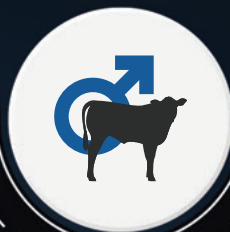


Create MORE
male calves

CONSISTENT,
PROFITABLE BEEF



Utilize ELITE SIRE
genetics



PRECISELY MANAGE
with DNA insights



ROADMAP TO PREMIUM BEEF ON DAIRY

Introducing STgenetics®' next evolution in Beef-on-Dairy innovation — a program designed to bring unmatched precision, predictability, and profitability to terminal crossbreeding.

Beef markets are evolving, and so are the expectations placed on the supply chain. With increasing demand for high-quality beef, tighter packer specifications, and growing pressure to deliver traceable, sustainable protein, the opportunity for dairy producers has never been greater to deliver high quality beef on dairy products to this supply chain. Beef-on-Dairy crossbreeding offers one of the most powerful tools to transform low-value dairy bull calves into profitable beef animals: however, **not all calves are created equal, and when their performance potential is not clearly understood, significant value is left on the table.**

STgenetics®' new **Beef on Dairy STrategy™** turns DNA into dollars by combining elite, proven genetics with individualized genomic evaluations to **create elite beef-on-dairy progeny who capture additional value through precision management aligned with their individual genetic blueprint.**

WHAT MAKES THIS PROGRAM DIFFERENT?



Elite, Proven Sire Genetics

The opening act sets the stage for a remarkable performance, and in the world of beef-on-dairy genetics, STgenetics® Angus bulls do just that. Built from the ground up, STgenetics® began with top-ranking terminal Angus sires and propagated only the very best genetics for dairy crossbreeding, based on progeny-proven data for growth, feed efficiency, and carcass traits. By leveraging actual progeny performance from more than 10,000 beef on dairy crossbreds, STgenetics® intensive selection process has created an elite lineup specifically developed for dairy crossbreeding. The result is a finely tuned roster of bulls with accurate, proven breeding values that reflect each bull's true ability to deliver premium genetics for any beef-on-dairy strategy. With STgenetics®, you're not just selecting a high-ranking terminal sire—you're choosing bulls that have proven themselves to consistently deliver profitable, predictable beef-on-dairy progeny.



Genomic-Driven Insights

For the first time ever, commercial producers can access STgenetics® genomic evaluations for beef-on-dairy crossbreds, unlocking new opportunities for precision management tailored to each calf's unique genetic blueprint. These genomic evaluations are powered by STgenetics® extensive progeny testing program, which has collected individual-animal performance and DNA information on more than 10,000 beef-on-dairy progeny. This comprehensive dataset provides deep, reliable phenotypes that serve as the data engine behind accurate, actionable genomic predictions.

By leveraging these evaluations, producers can reduce risk in retained ownership strategies, increase calf marketability, and build integrated supply chain relationships based on proven, reliable information. These genomic insights also support data-driven management decisions that maximize profitability through:

Individual Trait Breeding Values

Metrics for feed conversion, growth, and carcass traits let producers group cattle by performance potential, optimize days on feed, and target value-added programs such as high marbling, low carbon, or other premium endpoints. A comprehensive list of Breeding Values are shown in **Figure 1**.

TRAIT	DEFINITION	VALUE	WHAT CAN YOU EXPECT FOR THIS FEEDER CALF?
\$ST	Terminal profitability	\$55	\$55 in total feeder profit based on standardized economic values
Ecofeed	Feed conversion index	109	0.9 lbs dry matter savings per day compared to average
150 d Weight	Weight at 150 d of age	2.8	2.8 lbs more weight at 150 days compared to average
ADG	ADG across feeding period	0.10	0.10 lbs more growth per day compared to average
HCW	Hot carcass weight	30	30 pounds more carcass weight compared to average
FAT	Carcass Fat	0.04	0.04 more inches of carcass fat thickness compared to average
REA	Carcass ribeye area	0.57	0.57 in ² larger carcass ribeye area compared to average
MARB	Carcass marbling	550	550 degrees of carcass marbling

Figure 1 - Genomic Breeding Values, Breed Composition and Parentage Verification reported in STrategy™ platform.

Terminal Profitability Rankings

Quickly identify top-performing progeny using STgenetics® proprietary \$ST index, highlighting efficient, fast-growing offspring that consistently produce high-value carcasses.

WHAT MAKES THIS PROGRAM DIFFERENT? (CONTINUED)

Reliable Breed Composition & Parentage Verification

Confirms breed makeup and sire identity, enhancing performance predictions and supporting accurate marketing or sales claims. **(Figure 2).**

BREED	BREED COMPOSITION	ANXHO	THIS CALF IS AN ANGUS HOLSTEIN CROSSBRED
Discovered Sex	DNA verified sex	Male	This is a male calf
Discovered Sire	DNA verified sire	151AN1580	This calf was sired by 151AN1580
Discovered Dam	DNA verified dam	Unknown	This calf did not have a genotyped dam

Figure 2 - Functional Markers displayed in SStrategy™.

Functional Marker Insights

Genomic markers for tenderness and growth and puberty guide management and marketing strategies **(Figure 3).**

TEST NAME	GENOTYPES	TRAITS	DESCRIPTION
PLAG1	QQ/Qq/qq	Hot Carcass Weight	The Q allele is associated with higher carcass weight
Calpain316	CC/CG/GG	Meat tenderness	The C allele is associated with more tender meat
Calpain 4751	CC/CT/TT	Meat tenderness	The C allele is associated with more tender meat
Calpastatin	CC/CG/GG	Meat tenderness	The C allele is associated with more tender

Figure 3 - Functional Markers displayed in SStrategy™.

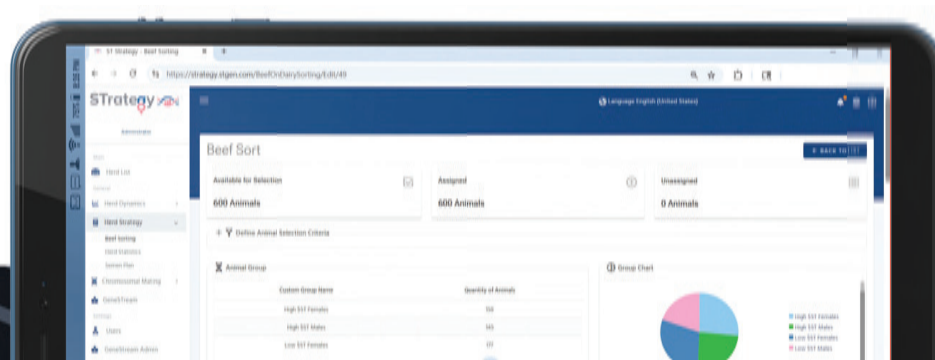
Together, these tools allow producers to optimize herd performance, predict profitability, and demonstrate the elite, traceable genetics behind every calf.



Actionable Insights

With STgenetics® app-guided tissue submission, sending samples from beef-on-dairy calves is seamless and straightforward. Once processed, detailed genomic evaluations are delivered through STgenetics® SStrategy™ platform, a centralized hub where producers can view, search, download, and even share results in a simple, accessible interface. For producers looking to take it a step further, SStrategy™ makes it easy to sort cattle into customized pens, sale groups, or management cohorts based on each calf's unique genetic blueprint.

These actionable insights empower producers to make smarter breeding, management, and marketing decisions. Whether your goal is optimizing retained ownership, improving traceability in your supply chain, or targeting value-added marketing opportunities, STgenetics® comprehensive genomic evaluations provide the tools to take your program to the next level.



Why Does This Matter?

Visual uniformity and pedigree tags fail to reveal a calf's true genetic potential, especially considering that sire misidentification rates of up to 50% are not uncommon in the beef-on-dairy sector. **Figure 3** illustrates two 70-head lots of commercial calves that would appear similar in value and performance under traditional evaluation. Despite uniform appearance and AI company identification, individual-animal feed intake, growth, and carcass data revealed a \$22,442 difference in net profit between the lots.

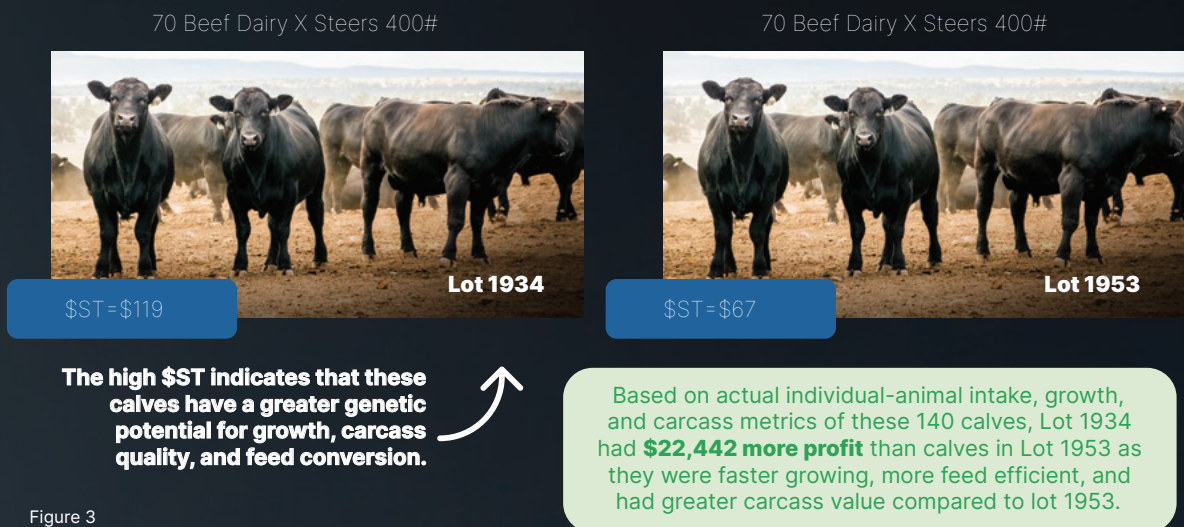


Figure 3

Rather than relying solely on visual cues and ear tags, individual genomic evaluations uncover differences in performance potential. For example, lot 1934 showed higher \$ST values, indicating greater expected profitability. This insight could be leveraged to capture additional value at sale or position calves for high-value programs, such as natural or other value-added initiatives. Conversely, lot 1953, with lower performance expectations, could be strategically directed toward programs that maximize lean growth efficiency. Regardless of how producers choose to use their genomic information, STgenetics® Beef-on-Dairy SStrategy™ ensures predictable, traceable, and profitable outcomes for terminal beef production.

Beyond Performance: Traceability & Sustainability

STgenetics® Beef-on-Dairy SStrategy™ doesn't just improve calf performance — it ensures full **traceability from farm to fork**. At any point in the supply chain, a tissue sample from a live calf, carcass, or even a steak at the meat counter can be collected and sent to STgenetics for source or program verification — bringing true, DNA-verified traceability to the beef supply chain.

What's Next?

In addition to the above, all STgenetics® beef sires are available in male gender-sorted semen. This approach drives greater profitability by producing nearly all-male F1 calves, enabling breeders to leverage the superior feed conversion and performance advantages of steers over heifers. By prioritizing male progeny, producers can maximize economic returns per calf while still retaining the ability to identify and select the top performers within each half-sib group.

By combining elite sire genetics with comprehensive genomic insights, STgenetics® Beef-on-Dairy SStrategy™ equips producers with the precision to transform Beef-on-Dairy from a commodity into a profitable, traceable, and sustainable enterprise.