of progeny of Limousin bulls mated to British-cross cows, with all calves placed in the feedlot and sold on a mainstream grid. It is a terminal sire index, including growth and carcass information only, since all calves are marketed and no females are retained in the herd.
- Red Angus ProS is Profit and Sustainability Index. This is the expected average performance of progeny where replacement heifers are retained in the herd and remaining progeny are fed out to slaughter and marketed on a quality-based carcass grid.
- Red Angus ProS is Profitability and Sustainability Index. This is an all-purpose index that covers economically relevant traits from conception to carcass, and is expressed as dollars per head born.
- Red Angus HB is HerdBuilder Index. This is the expected average performance of progeny where replacement heifers are retained in the herd and all remaining progeny are marketed at weaning.
- Red Angus GM is GridMaster Index. This is the expected average performance of progeny which are fed out to slaughter and marketed on a quality-based carcass grid.
- Shorthorn $CEZ is Calving Ease Direct. This index assumes a bull will only be mated to heifers. It is the expected average performance of progeny for profitability, which is measured by the incidence of live calves at birth.
- Shorthorn $BMI is British Maternal Index. This is the expected average performance of progeny of Shorthorn bulls when mated to a British cow base. It has a balance of growth and carcass traits, with a strong maternal component.
- Shorthorn $F is Feedlot. This is the expected average performance of progeny when sold on the fed market. It has a strong emphasis on growth and carcass traits.

- Simmental and SimAngus API is All-Purpose Index. This is the expected average performance of progeny of Simmental bulls used on the entire Angus cowherd, with a portion of the daughters being retained for breeding and the remaining progeny being put on feed and sold grade and yield.
- Simmental and SimAngus TI is Terminal Index. This is the expected average performance of progeny of Simmental bulls mated to mature Angus cows, with all offspring placed in the feedlot and sold grade and yield. It includes growth and carcass information only, since all progeny are marketed.

Accuracy

Most EPDs are reported with an Accuracy (ACC) value, which ranges from 0 to 1. It is a measure of the reliability of the EPD. EPDs will change and become more accurate as additional data on the bull and his relatives are processed by the breed association. For most yearling bulls, ACC is low, because they have not sired any progeny; however, genomic testing will increase the accuracy of the EPDs. Some breeds report the accuracy of these EPDs as BK, I, P, P+, or PE. These indicate that the EPD is based on pedigree data, or is an interim EPD based on pedigree data and the bull's own performance.

Percentile Tables

Average EPDs for most traits are not zero. The actual average will be different for each breed. Percentile tables must be used to determine where a bull's EPDs and indexes rank within the breed. EPDs and $ Indexes for the bulls in the IBEP test should be compared to percentiles for non-parent bulls of the same breed. Look up the bull's EPD in the table to determine where he ranks in his breed. For example, an Angus bull with a Yearling Weight EPD of +110 lb. is in the top 35% of Angus non-parent bulls. An Angus bull with a Birth Weight EPD of +1.0 lb. is in the top 45%. Remember that for most traits, a positive EPD is desirable. However, for Birth Weight, Carcass Fat, and Yield Grade, a negative EPD is desirable.

The EPDs and $ Indexes in the sale catalog are reported with the bull's percentile ranking in *'s. These are in 10% groups. An EPD with *10* is in the top 1-10% of the non-parent bulls of the breed, *9* is 11-20%, and so on; *2* is 81-90%, and *1* is 91-100% or the bottom 10%.

Percentile tables provided by the breed associations for breeds in the current IBEP test are available on our web site, https://ag.purdue.edu/ansc/ibep/. (Although Simmental, Red Angus, Chianina, Maine Anjou and Gelbvieh association EPDs can be directly compared, percentile tables will be different for each breed.)

Breed Association "Branding"

Breed associations may have programs to "brand" individuals that meet specific criteria. Currently, the American Angus Association is the only breed association with such a program.

American Angus Association's Certified Angus Beef "Targeting the Brand"

The Targeting the Brand™ logo is designed to highlight registered Angus bulls with greater genetic potential to produce calves meeting the most challenging specifications of the Certified Angus Beef ® brand. Bulls must meet genetic requirements of +0.65 Marbling EPD and +55 $Grid of non-parent Angus bulls to qualify for use of the Targeting the Brand™ logo.

Bulls meeting this requirement will show the logo below the owner's name:

Genomic Tests

Bulls that have had EPD's genomically enhanced will have one of the following logo's included with their cataloged data.

Owners of Sale Bulls - Contact Information

Bennett Angus
Carol D. Bennett
6 Hall Rd.
Eddyville, IL 62928
618-759-1046

Crisp Farm
Jeff Crisp
20905 Shawneetown Road
Thompsonville, IL 62890
618-559-9848

Halls Angus
James Hall
7 Hall Road
Eddyville, IL 62928
618-672-4304

Jay & Jennifer Alcorn
3894 S 450 W
Greencastle, IN 46135
765-720-2809

Mickey Angus
Tanner Mickey
713 Okey St.
Pana, IL 62557
217-825-6832

Neal Brothers Simmentals
Joe Neal
4812 N. Neal Rd.
Bicknell, IN 47512
812-881-9381

Saxe Farm
Tom Saxe
20457 Neal Davis Rd.
Thompsonville, IL 62890
618-627-2243

Small Cattle Farms
Terry Small
1105 Kingswood Road West
West Lafayette, IN 47906
630-441-8634

Stewart Select Angus LLC
Andrew Stewart
2230 E 300 N
Greensburg, IN 47240
812-614-4867

Underwood Angus Farms
Mark E. Underwood
12325 N 400 E
North Manchester, IN 46962
260-578-6656

Owners of Sale Bulls - Contact Information

Underwood Angus Farms / Neil
Neil and Mariah Underwood
13067 N 500 E
North Manchester, IN 46962
260-901-0006

Underwood Angus Farms/ Austin
Austin V. Underwood
12325 N 400 E
North Manchester, IN 46962
260-578-6656

Willer Timber Ridge
Ted & Kathy Willer
4342 S 300 E
Greencastle, IN 46135
765-721-0420

Indiana Beef Evaluation Program - 2021 Summer Test

Listing of Sale Bulls - Performance

Ear Tag	PEN	Breed	Pct	PSH	COL	Bull Reg. No.	Bull's Sire	Birth		Off Test		U-sound adj to 365-d			Rank in Breed					Perf Index
								M/D	Wt	Wt	ADG	REA	Rib Fat	%IM Fat	ADG	WPDA	SC	%Ret. Prod.	%IM Fat	
425	5	ANGUS	PB	P	BLK	19997323	Deer Valley Growth Fund	09/20	78	1318	3.58	15	0.2	3.4	*10*	*10*	*8*	*9*	*6*	115.2
426	5	ANGUS	PB	P	BLK	19997324	SAV Rainfall 6846	09/16	67	1170	3.32	15	0.2	3.6	*7*	*6*	*7*	*10*	*7*	104.5
427	5	ANGUS	PB	P	BLK	19997322	Deer Valley Growth Fund	09/11	65	1285	3.38	13	0.3	3.7	*9*	*9*	*6*	*4*	*8*	109.1
428	6	ANGUS	PB	P	BLK	19767268	WTR 654 Niagara 858	06/20	78	1508	2.96	12	0.3	4.3	*3*	*8*	*5*	*1*	*9*	99.2
438	6	ANGUS	PB	P	BLK	19816148	Connealy Mainstay	07/09	86	1268	3.50	12	0.2	3.7	*9*	*2*	*2*	*3*	*7*	104.5
439	5	ANGUS	PB	P	BLK	19875588	Hoover Hawkeye	09/01	85	1280	3.24	12	0.3	3.4	*7*	*8*	*5*	*3*	*5*	105.0
440	5	ANGUS	PB	P	BLK	19884112	Hoover Hawkeye	09/02	85	1208	3.10	13	0.1	3.4	*5*	*6*	*3*	*10*	*6*	100.0
441	5	ANGUS	PB	P	BLK	20112581	KB-Beastmode of B0101 F52	09/01	60	1160	3.71	11	0.3	4.3	*10*	*3*	*3*	*1*	*9*	110.1
442	5	ANGUS	PB	P	BLK	20112578	KB-Beastmode of B0101 F52	09/30	61	1098	3.14	11	0.2	2.9	*6*	*4*	*10*	*1*	*1*	99.9
443	5	ANGUS	PB	P	BLK	20094366	Deer Valley Growth Fund	09/09	54	1035	3.34	11	0.2	3.2	*8*	*1*	*5*	*2*	*4*	99.6
444	5	ANGUS	PB	P	BLK	20112579	KB-Beastmode of B0101 F52	09/30	59	1100	3.42	11	0.2	3.2	*9*	*4*	*6*	*2*	*3*	105.6
447	4	ANGUS	PB	P	BLK	19861836	Bar R Jet Black 5063	08/26	84	1315	3.26	13	0.2	3.9	*7*	*9*	*6*	*8*	*8*	105.8
448	4	ANGUS	PB	P	BLK	19861849	Bar R Jet Black 5063	09/13	88	1203	3.02	12	0.2	3.2	*4*	*7*	*7*	*6*	*4*	99.6
449	4	ANGUS	PB	P	BLK	19860588	Bar R Jet Black 5063	08/28	75	1243	3.33	11	0.2	3.3	*8*	*7*	*7*	*2*	*4*	105.1
450	4	ANGUS	PB	P	BLK	19861837	Deer Valley Unique 5635	09/06	90	1193	2.94	12	0.2	2.9	*3*	*6*	*9*	*8*	*2*	96.8
451	4	ANGUS	PB	P	BLK	19973268	ACC Ascension 7014	08/20	61	1335	3.38	13	0.3	3.4	*9*	*9*	*7*	*4*	*5*	108.1
453	4	ANGUS	PB	P	BLK	19861846	Thomas Up River 1614	09/23	84	1265	3.09	14	0.2	3.1	*4*	*10*	*9*	*9*	*2*	104.1
454	4	ANGUS	PB	P	BLK	19863919	Tehama Patriarch F028	08/27	76	1243	2.98	12	0.3	3.6	*4*	*7*	*10*	*4*	*7*	98.3
455	4	ANGUS	PB	P	BLK	19975755	Tehama Patriarch F028	08/18	69	1268	3.10	13	0.2	2.7	*5*	*7*	*3*	*9*	*1*	100.5
456	4	ANGUS	PB	P	BLK	19861840	Tehama Patriarch F028	09/02	86	1335	3.10	13	0.3	3	*5*	*10*	*6*	*7*	*2*	104.3
463	3	ANGUS	PB	P	BLK	19827079	FHCC Energize 8562	08/31	80	1260	3.58	13	0.3	5.5	*10*	*8*	*5*	*7*	*10*	110.7
471	3	ANGUS	PB	P	BLK	19827082	FHCC Energize 8562	09/09	83	1160	2.90	11	0.3	5.4	*3*	*4*	*7*	*2*	*10*	95.2
433	6	SIM-AN	63	P	BWF	3827695	SVF Buckle Up B58	05/08	80	1483	2.94	14	0.3	3.6	*3*	*5*	*1*	*6*	*10*	96.4
435	2	SIM-AN	63	P	BWF	3768863	TJ Frosty 318E	08/28	75	1093	3.08	9.5	0.1	2.5	*6*	*1*	*10*	*1*	*3*	97.1
436	2	SIM-AN	63	P	BLK	3885322	VSF United 6067D	09/29	78	1095	3.38	10	0.2	3	*9*	*6*	*7*	*2*	*9*	106.3
457	2	SIM-AN	50	P	BLK	3865783	Hooks Admiral 33A	09/08	70	1100	3.03	12	0.2	2.8	*5*	*3*	*10*	*4*	*7*	97.5
459	6	SIM-AN	75	P	BLK	3800176	KBHR High Road E283	09/12	78	1215	3.60	14	0.2	2.7	*10*	*9*	*4*	*8*	*6*	113.0
462	2	SIM-AN	50	P	BLK	3800175	Hooks Admiral 33A	09/12	78	1098	2.95	12	0.3	2.9	*4*	*4*	*4*	*3*	*8*	96.2

Pol/Scu/Hor: P = Polled; S = Scurred; H = Dehorned
Color: BLK = Black; BWF = Black-White Face; RED = Red; RWF = Red-White Face; WHT = White; GRY = Gray; BRN = Brown; SMK = Smoke

%Ret. Prod. = % Retail Product; % IM Fat = % Intramuscular Fat

Bulls' ranking is in 10% groups: *10* is the top 1-10%, *9* is 11-20%, and so on; *2* is 81-90%, *1* is 91-100% (bottom 10%).
For ADG, WPDA, SC, %Ret. Prod., and %IM Fat, bulls in this test are ranked within breed; for breeds with fewer than six bulls, ranking is based on all bulls in the test.

Owner: Jay & Jennifer Alcorn

Tag No.: **425** ANGUS (PB) Polled Black
Tattoo: 79 Born: 09/20/20 (S) Pen 5
Name: Alcorn Growth Fund 079 Reg. No. 19997323
Sire: Deer Valley Growth Fund
Dam's Sire: SAV Priority 7283

Verified to Sire and Dam

Performance Index 115.2

Birth Weight	78					Adj. REA	14.9	
Birth CE	UN	On Test Wt.	870			Adj. REA/cwt	1.05	
Dam Age	6	End Test Wt.	1318	Foot Angle	5	Adj. Rib Fat	0.24	
205-d Adj. Wt.	789	ADG	3.58 (115)	Claw Set	5	Adj. % IM Fat	3.43	(96)
205-d PCT	102	WPDA	3.61 (115)	Un Adj. SC	37	% Retail Product	67.8	(102)
205-d NO	2	Frame Score	6.0	Adj. 365-Day SC	37	Carcass Merit	99.0	

Genomic	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
EPDs &	0.7 (.52)	75.0 (.45)	134.0 (.39)	28.0 (.29)	10.0 (.35)	10.0 (.29)		68.0	82.0	111.0
Acc:	*7*	*9*	*10*	*8*	*9*	*7*		*7*	*10*	*10*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
9.0 (.35)	64.0 (.4)	0.24 (.36)	0.76 (.36)	-0.005 (.33)		36.0	147.0	259.0
2	*9*	*2*	*8*	*8*		*3*	*7*	*8*

Owner: Jay & Jennifer Alcorn

Tag No.: **427** ANGUS (PB) Polled Black
Tattoo: 58 Born: 09/11/20 (S) Pen 5
Name: Alcorn Growth Fund 058 Reg. No. 19997322
Sire: Deer Valley Growth Fund
Dam's Sire: EXAR Denver 2002B

Verified to Sire and Dam

Performance Index 109.1

Birth Weight	65					Adj. REA	13.1	
Birth CE	UN	On Test Wt.	862			Adj. REA/cwt	0.97	
Dam Age	4	End Test Wt.	1285	Foot Angle	5	Adj. Rib Fat	0.25	
205-d Adj. Wt.	763	ADG	3.38 (109)	Claw Set	6	Adj. % IM Fat	3.67	(103)
205-d PCT	98	WPDA	3.44 (110)	Un Adj. SC	35	% Retail Product	66.0	(99)
205-d NO	2	Frame Score	5.3	Adj. 365-Day SC	35	Carcass Merit	101.0	

Genomic	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
EPDs &	1.1 (.51)	77.0 (.43)	145.0 (.37)	35.0 (.28)	11.0 (.34)	15.0 (.28)		70.0	87.0	116.0
Acc:	*6*	*10*	*10*	*10*	*9*	*10*		*8*	*10*	*10*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
17.0 (.35)	66.0 (.39)	0.52 (.36)	0.75 (.36)	0.004 (.33)		47.0	163.0	281.0
5	*10*	*5*	*8*	*7*		*6*	*9*	*9*

Owner: Bennett Angus

Tag No.: **451** ANGUS (PB) Polled Black
Tattoo: B54 Born: 08/20/20 (S) Pen 4
Name: Bennetts Ascension B54 Reg. No. 19973268
Sire: ACC Ascension 7014
Dam's Sire: 3F Epic 4631

Verified to Sire and Dam

Performance Index 108.1

Birth Weight	61					Adj. REA	12.6	
Birth CE	UN	On Test Wt.	913			Adj. REA/cwt	0.98	
Dam Age	2	End Test Wt.	1335	Foot Angle	5	Adj. Rib Fat	0.25	
205-d Adj. Wt.	685	ADG	3.38 (108)	Claw Set	5	Adj. % IM Fat	3.42	(96)
205-d PCT	101	WPDA	3.37 (108)	Un Adj. SC	37	% Retail Product	65.9	(99)
205-d NO	17	Frame Score	5.2	Adj. 365-Day SC	36	Carcass Merit	97.5	

Genomic	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
EPDs &	0.3 (.53)	85.0 (.46)	153.0 (.36)	30.0 (.27)	10.0 (.36)	17.0 (.26)		60.0	95.0	120.0
Acc:	*8*	*10*	*10*	*9*	*9*	*10*		*5*	*10*	*10*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
2.0 (.33)	73.0 (.39)	0.85 (.35)	0.51 (.35)	0.021 (.33)		57.0	178.0	291.0
1	*10*	*8*	*4*	*4*		*8*	*10*	*10*

Owner: Small Cattle Farms

Tag No.: **463** ANGUS (PB) Polled Black
Tattoo: H40 Born: 08/31/20 (S) Pen 3
Name: SCF Energize H40 Reg. No. 19827079
Sire: FHCC Energize 8562
Dam's Sire: SydGen Black Pearl 5695

Verified to Sire and Dam

Performance Index 110.7

Birth Weight	80					Adj. REA	12.8	
Birth CE	UN	On Test Wt.	813			Adj. REA/cwt	1.03	
Dam Age	2	End Test Wt.	1260	Foot Angle	6	Adj. Rib Fat	0.25	
205-d Adj. Wt.	662	ADG	3.58 (115)	Claw Set	6	Adj. % IM Fat	5.45	(152)
205-d PCT	104	WPDA	3.27 (104)	Un Adj. SC	35	% Retail Product	66.5	(100)
205-d NO	24	Frame Score	5.3	Adj. 365-Day SC	34	Carcass Merit	126.3	

Genomic	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
EPDs &	-0.2 (.51)	51.0 (.43)	97.0 (.33)	34.0 (.26)	11.0 (.33)	10.0 (.24)		76.0	64.0	94.0
Acc:	*9*	*3*	*4*	*10*	*9*	*7*		*9*	*7*	*8*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
25.0 (.3)	46.0 (.38)	1.16 (.33)	0.94 (.34)	-0.002 (.31)		78.0	172.0	299.0
9	*6*	*10*	*10*	*7*		*10*	*10*	*10*

Owner: Halls Angus

Tag No.: **447** ANGUS (PB) Polled Black
Tattoo: H533 Born: 08/26/20 (S) Pen 4
Name: Hall's Jet Black 533 Reg. No. 19861836
Sire: Bar R Jet Black 5063
Dam's Sire: S summit 956

Verified to Sire and Dam

Performance Index 105.8

Birth Weight	84					Adj. REA	12.7	
Birth CE	UN	On Test Wt.	908			Adj. REA/cwt	1.04	
Dam Age	7	End Test Wt.	1315	Foot Angle	5	Adj. Rib Fat	0.23	
205-d Adj. Wt.	694	ADG	3.26 (105)	Claw Set	5	Adj. % IM Fat	3.93	(110)
205-d PCT	103	WPDA	3.37 (108)	Un Adj. SC	36	% Retail Product	66.8	(101)
205-d NO	17	Frame Score	5.4	Adj. 365-Day SC	35	Carcass Merit	105.3	

Genomic	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
EPDs &	1.6 (.54)	70.0 (.47)	117.0 (.38)	32.0 (.32)	8.0 (.35)	10.0 (.31)		80.0	83.0	106.0
Acc:	*5*	*9*	*8*	*9*	*7*	*7*		*10*	*10*	*9*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
12.0 (.35)	63.0 (.41)	0.72 (.37)	0.83 (.37)	0.047 (.34)		54.0	159.0	286.0
3	*9*	*7*	*9*	*3*		*8*	*9*	*10*

Owner: Jay & Jennifer Alcorn

Tag No.: **426** ANGUS (PB) Polled Black
Tattoo: 66 Born: 09/16/20 (S) Pen 5
Name: Alcorn Rainfall 066 Reg. No. 19997324
Sire: SAV Rainfall 6846
Dam's Sire: Connealy Legendary 644L

Verified to Sire and Dam

Performance Index 104.5

Birth Weight	67					Adj. REA	14.9	
Birth CE	UN	On Test Wt.	755			Adj. REA/cwt	1.16	
Dam Age	2	End Test Wt.	1170	Foot Angle	5	Adj. Rib Fat	0.23	
205-d Adj. Wt.	761	ADG	3.32 (107)	Claw Set	4	Adj. % IM Fat	3.55	(99)
205-d PCT	100	WPDA	3.17 (101)	Un Adj. SC	36	% Retail Product	68.9	(104)
205-d NO	0	Frame Score	4.1	Adj. 365-Day SC	36	Carcass Merit	101.5	

Genomic	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
EPDs &	-2.0 (.51)	66.0 (.43)	115.0 (.39)	31.0 (.31)	10.0 (.35)	6.0 (.31)		64.0	82.0	83.0
Acc:	*10*	*8*	*7*	*9*	*9*	*3*		*6*	*10*	*5*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
21.0 (.37)	41.0 (.41)	0.88 (.37)	1.01 (.37)	0.006 (.33)		66.0	149.0	257.0
7	*4*	*9*	*10*	*6*		*10*	*8*	*8*

Owner: Halls Angus

Tag No.: **456** ANGUS (PB) Polled Black
Tattoo: H535 Born: 09/02/20 (S) Pen 4
Name: Hall's Patriarch 535 Reg. No. 19861840
Sire: Tehama Patriarch F028
Dam's Sire: Connealy Uptown 098E

Verified to Sire and Dam

				Performance Index 104.3				
Birth Weight	86					Adj. REA	12.7	
Birth CE	UN	On Test Wt.	947			Adj. REA/cwt	1.06	
Dam Age	6	End Test Wt.	1335	Foot Angle	5	Adj. Rib Fat	0.3	
205-d Adj. Wt.	667	ADG	3.10 (100)	Claw Set	5	Adj. % IM Fat	2.99	(84)
205-d PCT	99	WPDA	3.49 (111)	Un Adj. SC	36	% Retail Product	66.2	(100)
205-d NO	17	Frame Score	6.0	Adj. 365-Day SC	35	Carcass Merit	91.7	

Genomic EPDs & Acc:	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
	-0.5 (.55)	85.0 (.47)	152.0 (.38)	33.0 (.3)	11.0 (.36)	15.0 (.27)		92.0	102.0	101.0
	9	*10*	*10*	*10*	*9*	*10*		*10*	*10*	*9*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
27.0 (.34)	62.0 (.41)	0.46 (.37)	1.02 (.37)	-0.001 (.34)		48.0	149.0	285.0
9	*9*	*4*	*10*	*7*		*6*	*8*	*10*

Owner: Saxe Farm

Tag No.: **459** SIM-AN (75% Simmental 25% Angus) Polled Black
Tattoo: H026 Born: 09/12/20 (S) Pen 6
Name: SF High Road H026 Reg. No. 3800176
Sire: KBHR High Road E283
Dam's Sire: Hook's Xavier 14X

Verified to Sire and Dam

				Performance Index 113.0				
Birth Weight	78					Adj. REA	14.3	
Birth CE	UN	On Test Wt.	765			Adj. REA/cwt	1.08	
Dam Age	4	End Test Wt.	1215	Foot Angle	5	Adj. Rib Fat	0.18	
205-d Adj. Wt.	703	ADG	3.60 (117)	Claw Set	6	Adj. % IM Fat	2.73	(100)
205-d PCT	109	WPDA	3.26 (107)	Un Adj. SC	33	% Retail Product	68.4	(102)
205-d NO	8	Frame Score	5.0	Adj. 365-Day SC	33	Carcass Merit	100.6	

Genomic EPDs & PC:	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:
	1.9 (±1.53	100.0 (±8.64	152.2 (±13.3	28.1 (±9.88	9.5 (±4.3)	6.7 (±6)	
	3	*10*	*10*	*10*	*2*	*6*	

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	Yield Grade	API	TI
14.1 (±3.2	46.3 (±10.)	0.42 (±.14)	1.13 (±.22)	-0.039 (±.02)	-0.31 (±.12)	144.50	94.00
8	*9*	*8*	*10*	*4*	*8*	*8*	*10*

Owner: Neal Brothers Simmentals

Tag No.: **436** SIM-AN (5/8 Simmental 3/8 Angus) Polled Black
Tattoo: 129H Born: 09/29/20 (ET) Pen 2
Name: Reg. No. 3885322
Sire: VSF United 6067D
Dam's Sire:

Verified to Sire and Dam

				Performance Index 106.3				
Birth Weight	78					Adj. REA	10.5	
Birth CE	UN	On Test Wt.	673			Adj. REA/cwt	0.89	
Dam Age		End Test Wt.	1095	Foot Angle	5	Adj. Rib Fat	0.23	
205-d Adj. Wt.	608	ADG	3.38 (110)	Claw Set	5	Adj. % IM Fat	2.96	(108)
205-d PCT	100	WPDA	3.08 (101)	Un Adj. SC	34	% Retail Product	64.4	(96)
205-d NO	1	Frame Score	5.1	Adj. 365-Day SC	34	Carcass Merit	101.8	

Genomic EPDs & PC:	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:
	1.2 (±1.8)	86.0 (±9.9)	137.8 (±15.7	24.3 (±10.6	12.8 (±4.8)	6.8 (±6.4)	
	4	*9*	*10*	*7*	*6*	*6*	

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	Yield Grade	API	TI
7.3 (±3.4	35.7 (±11.)	0.41 (±.16)	0.17 (±.25)	-0.005 (±.03)	0.04 (±.13)	149.20	85.00
1	*7*	*8*	*1*	*1*	*1*	*9*	*9*

Owner: Underwood Angus Farms

Tag No.: **441** ANGUS (PB) Polled Black
Tattoo: 48 Born: 09/01/20 (S) Pen 5
Name: Underwood Beast Mode 048 Reg. No. 20112581
Sire: KB-Beastmode of B0101 F52
Dam's Sire: Kiata New Design 3860

Verified to Sire and Dam

Performance Index 110.1

Birth Weight	60					Adj. REA	11.3	
Birth CE	UN	On Test Wt.	696			Adj. REA/cwt	0.88	
Dam Age	3	End Test Wt.	1160	Foot Angle	5	Adj. Rib Fat	0.27	
205-d Adj. Wt.	662	ADG	3.71 (119)	Claw Set	6	Adj. % IM Fat	4.28	(120)
205-d PCT	102	WPDA	3.02 (96)	Un Adj. SC	34	% Retail Product	64.1	(97)
205-d NO	4	Frame Score	5.8	Adj. 365-Day SC	33	Carcass Merit	108.1	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	0.4 (.51)	73.0 (.42)	127.0 (.32)	36.0 (.26)	8.0 (.3)	11.0 (.23)		78.0	91.0	91.0
Acc:	*8*	*9*	*9*	*10*	*7*	*8*		*9*	*10*	*7*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
28.0 (.29)	54.0 (.37)	1.12 (.33)	0.61 (.33)	0.054 (.3)		68.0	158.0	283.0
10	*8*	*10*	*6*	*3*		*10*	*9*	*10*

Owner: Halls Angus

Tag No.: **455** ANGUS (PB) Polled Black
Tattoo: H532 Born: 08/18/20 (S) Pen 4
Name: Hall's Patriarch 532 Reg. No. 19975755
Sire: Tehama Patriarch F028
Dam's Sire: KM Roken Bow 002

Verified to Sire and Dam

Performance Index 100.5

Birth Weight	69					Adj. REA	13.4	
Birth CE	UN	On Test Wt.	880			Adj. REA/cwt	1.16	
Dam Age	2	End Test Wt.	1268	Foot Angle	5	Adj. Rib Fat	0.2	
205-d Adj. Wt.	637	ADG	3.10 (100)	Claw Set	5	Adj. % IM Fat	2.73	(76)
205-d PCT	94	WPDA	3.19 (102)	Un Adj. SC	34	% Retail Product	68.4	(103)
205-d NO	17	Frame Score	4.9	Adj. 365-Day SC	33	Carcass Merit	89.7	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	-2.2 (.52)	76.0 (.45)	131.0 (.36)	22.0 (.27)	10.0 (.36)	12.0 (.25)		74.0	81.0	90.0
Acc:	*10*	*10*	*9*	*3*	*9*	*9*		*9*	*10*	*7*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
19.0 (.31)	50.0 (.39)	0.70 (.35)	1.01 (.35)	-0.003 (.32)		59.0	149.0	267.0
6	*7*	*7*	*10*	*8*		*9*	*8*	*9*

Owner: Bennett Angus

Tag No.: **449** ANGUS (PB) Polled Black
Tattoo: B56 Born: 08/28/20 (S) Pen 4
Name: Bennetts MP Jet Black B56 Reg. No. 19860588
Sire: Bar R Jet Black 5063
Dam's Sire: SydGen Black Pearl 2006

Verified to Sire and Dam

Performance Index 105.1

Birth Weight	75					Adj. REA	11.4	
Birth CE	UN	On Test Wt.	827			Adj. REA/cwt	0.96	
Dam Age	3	End Test Wt.	1243	Foot Angle	5	Adj. Rib Fat	0.23	
205-d Adj. Wt.	615	ADG	3.33 (107)	Claw Set	5	Adj. % IM Fat	3.25	(91)
205-d PCT	91	WPDA	3.20 (102)	Un Adj. SC	37	% Retail Product	65.4	(99)
205-d NO	17	Frame Score	5.9	Adj. 365-Day SC	36	Carcass Merit	94.7	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	1.4 (.54)	70.0 (.46)	122.0 (.38)	24.0 (.31)	5.0 (.35)	6.0 (.31)		75.0	73.0	97.0
Acc:	*5*	*9*	*8*	*5*	*4*	*3*		*9*	*9*	*8*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
18.0 (.35)	55.0 (.41)	0.74 (.38)	0.83 (.37)	0.008 (.35)		58.0	155.0	276.0
6	*8*	*7*	*9*	*6*		*9*	*8*	*9*

Owner: Mickey Angus

Tag No.: **439** ANGUS (PB) Polled Black
Tattoo: X16 Born: 09/01/20 (S) Pen 5
Name: Mickey Hawkeye X16 Reg. No. 19875588
Sire: Hoover Hawkeye
Dam's Sire: Connealy Direct Deposit

Verified to Sire and Dam

Performance Index 105.0

Birth Weight	85					Adj. REA	12.4	
Birth CE	UN	On Test Wt.	875			Adj. REA/cwt	0.97	
Dam Age	6	End Test Wt.	1280	Foot Angle	5	Adj. Rib Fat	0.26	
205-d Adj. Wt.	711	ADG	3.24 (104)	Claw Set	6	Adj. % IM Fat	3.41	(95)
205-d PCT	103	WPDA	3.33 (106)	Un Adj. SC	35	% Retail Product	65.7	(99)
205-d NO	10	Frame Score	6.1	Adj. 365-Day SC	34	Carcass Merit	97.1	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs & Acc:	3.0 (.54) *2*	69.0 (.46) *8*	115.0 (.38) *7*	26.0 (.33) *6*	5.0 (.34) *4*	11.0 (.3) *8*		75.0 *9*	69.0 *8*	84.0 *6*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	$ Indexes:	$G	$B	$C
28.0 (.37) *10*	48.0 (.4) *6*	0.44 (.37) *4*	0.49 (.36) *4*	0.023 (.33) *4*		39.0 *4*	123.0 *4*	235.0 *5*

Owner: Halls Angus

Tag No.: **454** ANGUS (PB) Polled Black
Tattoo: H534 Born: 08/27/20 (S) Pen 4
Name: Hall's Patriarch 534 Reg. No. 19863919
Sire: Tehama Patriarch F028
Dam's Sire: KCF Bennett Southside

Verified to Sire and Dam

Performance Index 98.3

Birth Weight	76					Adj. REA	11.8	
Birth CE	UN	On Test Wt.	870			Adj. REA/cwt	1.00	
Dam Age	4	End Test Wt.	1243	Foot Angle	5	Adj. Rib Fat	0.25	
205-d Adj. Wt.	665	ADG	2.98 (96)	Claw Set	6	Adj. % IM Fat	3.55	(99)
205-d PCT	98	WPDA	3.20 (102)	Un Adj. SC	42	% Retail Product	65.8	(99)
205-d NO	17	Frame Score	6.1	Adj. 365-Day SC	41	Carcass Merit	99.2	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs & Acc:	-0.5 (.53) *9*	68.0 (.46) *8*	124.0 (.37) *9*	25.0 (.28) *5*	9.0 (.35) *8*	11.0 (.26) *8*		77.0 *9*	73.0 *9*	98.0 *8*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	$ Indexes:	$G	$B	$C
34.0 (.32) *10*	50.0 (.39) *7*	0.86 (.35) *9*	0.69 (.36) *7*	0.041 (.33) *3*		58.0 *9*	157.0 *9*	281.0 *9*

Owner: Saxe Farm

Tag No.: **462** SIM-AN (50% Simmental 50% Angus) Polled Black
Tattoo: H025 Born: 09/12/20 (S) Pen 2
Name: SF Admiral Easy H025 Reg. No. 3800175
Sire: Hooks Admiral 33A
Dam's Sire: GCCR Easy Answer Y108

Verified to Sire and Dam

Performance Index 96.2

Birth Weight	78					Adj. REA	12.4	
Birth CE	UN	On Test Wt.	729			Adj. REA/cwt	1.11	
Dam Age	6	End Test Wt.	1098	Foot Angle	5	Adj. Rib Fat	0.28	
205-d Adj. Wt.	634	ADG	2.95 (96)	Claw Set	5	Adj. % IM Fat	2.92	(107)
205-d PCT	98	WPDA	2.94 (97)	Un Adj. SC	33	% Retail Product	66.7	(99)
205-d NO	8	Frame Score	4.8	Adj. 365-Day SC	33	Carcass Merit	102.8	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:
Genomic EPDs & PC:	16.2 (±4.52 *1*	80.1 (±8.8) *8*	118.8 (±13.8 *6*	13.3 (±9.52 *1*	16.2 (±4.5) *10*	11.6 (±6) *10*	

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	Yield Grade	$ Indexes:	API	TI
15.4 (±3.2 *10*	46.3 (±10.) *9*	0.45 (±.14) *8*	0.85 (±.23) *9*	-0.004 (±.02) *1*	-0.13 (±.12) *3*		153.50 *9*	84.40 *9*

Owner: Stewart Select Angus LLC

Tag No.: **438** ANGUS (PB) Polled Black
Tattoo: H227 Born: 07/09/20 (S) Pen 6
Name: SS Mainstay H227 Reg. No. 19816148
Sire: Connealy Mainstay
Dam's Sire: SS Biggie D5

Verified to Sire and Dam

Performance Index 104.5

Birth Weight	86					Adj. REA	11.5	
Birth CE	UN	On Test Wt.	830			Adj. REA/cwt	0.97	
Dam Age	2	End Test Wt.	1268	Foot Angle	5	Adj. Rib Fat	0.22	
205-d Adj. Wt.	598	ADG	3.50 (113)	Claw Set	7	Adj. % IM Fat	3.65	(102)
205-d PCT	95	WPDA	2.89 (92)	Un Adj. SC	34	% Retail Product	65.6	(99)
205-d NO	3	Frame Score	4.9	Adj. 365-Day SC	31	Carcass Merit	100.5	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	-0.8 (.53)	52.0 (.45)	109.0 (.39)	31.0 (.30)	11.0 (.35)	8.0 (.29)		57.0	59.0	98.0
Acc:	*9*	*3*	*6*	*9*	*9*	*5*		*4*	*5*	*8*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
25.0 (.37)	40.0 (.40)	0.67 (.36)	0.42 (.36)	0.025 (.33)		48.0	146.0	246.0
9	*4*	*7*	*3*	*4*		*6*	*7*	*7*

Owner: Underwood Angus Farms / Neil

Tag No.: **443** ANGUS (PB) Polled Black
Tattoo: 50 Born: 09/09/20 (S) Pen 5
Name: UAF Growth Fund Reg. No. 20094366
Sire: Deer Valley Growth Fund
Dam's Sire: VAR Discovery 2240

Verified to Sire and Dam

Performance Index 99.6

Birth Weight	54					Adj. REA	10.8	
Birth CE	UN	On Test Wt.	617			Adj. REA/cwt	0.93	
Dam Age	2	End Test Wt.	1035	Foot Angle	5	Adj. Rib Fat	0.23	
205-d Adj. Wt.	594	ADG	3.34 (107)	Claw Set	5	Adj. % IM Fat	3.24	(91)
205-d PCT	100	WPDA	2.75 (88)	Un Adj. SC	34	% Retail Product	64.9	(98)
205-d NO	1	Frame Score	4.8	Adj. 365-Day SC	34	Carcass Merit	94.2	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	0.3 (.55)	81.0 (.47)	149.0 (.42)	39.0 (.33)	9.0 (.38)	14.0 (.32)		77.0	98.0	122.0
Acc:	*8*	*10*	*10*	*10*	*8*	*10*		*9*	*10*	*10*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
24.0 (.41)	72.0 (.43)	0.88 (.39)	0.51 (.39)	0.047 (.35)		57.0	179.0	309.0
9	*10*	*9*	*4*	*3*		*8*	*10*	*10*

Owner: Halls Angus

Tag No.: **453** ANGUS (PB) Polled Black
Tattoo: H542 Born: 09/23/20 (S) Pen 4
Name: Hall's Up River 542 Reg. No. 19861846
Sire: Thomas Up River 1614
Dam's Sire: Barstow Bankroll B73

Verified to Sire and Dam

Performance Index 104.1

Birth Weight	84					Adj. REA	13.5	
Birth CE	UN	On Test Wt.	879			Adj. REA/cwt	1.07	
Dam Age	4	End Test Wt.	1265	Foot Angle	5	Adj. Rib Fat	0.19	
205-d Adj. Wt.	724	ADG	3.09 (99)	Claw Set	5	Adj. % IM Fat	3.07	(86)
205-d PCT	107	WPDA	3.49 (112)	Un Adj. SC	38	% Retail Product	67.8	(102)
205-d NO	17	Frame Score	5.5	Adj. 365-Day SC	38	Carcass Merit	94.0	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	1.0 (.54)	76.0 (.47)	134.0 (.38)	28.0 (.33)	3.0 (.35)	3.0 (.31)		69.0	81.0	101.0
Acc:	*6*	*10*	*10*	*8*	*3*	*1*		*7*	*10*	*9*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
19.0 (.35)	62.0 (.42)	0.48 (.38)	0.93 (.38)	-0.022 (.35)		50.0	150.0	264.0
6	*9*	*4*	*10*	*9*		*7*	*8*	*8*

Owner: Mickey Angus

Tag No.: **440** ANGUS (PB) Polled Black
Tattoo: X17 Born: 09/02/20 (S) Pen 5
Name: Mickey Hawkeye X17 Reg. No. 19884112
Sire: Hoover Hawkeye
Dam's Sire: Basin Excitement

Verified to Sire and Dam

Performance Index
100.0

Birth Weight	85					Adj. REA	13.3	
Birth CE	UN	On Test Wt.	821			Adj. REA/cwt	1.11	
Dam Age	7	End Test Wt.	1208	Foot Angle	5	Adj. Rib Fat	0.13	
205-d Adj. Wt.	689	ADG	3.10 (99)	Claw Set	6	Adj. % IM Fat	3.44	(96)
205-d PCT	99	WPDA	3.15 (101)	Un Adj. SC	34	% Retail Product	68.6	(103)
205-d NO	10	Frame Score	5.0	Adj. 365-Day SC	33	Carcass Merit	99.8	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	1.1 (.52)	62.0 (.45)	103.0 (.37)	35.0 (.32)	7.0 (.33)	10.0 (.29)		96.0	83.0	86.0
Acc:	*6*	*7*	*5*	*10*	*6*	*7*		*10*	*10*	*6*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
33.0 (.35)	45.0 (.39)	0.28 (.35)	1.06 (.35)	0.001 (.32)		41.0	127.0	261.0
10	*5*	*2*	*10*	*7*		*4*	*4*	*8*

Owner: Halls Angus

Tag No.: **448** ANGUS (PB) Polled Black
Tattoo: H538 Born: 09/13/20 (S) Pen 4
Name: Hall's Jet Black 538 Reg. No. 19861849
Sire: Bar R Jet Black 5063
Dam's Sire: S Summit 956

Verified to Sire and Dam

Performance Index
99.6

Birth Weight	88					Adj. REA	11.8	
Birth CE	UN	On Test Wt.	825			Adj. REA/cwt	0.98	
Dam Age	3	End Test Wt.	1203	Foot Angle	5	Adj. Rib Fat	0.18	
205-d Adj. Wt.	690	ADG	3.02 (97)	Claw Set	6	Adj. % IM Fat	3.24	(91)
205-d PCT	102	WPDA	3.23 (103)	Un Adj. SC	36	% Retail Product	66.2	(100)
205-d NO	17	Frame Score	6.7	Adj. 365-Day SC	36	Carcass Merit	95.2	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	1.3 (.55)	67.0 (.48)	113.0 (.39)	34.0 (.33)	9.0 (.37)	10.0 (.32)		49.0	82.0	104.0
Acc:	*5*	*8*	*7*	*10*	*8*	*7*		*2*	*10*	*9*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
31.0 (.37)	59.0 (.43)	0.56 (.39)	0.41 (.38)	0.071 (.36)		39.0	144.0	236.0
10	*9*	*5*	*3*	*3*		*4*	*7*	*6*

Owner: Underwood Angus Farms/ Aust

Tag No.: **442** ANGUS (PB) Polled Black
Tattoo: 54 Born: 09/30/20 (S) Pen 5
Name: Underwood Beast Mode 054 Reg. No. 20112578
Sire: KB-Beastmode of B0101 F52
Dam's Sire: Connealy Black Granite

Verified to Sire and Dam

Performance Index
99.9

Birth Weight	61					Adj. REA	10.5	
Birth CE	UN	On Test Wt.	706			Adj. REA/cwt	0.89	
Dam Age	5	End Test Wt.	1098	Foot Angle	6	Adj. Rib Fat	0.22	
205-d Adj. Wt.	676	ADG	3.14 (101)	Claw Set	5	Adj. % IM Fat	2.87	(80)
205-d PCT	104	WPDA	3.09 (99)	Un Adj. SC	40	% Retail Product	64.4	(97)
205-d NO	4	Frame Score	5.0	Adj. 365-Day SC	40	Carcass Merit	88.7	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs &	1.3 (.55)	84.0 (.46)	146.0 (.37)	33.0 (.31)	9.0 (.34)	14.0 (.29)		76.0	99.0	96.0
Acc:	*5*	*10*	*10*	*10*	*8*	*10*		*9*	*10*	*8*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
17.0 (.34)	59.0 (.42)	0.64 (.38)	0.46 (.37)	0.042 (.35)		46.0	142.0	260.0
5	*9*	*6*	*4*	*3*		*6*	*7*	*8*

Owner: Underwood Angus Farms

Tag No.: **444** ANGUS (PB) Polled Black
Tattoo: 52 Born: 09/30/20 (S) Pen 5
Name: Underwood Beast Mode 052 Reg. No. 20112579
Sire: KB-Beastmode of B0101 F52
Dam's Sire: SS Niagra Z29

Verified to Sire and Dam

Performance Index 105.6

Birth Weight	59					Adj. REA	11.1	
Birth CE	UN	On Test Wt.	672			Adj. REA/cwt	0.89	
Dam Age	6	End Test Wt.	1100	Foot Angle	5	Adj. Rib Fat	0.21	
205-d Adj. Wt.	701	ADG	3.42 (110)	Claw Set	7	Adj. % IM Fat	3.22	(90)
205-d PCT	108	WPDA	3.10 (99)	Un Adj. SC	35	% Retail Product	64.8	(98)
205-d NO	4	Frame Score	5.4	Adj. 365-Day SC	35	Carcass Merit	93.8	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs & Acc:	3.3 (.55) *2*	92.0 (.46) *10*	160.0 (.36) *10*	20.0 (.3) *2*	2.0 (.33) *2*	9.0 (.28) *6*		55.0 *4*	80.0 *10*	111.0 *10*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
27.0 (.34) *9*	71.0 (.41) *10*	0.52 (.37) *5*	0.94 (.37) *10*	0.027 (.34) *3*		48.0 *6*	159.0 *9*	261.0 *8*

Owner: Neal Brothers Simmentals

Tag No.: **433** SIM-AN (5/8 Simmental 3/8 Angus) Polled Black-WF
Tattoo: 1H Born: 05/08/20 (S) Pen 6
Name: 1H Reg. No. 3827695
Sire: SVF Buckle Up B58
Dam's Sire: Rito Tremendous 0V42

Verified to Sire and Dam

Performance Index 96.4

Birth Weight	80					Adj. REA	13.9	
Birth CE	UN	On Test Wt.	1115			Adj. REA/cwt	1.24	
Dam Age	9	End Test Wt.	1483	Foot Angle	5	Adj. Rib Fat	0.33	
205-d Adj. Wt.	584	ADG	2.94 (96)	Claw Set	5	Adj. % IM Fat	3.61	(132)
205-d PCT	97	WPDA	2.97 (97)	Un Adj. SC	36	% Retail Product	68.0	(101)
205-d NO	5	Frame Score	4.1	Adj. 365-Day SC	29	Carcass Merit	116.4	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:		
Genomic EPDs & PC:	0.8 (±1.65 *5*	75.9 (±9.62 *6*	114.1 (±15.2 *5*	20.6 (±10.4 *4*	13.1 (±4.7) *7*	4.6 (±6.3) *2*			

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	Yield Grade		API	TI
18.2 (±3.2 *10*	42.4 (±10.) *9*	0.40 (±.16) *8*	0.61 (±.25) *5*	-0.041 (±.02) *6*	-0.16 (±.13) *4*		136.70 *7*	79.10 *6*

Owner: Halls Angus

Tag No.: **450** ANGUS (PB) Polled Black
Tattoo: H537 Born: 09/06/20 (S) Pen 4
Name: Hall's Unique 537 Reg. No. 19861837
Sire: Deer Valley Unique 5635
Dam's Sire: Haynes Sterling 924

Verified to Sire and Dam

Performance Index 96.8

Birth Weight	90					Adj. REA	11.7	
Birth CE	UN	On Test Wt.	826			Adj. REA/cwt	1.05	
Dam Age	7	End Test Wt.	1193	Foot Angle	6	Adj. Rib Fat	0.16	
205-d Adj. Wt.	647	ADG	2.94 (94)	Claw Set	4	Adj. % IM Fat	2.9	(81)
205-d PCT	96	WPDA	3.15 (100)	Un Adj. SC	39	% Retail Product	67.0	(101)
205-d NO	17	Frame Score	5.8	Adj. 365-Day SC	38	Carcass Merit	91.0	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs & Acc:	-0.1 (.55) *8*	46.0 (.48) *2*	83.0 (.38) *2*	22.0 (.32) *3*	12.0 (.36) *10*	8.0 (.3) *5*		70.0 *8*	48.0 *3*	69.0 *2*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
12.0 (.36) *3*	24.0 (.42) *1*	0.72 (.39) *7*	0.64 (.38) *6*	-0.004 (.36) *8*		55.0 *8*	124.0 *4*	231.0 *5*

Owner: Small Cattle Farms

Tag No.: **471** ANGUS (PB) Polled Black
Tattoo: H43 Born: 09/09/20 (S) Pen 3
Name: SCF Engergize H43 Reg. No. 19827082
Sire: FHCC Energize 8562
Dam's Sire: SyGen Straight Up 6921

Verified to Sire and Dam

Performance Index 95.2

Birth Weight	83					Adj. REA	11	
Birth CE	UN	On Test Wt.	798			Adj. REA/cwt	0.96	
Dam Age	2	End Test Wt.	1160	Foot Angle	5	Adj. Rib Fat	0.26	
205-d Adj. Wt.	683	ADG	2.90 (93)	Claw Set	6	Adj. % IM Fat	5.44	(152)
205-d PCT	107	WPDA	3.09 (98)	Un Adj. SC	36	% Retail Product	65.0	(98)
205-d NO	24	Frame Score	4.7	Adj. 365-Day SC	36	Carcass Merit	125.0	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs & Acc:	1.4 (.51) *5*	54.0 (.43) *4*	95.0 (.33) *4*	29.0 (.25) *8*	10.0 (.32) *9*	9.0 (.23) *6*		84.0 *10*	63.0 *6*	80.0 *5*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
29.0 (.29) *10*	43.0 (.37) *5*	1.39 (.33) *10*	0.51 (.33) *4*	0.016 (.3) *5*		81.0 *10*	162.0 *9*	294.0 *10*

Owner: Crisp Farm

Tag No.: **457** SIM-AN (50% Simmental 50% Angus) Polled Black
Tattoo: H110 Born: 09/08/20 (S) Pen 2
Name: JCFF Admiral Frontier H110 Reg. No. 3865783
Sire: Hooks Admiral 33A
Dam's Sire: CCR Frontier 0053Z

Verified to Sire and Dam

Performance Index 97.5

Birth Weight	70					Adj. REA	12	
Birth CE	UN	On Test Wt.	721			Adj. REA/cwt	1.09	
Dam Age	3	End Test Wt.	1100	Foot Angle	5	Adj. Rib Fat	0.23	
205-d Adj. Wt.	592	ADG	3.03 (99)	Claw Set	5	Adj. % IM Fat	2.78	(102)
205-d PCT	100	WPDA	2.92 (96)	Un Adj. SC	36	% Retail Product	66.9	(99)
205-d NO	1	Frame Score	4.6	Adj. 365-Day SC	35	Carcass Merit	100.4	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:
Genomic EPDs & PC:	0.8 (±1.71 *5*	82.4 (±9.45 *8*	128.7 (±14.9 *8*	19.7 (±9.76 *3*	10.7 (±4.6) *4*	8.3 (±6) *8*	

Docility	Carcass Wt	Marbling	Ribeye Area	Fat	Yield Grade	API	TI
11.4 (±3.1 *5*	29.3 (±10.) *5*	0.46 (±.14) *8*	0.61 (±.23) *5*	0.002 (±.02) *1*	-0.10 (±.13) *2*	144.30 *8*	84.10 *8*

Owner: Willer Timber Ridge

Tag No.: **428** ANGUS (PB) Polled Black
Tattoo: 91 Born: 06/20/20 (S) Pen 6
Name: WTR 731-654 Niagra 091 Reg. No. 19767268
Sire: WTR 654 Niagara 858
Dam's Sire: Basin Payweight 1682

Verified to Sire and Dam

Performance Index 99.2

Birth Weight	78					Adj. REA	12.1	
Birth CE	UN	On Test Wt.	1138			Adj. REA/cwt	0.90	
Dam Age	4	End Test Wt.	1508	Foot Angle	5	Adj. Rib Fat	0.3	
205-d Adj. Wt.	840	ADG	2.96 (95)	Claw Set	5	Adj. % IM Fat	4.26	(119)
205-d PCT	100	WPDA	3.30 (105)	Un Adj. SC	37	% Retail Product	64.4	(97)
205-d NO	1	Frame Score	5.4	Adj. 365-Day SC	34	Carcass Merit	108.0	

	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:	$M	$W	$F
Genomic EPDs & Acc:	3.8 (.48) *1*	63.0 (.4) *7*	122.0 (.35) *8*	27.0 (.28) *7*	-5.0 (.31) *1*	2.0 (.27) *1*		45.0 *2*	54.0 *4*	100.0 *9*

Docility	Carcass Wt	Marbling	Ribeye Area	Fat		$G	$B	$C
35.0 (.31) *10*	53.0 (.38) *8*	0.60 (.34) *6*	0.68 (.34) *7*	0.018 (.3) *5*		49.0 *7*	148.0 *8*	237.0 *6*

Owner: Neal Brothers Simmentals

Tag No.: 435 SIM-AN (5/8 Simmental 3/8 Angus) Polled Black-WF
Tattoo: 31H Born: 08/28/20 (S) Pen 2
Name: Bush Frosty 31H Reg. No. 3768863
Sire: TJ Frosty 318E
Dam's Sire: CCR Payweight 0327C

Verified to Sire and Dam

Performance Index 97.1

Birth Weight	75					Adj. REA	9.48	
Birth CE	UN	On Test Wt.	708			Adj. REA/cwt	0.80	
Dam Age	2	End Test Wt.	1093	Foot Angle	5	Adj. Rib Fat	0.14	
205-d Adj. Wt.	639	ADG	3.08 (100)	Claw Set	5	Adj. % IM Fat	2.45	(89)
205-d PCT	100	WPDA	2.82 (93)	Un Adj. SC	36	% Retail Product	64.0	(95)
205-d NO	1	Frame Score	5.3	Adj. 365-Day SC	35	Carcass Merit	92.3	

Genomic EPDs & PC:	Birth Wt	Wean Wt	Year Wt	Mat Milk	Direct CE	Mat CE	$ Indexes:		
	1.9 (±1.56	91.0 (±9.45	131.0 (±14.9	22.7 (±10.7	10.5 (±4.4)	4.1 (±6.2)			
	3	*10*	*9*	*6*	*3*	*2*			
Docility	Carcass Wt	Marbling	Ribeye Area	Fat	Yield Grade		API	TI	
15.6 (±3.2	47.1 (±10.)	0.21 (±.15)	0.47 (±.25)	-0.040 (±.03)	-0.09 (±.13)		133.70	81.20	
10	*9*	*4*	*3*	*6*	*2*		*6*	*7*	

IBEP HALL OF FAME
Highest Performance-Indexing Sale Eligible Individual (12,115 Tested)

Test	Breed (%)	ADG	WPDA	Perf. Index	Owner & Address
75	Angus	5.24	3.97	126.3	Bill Washburn, Olney, IL
76	Angus	4.89	3.92	128.1	Kiata Farms, Hamilton, OH
77	Simmental	4.93	4.09	126.1	Eggersman Brothers, Brownstown
78	Angus	4.56	3.81	119.5	Willer Timber Ridge, Greencastle
79	Angus	5.50	3.51	127.7	Dan Stewart, Yorktown
80	Simmental	4.92	3.89	130.0	B&K Cattle, Crandon, WI
81	Angus	4.72	3.96	121.7	Bill Washburn, Olney, IL
82	SimAngus (50)	3.92	2.95	119.2	Fairfield Farms, Cox's Creek, KY
83	Angus	5.08	3.54	131.4	Rolling Acres Angus, Freetown
84	Angus	3.79	3.32	120.1	Halls Angus, Eddyville, IL
85	Angus	4.82	3.49	124.1	Infinity Cattle Company LLC, Ferdinand
86	Angus	3.58	3.57	120.4	Halls Angus, Eddyville, IL
87	Angus	4.66	3.45	120.2	Voogt Farms, Marne, MI
88	Angus	3.58	3.61	115.2	Jay & Jennifer Alcorn, Greencastle, IN

Highest Sale-Indexing Bull

Test	Breed (%)	ADG	WPDA	Sale Index	Owner & Address
75	Angus	4.39	3.76	62/70	Kohli Farms, Circleville, OH
76	Angus	4.19	3.56	69/70	Powell Farms, Worthington
77	Angus	4.86	3.81	60/70	Kohli Farms, Circleville, OH
78	Angus	3.77	3.69	63/70	Kiata Farms, Hamilton, OH
79	Angus	4.77	3.76	91.0/100	Kiata Farms, Hamilton, OH
80	Angus	4.21	3.53	81.8/100	Kiata Farms, Hamilton, OH
81	SimAngus (63)	5.02	3.85	95.8/100	Neal Brothers Simmentals, Bicknell
82	Angus	3.92	3.42	96.3/100	Halls Angus Farm, Eddyville, IL
83	Angus	4.13	3.34	86.8/100	KB Angus, Merritt, MI
84	Hereford	2.88	2.95	88.3/100	Greives Herefords, West Lafayette
85	Angus	4.26	3.37	90.8/100	Stewart Select Angus LLC, Greensburg
86	Angus	3.58	3.57	81.0/100	Halls Angus, Eddyville, IL
87	Angus	4.34	3.31	92.8/100	KB Angus, Merritt, MI
88	Angus	3.58	3.61	91.3/100	Jay & Jennifer Alcorn, Greencastle, IN

IBEP HALL OF FAME
Highest-Indexing Get-of-Sire (1,340 Tested)

Test	Breed	ADG	WPDA	Perf. Index	Owner & Address
68	SimAngus Sire: ALC Big Eye D09N	4.12	3.59	104.0	Saxe Farm, Thompsonville, IL
69	SimAngus Sire: Mr NLC Upgrade U8676	4.79	3.73	112.5	Bill Washburn, Olney, IL
70	Angus Sire: CRA Bextor 872 5205 608	4.51	3.75	109.6	Kiata Farms, Hamilton, OH
71	SimAngus Sire: Mr NLC Upgrade U8676	4.05	3.70	107.7	Bill Washburn, Olney, IL
72	SimAngus Sire: ALC Big Eye D09N	4.61	3.91	116.1	Saxe Farm, Thompsonville, IL
73	Angus Sire: Connealy Confidence 0100	4.86	3.63	122.3	Bill Washburn, Olney, IL
74	Angus Sire: Home Acres CC&7 7118	4.58	3.26	108.4	Home Acres Farm Inc., Lebanon, OH
75	Angus Sire: SS Niagara Z29	4.71	3.69	115.0	Stewart Select Angus, Greensburg
76	Angus Sire: Deer Valley All In	3.89	3.48	106.4	Brown Family Farms, Norman and Kiata Farms, Hamilton, OH
77	Angus Sire: SS Niagara Z29	4.71	3.80	113.7	Stewart Select Angus, Greensburg
78	Angus Sire: Home Acres CC&7 7118	4.52	3.01	109.0	Home Acres Farm Inc., Lebanon, OH
79	Angus Sire: SS Niagara Z29	4.53	3.68	114.7	Rolling Acres Angus, Freetown Snider-Clayton Farms, Goshen and Underwood Angus Farms, N. Manchester
80	Angus Sire: RB Tour of Duty 177	3.99	3.21	104.5	Dolph Angus, Walkerton and Snider-Clayton Farm, Goshen
81	Angus Sire: SS Niagara C2	4.13	3.61	108.1	Rolling Acres Angus, Freetown
82	Angus Sire: GAR Sure Fire	3.27	2.83	97.9	Keene Farms, Harrisburg, IL
83	Angus Sire: SAV Pedigree 4834	4.17	3.12	110.6	Wynn's Angus Farm, Ashland, OH
84	Angus Sire: Baldridge 38 Special	3.55	3.12	112.4	Mickey Angus, Pana, IL
85	Angus Sire: SS Niagara Z29	4.45	3.33	116.1	Underwood Angus Farms, N. Manchester
86	Angus Sire: KCF Bennett Fortress	3.24	3.30	109.8	Bennett Angus, Eddyville, IL and Halls Angus, Eddyville, IL
87	Angus: Sire: Jindra Acclaim	4.28	3.26	111.8	Eagle River Angus, Princeville, IL
88	Angus: Sire: KB-Beasetmode of B0101 F52	3.42	3.07	105.2	Underwood Angus Farms, North Manchester, IN

88th IBEP Bull Sale – October 16, 2021
Bulls in Order by Breed and Ear Tag

Tag Number	Breed	Performance Index	Page Number	Price
425	Angus	115.2	20	
426	Angus	104.5	21	
427	Angus	109.1	20	
428	Angus	99.2	28	
438	Angus	104.5	25	
439	Angus	105.0	24	
440	Angus	100.0	26	
441	Angus	110.1	23	
442	Angus	99.9	26	
443	Angus	99.6	25	
444	Angus	105.6	27	
447	Angus	105.8	21	
448	Angus	99.6	26	
449	Angus	105.1	23	
450	Angus	96.8	27	
451	Angus	108.1	20	
453	Angus	104.1	25	
454	Angus	98.3	24	
455	Angus	100.5	23	
456	Angus	104.3	22	
463	Angus	110.7	21	
471	Angus	95.2	28	
433	SimAngus	96.4	27	
435	SimAngus	97.1	29	
436	SimAngus	106.3	22	
457	SimAngus	97.5	28	
459	SimAngus	113.0	22	
462	SimAngus	96.2	24	

TABLE 1: JANUARY 2021 ADJUSTMENT FACTORS TO ADD TO EPDs OF EIGHTEEN DIFFERENT BREEDS TO ESTIMATE ACROSS BREED EPDs

Breed	Birth Wt. (lb)	Weaning Wt. (lb)	Yearling Wt. (lb)	Maternal Milk (lb)	Marbling Score[a]	Ribeye Area (in^2)	Fat (in)	Carcass Wt.(lb)
Angus	0.0	0.0	0.0	0.0	0.00	0.00	0.000	0.0
Hereford	0.9	-16.6	-41.3	-11.1	-0.35	0.06	-0.076	-69.7
Red Angus	2.3	-21.3	-28.9	1.6	-0.11	0.29	-0.035	-7.2
Shorthorn	3.5	-23.1	-37.6	-4.9	-0.15	0.32	-0.039	-3.0
South Devon	3.1	-30.9	-57.9	2.6	-0.37	0.39	-0.042	2.2
Beefmaster	3.8	24.1	2.5	4.2				
Brahman	9.4	55.8	19.9	13.6	-0.69	0.11	-0.154	-33.9
Brangus	2.8	16.5	10.2	14.1				
Santa Gertrudis	4.9	39.7	35.1	17.5	-0.47	0.21	-0.074	-2.1
Braunvieh	2.1	-14.2	-40.6	-1.2	-0.63	1.17	-0.117	-38.9
Charolais	6.0	28.5	20.3	8.4	-0.33	0.80	-0.198	6.6
Chiangus	2.4	-23.6	-42.9	4.3	-0.40	0.53	-0.122	-26.1
Gelbvieh	3.2	-9.7	-17.2	7.1	-0.56	0.77	-0.112	-12.3
Limousin	1.7	-10.9	-35.4	-4.8	-0.39	0.61	-0.082	-4.5
Maine-Anjou	1.8	-28.5	-57.9	-7.6	-0.53	1.06	-0.169	-26.5
Salers	2.1	-17.7	-31.5	8.3	-0.78	0.53	-0.063	0.5
Simmental	1.7	-16.2	-25.5	-2.8	-0.19	0.50	-0.066	-4.5
Tarentaise	2.2	26.9	-8.1	11.1				

[a]Marbling score units: 4.00 = Sl^{00}; 5.00 = Sm^{00}. Note that Brahman EPDs for marbling are reported on a scale where 400 = Sl^{00} and 500 = Sm^{00}. When converting sires from other breeds to a Brahman basis, the adjusted EPD should be multiplied by 100. Likewise, when Brahman EPDs are adjusted to other breeds, the EPD should be divided by 100 before adding the adjustment factor.

(Kuehn and Thallman, 2000. www.beefimprovement.org)

TABLE 2: BREED OF SIRE MEANS FOR 2019 BORN ANIMALS

UNDER CONDITIONS SIMILAR TO USMARC

Breed	Birth Wt. (lb)	Weaning Wt. (lb)	Yearling Wt. (lb)	Maternal Milk (lb)	Marbling Score[a]	Ribeye Area (in^2)	Fat (in)	Carcass Wt.(lb)
Angus	84.5	525.0	1050.8	506.9	5.99	13.81	0.697	935.6
Hereford	87.0	502.7	989.7	494.1	5.13	13.62	0.623	891.4
Red Angus	83.8	504.5	1012.1	509.1	5.68	13.59	0.667	908.7
Shorthorn	88.7	487.9	978.2	500.6	5.24	13.86	0.568	894.6
South Devon	87.4	495.1	974.9	502.1	5.11	13.92	0.546	879.2
Beefmaster	87.3	516.7	993.8	495.7				
Brahman	94.4	540.5	996.2	502.8	4.70	13.60	0.542	882.3
Brangus	87.0	508.1	1002.7	505.5				
Santa Gertrudis	88.4	513.6	991.9	500.6	4.93	13.45	0.615	897.9
Braunvieh	88.1	497.0	974.0	514.0	5.31	14.76	0.485	881.2
Charolais	89.6	526.8	1025.1	501.0	5.16	14.70	0.498	922.5
Chiangus	87.5	492.2	979.1	500.9	5.27	14.11	0.548	894.5
Gelbvieh	86.3	524.6	1030.4	509.2	5.11	14.55	0.559	915.8
Limousin	86.0	522.4	1011.1	498.9	5.07	14.75	0.552	917.4
Maine-Anjou	86.0	483.3	948.9	492.9	4.98	14.54	0.491	882.3
Salers	85.4	506.3	996.3	506.8	5.00	14.42	0.544	897.9
Simmental	86.8	527.0	1034.5	503.2	5.30	14.56	0.531	919.9
Tarentaise	86.0	509.5	966.7	494.3				

[a]Marbling score units: 4.00 = Sl^{00}; 5.00 = Sm^{00}

(Kuehn and Thallman, 2000. www.beefimprovement.org)

Notes

INDIANA BEEF EVALUATION PROGRAM
Feldun Purdue Agriculture Center
1117 State Road 458
Bedford, IN 47421

2021 Officers

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BOARD OF DIRECTORS

Representing	Name	Address	Phone Number	Email
IBCA	Norman Voyles, Jr.	2190 Voyles Rd., Martinsville, IN 46151	(765) 342-8238	voylesfarm@gmail.com
IBCA	Joe Rode	6400 E. St. Rd. 144, Mooresville, IN 46158	(317) 831-8311	
IBCA	Randy Roberts	11043 W. Henry Brown Rd., Campbellsburg, IN 47108	(812) 755-4167	rdroberts@hughes.net
Angus	John Finke	8512 E 600 N, Columbus, IN 47203	(812) 350-9942	finkefarms@aol.com
Charolais	Robert Wubben	1455 Reuter Lane, Springville, IN 47462	(812) 275-5095	
Hereford	Jim Day	1036 N. Jim Day Rd., Salem, IN 47167	(812) 883-3722	
Polled Hereford	Terry Ferguson	11170 E 1400 N, Odon, IN 47562	(812) 617-1954	terryferguson@centurytel.net
Simmental	Leah Meinders	3687 N 500 E, Milan, IN 47031	(812) 654-2030	chm.excavating@gmail.com
Other Breeds	Byron Fagg	2608 E. Old 160, Salem, IN 47167	(812) 883-6574	bwfagg@blueriver.net
At Large	John Baugh	Dean of Ag Office, Purdue	(765) 494-8392	baughj@purdue.edu
At Large	David Smith	1631 N. Tyrel Ave. W, Greensburg, IN 47240	(812) 663-5763	dlsmith@etczone.com
Purdue CES	Danielle Walker	806 Martinsburg Rd. Suite 104, Salem, IN 47167	(765) 883-4601	dhowellw@purdue.edu

OTHER PERSONNEL

Responsibility				
Station Manager	Nick Minton	1117 State Road 458, Bedford, IN 47421	(812) 279-4330	nminton@purdue.edu
FPAC Superintendent	Brad Shelton	1117 State Road 458, Bedford, IN 47421	(812) 279-8554	sheltonb@purdue.edu
Data Consulting	Donna Lofgren	Animal Sciences, Purdue	(765) 494-6439	dlofgren@purdue.edu
Finances	Nick Minton	1117 State Road 458, Bedford, IN 47421	(812) 279-4330	nminton@purdue.edu
Health	Bethany Funnell	Veterinary Clinical Sciences, Purdue	(765) 494-8548	bfunnell@purdue.edu
Emergency Health	Jerry Rusch Ellen Burcham	995 SR 60E, Mitchell, IN 47446 995 SR 60E, Mitchell, IN 47446	(812) 849-4525 (812) 849-4525	Jerry.Rusch@gmail.com
Breeding Soundness	Wayne Singleton Ellen Burcham	Animal Sciences, Purdue, Prof. Emeritus 995 SR 60E, Mitchell, IN 47446	(765) 490-1214 (812)849-4525	wsinglet2244@gmail.com

Feldun-Purdue Ag Center Staff:

Roger Bartlett
Sam Perry, Jr.
Aaron Keiser
HD Smith

Auctioneer	Mike Berger	408 King Rd., Bremen, IN 46506	(574) 784-3800	