

Value Added Programs for New Mexico Beef Calves

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New Mexico beef producers should evaluate opportunities to increase value of, then aggressively market, their calves. Due to the thin profit margin associated with range livestock production throughout New Mexico, any additional revenue generated may be the difference between making a small profit or experiencing a net loss. Drought is the normal environmental condition experienced each year, resulting in low stocking densities on NM rangelands. Low stocking density, pregnancy loss, predation and other factors reduce the number of calves a producer can offer. Therefore, producers need to maximize the return on every calf they market.

One way to potentially increase the value of each calf marketed annually is seeking out each value-added program that the calves can qualify for. Many companies offer value added programs ranging from vaccination guidelines to third-party verified programs with a large variety of offerings. Each one of these can add value, with premiums being added for different aspects of the programs the calves are enrolled in.

For the sake of this paper, the authors are not endorsing one program or company over another but have chosen a few examples provided by well established companies that the economic returns can be documented. Other companies provide a wide range of services that merit investigation by producers that are not referenced here.



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VACCINATION PROGRAMS

Listed below are the vaccination guidelines used by Superior Livestock Auction³. The preventative health care practices outlined are opportunities for producers to increase the value of calves without changing any management procedures normally used. Consult your herd veterinarian to determine which vaccination program is best suited for your operation. Documenting the practices that are used is the key to receiving increased revenue from value added programs.



The information is based on data obtained from Superior Livestock Auction on August 22, 2023. While efforts have been made to ensure the accuracy and reliability of the information, it may be subject to changes and updates. Readers are encouraged to visit the [Superior Livestock Auction website](https://superiorlivestock.com/value-added-programs/) for the most current and accurate details regarding livestock sales, auctions, and other relevant information (<https://superiorlivestock.com/value-added-programs/>).

Management requirements:

- Please consult your veterinarian or health advisor when selecting the vaccine that qualifies for these programs.
- Always read and follow vaccine label directions.
- Always use proper injection sites and techniques. Whenever possible, use Sub Q labeled products.
- Provide adequate nutrition and minerals to enhance immune system.
- Include other vaccines or management practices that are unique to your operation or are of value to the calf purchaser.

VAC 24

Calves vaccinated on cows at 2 to 4 months of age.

Vaccination requirements:

- 1 dose 7-way, 8-way or 9-way Clostridial.
- 1 dose viral 5-way (IBR, PI3, BRSV and BVD Type I & II). IBR and PI3 must be chemically altered modified live or modified live with veterinarian's approval. BVD and BRSV can be modified live or killed.
- 1 dose Mannheimia Haemolytica and/or Pasteurella Multocida.
- Internal & External Parasite Control Recommended.

VAC 34

Calves vaccinated on cows at 2-4 weeks prior to shipping.

Vaccination requirements:

- 2 doses 7-way, 8-way or 9-way Clostridial. One dose at branding and one dose 2-4 weeks prior to shipping.

- 1 dose viral 5-way (IBR, PI3, BRSV and BVD Type I & II). IBR and PI3 must be chemically altered modified live or modified live with veterinarian's approval. BVD and BRSV can be modified live or killed.
- 1 dose Mannheimia Haemolytica and/or Pasteurella Multocida.
- Internal & External Parasite Control Recommended.

VAC 34+

Calves vaccinated on cows at branding and 2-4 weeks prior to shipping.

Vaccination requirements:

- 2 doses 7-way, 8-way or 9-way Clostridial. One dose at branding and one dose 2-4 weeks prior to shipping.
- 2 doses viral 5-way (IBR, PI3, BRSV and BVD Type I & II) at branding and 2-4 weeks prior to shipping. IBR and PI3 must be chemically altered modified live or modified live with veterinarian's approval. BVD and BRSV can be modified live or killed.
- 1 dose Mannheimia Haemolytica and/or Pasteurella Multocida 2-4 weeks prior to shipping
- Internal and external parasite control recommended.

VAC 45

Calves vaccinated twice: At branding or 2-4 weeks prior to weaning and booster at weaning, or at weaning and booster to label instructions. Home Raised and Weaned minimum of 45 days prior to delivery.

Vaccination requirements:

- 2 doses 7-way, 8-way or 9-way Clostridial.
- 2 doses viral 5-way (IBR, PI3, BRSV and BVD Type I & II). IBR and PI3 must be chemically altered modified live or modified live with veterinarian's approval. BVD and BRSV can be modified live or killed.
- 1 dose Mannheimia Haemolytica and/or Pasteurella Multocida prior to weaning or at weaning and boosted to label instructions.
- Internal & External Parasite Control Recommended.

VAC 45+

Calves vaccinated three times: At branding, 2-4 weeks prior to weaning and booster at weaning or at branding, at weaning and booster to label instructions. Home Raised and Weaned minimum of 45 days prior to delivery.

Vaccination requirements:

- 2 doses 7-way, 8-way or 9-way Clostridial @ branding, prior to or at weaning and boosted to label instructions.
- 3 doses Modified Live Viral 5 way (IBR, PI3, BRSV, BVD Type I & II) @ branding, prior to weaning or at weaning and boosted to label instructions.

- 2 doses Mannheimia Haemolytica and/or Pasteurella Multocida @ branding, prior to, or at weaning and boosted to label instructions.
- Internal & External Parasite Control Required.

VAC 60

Calves vaccinated twice: At branding or 2-4 weeks prior to weaning and booster at weaning, or at weaning and booster to label instructions. Home Raised and Weaned minimum of 60 days prior to delivery.

Vaccination requirements:

- 2 doses 7-way, 8-way or 9-way Clostridial.
- 2 doses viral 5-way (IBR, PI3, BRSV and BVD Type I & II). IBR and PI3 must be chemically altered modified live or modified live with veterinarian's approval. BVD and BRSV can be modified live or killed.
- 1 dose Mannheimia Haemolytica and/or Pasteurella Multocida prior to weaning or at weaning and boosted to label instructions.
- Internal & External Parasite Control Recommended.

Vac Precon

Vaccinated twice: At arrival and boosted to label instructions, minimum of 14 days prior to delivery. Purchased cattle weaned minimum of 60 days prior to delivery.

Vaccination requirements:

- 2 doses 7-way, 8-way or 9-way Clostridial on arrival and boosted.
- 2 doses Modified Live Viral 5 way (IBR, PI3, BRSV, BVD Type I & II) on arrival and boosted.
- 1 dose Mannheimia Haemolytica and/or Pasteurella Multocida.
- Internal Parasite Control Recommended, External Parasite Control Recommended.

Many producers incorporate vaccinations that meet the guidelines listed above in their normal management practices, therefore documenting the vaccination program that is met and advertising the calves as meeting the above guideline may result in increased revenue received. In addition, many other value-added programs can be added to basic vaccination programs.

VALUE- ADDED AND THIRD-PARTY VERIFIED PROGRAMMING

The examples given below are programs offered by IMI Global/Where Food Comes From⁴—a third party verification provider based in Castle Rock, CO. They are provided as an example of the variety of programs offered and are not intended as an endorsement.



The information is based on data obtained from IMI Global on August 24, 2023. While efforts have been made to ensure the accuracy and reliability of the information, it may be subject to changes and updates. Readers are encouraged to visit the [IMI Global website](https://www.imiglobal.com/) for the most current and accurate details regarding livestock sales, auctions, and other relevant information (<https://www.imiglobal.com/beef>).

Beef Verification Programs

From day one, the roots of IMI Global have always been firmly planted within the beef industry. Our expertise in cattle production and related verification and added-value programs and services is unparalleled and we have been providing these services since 1995. Whether you are simply trying to meet new identification and traceability requirements through the use of EID tags or are seeking new premium market opportunities like the non-hormone treated cattle program, unique animal care and humane handling programs, sustainability verification, breed verification and more, our team is here to help!

Breed Verified

The IMI Global Breed Verified programs and verification partnerships allow producers to verify that their cattle are a certain breed. Breed Verified can be added to the Source & Age Verification (SAV) program at no (or minimal) cost - SAV is the minimum requirement for Breed Verified. IMI Global partnerships include: Angus Verified, ABS InFocus Genetics, American Aberdeen Premium Beef, Certified Piedmontese, Charolais Advantage, Glebvieh Balancer Edge, Hereford Advantage and Red Angus FCCP and Allied Access

Source & Age

[Source and Age verification \(SAV\)](#) requires you to keep records of your first and last calf born date, as well as apply an EID tag prior to cattle whenever leaving your ranch - their source of origin (<https://www.imiglobal.com/download-beef-documents>). Source only - US Verified Source verification - is available as well.

Tags & Traceability

All IMI Global value-added programs require an individual, electronic identification (known as Program Compliant Tags (PCTs)), but we also believe that no matter how or where you are marketing your cattle, the basis to any added value starts with an electronic ID. We can work with you to customize your tags to meet your exact needs - from special colors to unique management numbers or including your ranch name or brand - we can make it happen.

Non-Hormone Treated Cattle (NHTC)

The [NHTC](https://www.imi-global.com/download-beef-documents) program (<https://www.imi-global.com/download-beef-documents>) allows your cattle to be eligible for buyers looking for non-hormone treated cattle, many of which are looking to export beef to the EU. Implants or fed hormone growth promotants (HGP) of any kind are not allowed. Cattle must move through NHTC approved locations. Examples include implants, Lutalyse, CIDRs, Optaflexx, MGA.



Verified Natural Beef

“Natural” is something we see in the marketplace, but it is not a set standard across the board. The [IMI Global Verified Natural Beef Standard](https://www.imiglobal.com/download-beef-documents) allows buyers to be assured that cattle have never received any Beta-Agonists, Ionophores, Antibiotics or Animal By-Products (<https://www.imiglobal.com/download-beef-documents>). Cattle must move through approved VNB approved locations.



CARE Certified

Where Food Comes From CARE Certified is a suite of sustainability standards that certifies participating farmers and ranchers are implementing best practices in animal care, environmental stewardship and supporting their local communities and the people within them.



Verified Grass-fed

The Verified Grass-fed program is an approved USDA Process Verified claim. Cattle approved for this standard must be on diets solely derived from forage. Cattle must move through VGF approved locations.



USDA Organic by WFCF Organic, a sister division to IMI Global

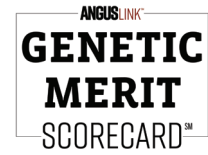
To begin, you must be Source, Age, NHTC and Verified Natural among a few other requirements that your account manager will walk you through during the process. IMI Global works directly with their sister division, Where Food Comes From Organic, to streamline and bundle a USDA Organic Certified solution to your operation. In most cases, it may only be a few simple changes to your operation or where you simply source feed to become compliant. Most importantly, your



Organic certification will be managed by a team who grew up in the cattle industry and have experience working with cow- calf and feedyard operations.

AngusLink Genetic Merit ScorecardSM

Genetic Merit Scorecard gives producers the ability to effectively communicate the genetic merit of their calves to potential buyers and differentiate their calves from others on sale day. The program also serves as a platform to track genetic progress to make sure the next calf crop is better than the last.



ECONOMIC ANALYSIS

Financial decisions that management teams make in livestock enterprises hold significant opportunities to enhance return. Value-added calf programs have historically been demonstrated to hold positive financial returns for the producer. Premiums associated with certain programs have varied, but the trend has always remained positive. Calves enrolled in value-added programs will generally return more than calves that are not enrolled in value-added programs.

A series of three individual economic models were developed and analyzed. Commercial, implanted calf and CARE-certified models were considered in the aggregate analysis. Each model represented 350 animal unites, a 1 to 20 dam/sire ratio, 85% weaned calf crop, and a 15% replacement rate. Replacements were assumed to be raised, and replacement bulls were purchased. Price information was derived from USDA market reports for the current period of 2023.

Commercial Enterprise

The assumption of the commercial enterprise was not to employ growth implants at branding or any other time period. Value-added programs were not incorporated in this model. All other production, input, and management costs were held constant in association with the implant and CARE-certified models. Economic returns for the commercial model lagged behind those of the other two models. The net return between the commercial and CARE Certified models demonstrated that the commercial enterprise returned \$55.63 per animal unit. The implant enterprise model held a \$44.44 per animal unit financial advantage relative to the commercial enterprise. Ranch enterprise net levels of return discovered that the commercial enterprise returned approximately \$15,500 and \$18,000 less than the implant enterprise and CARE Certified enterprise respectively.

Implant Enterprise

The implant enterprise assumption was to employ growth implants at branding. Value-added programs were not in-

corporated in this model. All other production, input, and management costs were held constant in association with the commercial and CARE-certified models. Economic returns for the implant model exceeded those of the commercial enterprise but were less than those realized in the CARE Certified enterprise. Net return between the implant enterprise and the commercial and CARE Certified models demonstrated that the implant enterprise returned \$44.44 per animal unit more than the commercial enterprise model but \$11.19 less per animal unit than the CARE Certified model. Ranch enterprise net levels of return discovered that the implant enterprise had a greater return of approximately \$15,500 relative to the commercial enterprise. The CARE Certified enterprise realized a net return of approximately \$2,400 greater than the implant enterprise.

CARE Certified Enterprise

The CARE enterprise assumption was to not employ growth implants at branding or any other time period, even though implanting is allowed under the CARE Certified program. The value-added program, CARE Certified was incorporated in this model. CARE certified is a three pillar sustainability claim that starts with Age and Source, and does not include other claims such as all natural or NHTC. All other production, input, and management costs were held constant in association with the implant and commercial enterprise models. Economic returns for the CARE Certified enterprise exceeded those of the other models. Net return between the commercial and implant enterprise models demonstrated that the CARE Certified enterprise returned \$55.63 per animal unit more than the commercial enterprise model. The CARE Certified enterprise model held a \$11.19 financial advantage per animal unit relative to the implant model enterprise. It is important to note that the financial advantages for CARE Certified and the implant model can be additive to a degree, as the two programs can be combined. Ranch enterprise net levels of return discovered that the CARE Certified enterprise returned approximately \$18,000 more than the commercial enterprise and \$2,400 more than the implant enterprise model.

SUMMARY

Economic analysis of the cost and return estimates are provided in Tables 1 and 2. The CARE Certified program demonstrated to be the most effective economic model evaluated relative to net return. Table 1 suggests that the CARE Certified program has the greatest positive economic return of the models evaluated.

Table 1. Enterprise return per treatment for a 350 AU operation, 2023

	AU	Enterprise
	Net Return	Net Return
Commercial	\$1,354.56	\$179,114
Implanted	\$1,409.72	\$194,670
CARE Certified	\$1,418.61	\$198,588
Mean Return	\$1,396	\$190,291

Table 2 provides the per-head net return for each of the three models considered. Beef cattle financial returns in 2023 are strong across all classes of cattle. Enterprise analysis demonstrates that producers that enact more progressive marketing strategies have the potential to realize greater economic returns.

Table 2. Return above total cost, per treatment, 2023

	Net Return Per AU
Commercial	\$511.76
Implanted	\$556.20
CARE Certified	\$567.39
Mean Return	\$545.12

Livestock producers can realize stronger financial returns when choosing to market livestock through avenues that reach a larger set of consumers. Greater demand has been demonstrated in recent years for beef, both domestically and internationally that has stronger individual and enterprise data associated with it. Enhanced demand with a shorter supply of such products continues to provide market outlets that hold positive economic returns for today's beef cattle producers.

For many producers who are not able to meet the requirements for most of the value-added programming, such as selling in load lots or inability to meet documentation requirements, a very basic way to increase the value of calves marketed off the ranch is to use growth-promoting implants on suckling calves. Simply put, calves implanted at branding weigh more when weaned than calves that were not implanted at branding. When selling calves by the pound, heavier calves bring in more money. It really is that simple. The additional pounds of growth, the safety and wholesomeness, and carcass quality of implanted beef is well documented and supported by years of research. The economic return of using an implant strategy is positive, as the cost of a suckling calf implant is approximately \$1.50 with an expected weight gain of at least 20 lbs. The greater

the number of calves receiving an implant at branding, the greater the economic return. With today's prices, the additional weight gain can certainly result in a significant "premium" on the implanted calves, even for producers not selling in load lots or who market a few calves at a time which may make their calves not eligible for traditional value-added programs.

Research conducted at South Dakota State University¹ showed a significantly increased weight gain by implanted calves whose dams were 4 years old or older as compared to dams that were less than four years old. The implanted calves from "running age" cows gained approximately 44 pounds by weaning as compared to 20 pounds gained by calves from 2 and 3-year-old heifers. Depending on the age distribution of a herd and average environmental conditions, gains of 20 pounds and greater can be expected by weaning on calves implanted at branding on range conditions¹. Numerous other studies have had similar results. Producers have raised questions about the safety and performance of implanting heifer calves at branding, then retaining those implanted heifer calves for replacement heifers. Fairly recent research performed at New Mexico State University² showed additional growth, by weaning, in heifer calves implanted at branding without adverse effects on first service conception, pregnancy rates or herd retention. Implanting non-program suckling calves will result in greater economic returns when compared to non-implanted suckling calves and this strategy to increase value can be easily implemented on most operations.

Consult with your herd veterinarian as to which implant strategy and product best fits your operation.

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