

SELECTING FOR GRASS-BASED GENETICS

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THE PASTURE PROJECT

The Basics

One of the most frequently asked questions from those interested in grass-based cattle genetics is, "What breed of cattle is the best for grass fed beef production?" The truth is there is not a single breed that is THE answer to high quality grass fed beef. All breeds have strengths and weaknesses, so sound genetic selection is best accomplished by examining bloodlines within breeds for the characteristics desired.

The first thing to consider – what are the traits that make a beef cow functional and profitable? Data collected within the National IRM/SPA program, from beef cattle operations in many regions of the U.S., showed that the average beef cow has an average of 4.2 calves in her lifetime before she is culled. This includes heifers that fail to breed, first calf heifers that fail to rebreed, and cows culled for bad udders, etc. However, the same data also revealed that the average beef cow in the U.S. does not break even on her investment until her fifth calf. Therefore, the average cow never makes any money. So the most important trait to the beef cattle producer is **longevity**. The cow has to last long enough in the herd to generate a solid return on investment. The real money is made from the sixth calf and beyond. Therefore, cows need to last well into their teens for optimum profitability.

Related traits of importance are **adaptability** to your environment, **fertility**, and **soundness of feet & legs, eyes, and udders**. If an animal is lacking in any of these traits, they will not possess longevity. Longevity is a function of all the above traits combined. If they lack adaptability, they will break down, fail to breed or rebreed, or fail to maintain adequate body condition. If fertility is subpar, then cows will skip one or more calves during their lifetime. If they have issues with feet and legs, eyes, or udders and teats, then they will not stay in the herd very long. Cattle need to be able to travel so that they can utilize available forage and not have to rely on supplementation.

After selecting for the above traits first and foremost, then you can concentrate on selection for traits that affect ability to finish on forage, produce a high quality carcass, and a desirable eating experience. Your primary goal should be to produce cattle that can make a profit no matter what market they are sold into. Functional cattle will always have a place in the beef industry and will be in increasing demand.

As a general rule, the breeds of cattle that work best for grass fed production are British breeds and crosses utilizing British Breeds. However, there are cattle within other breed types that will work as well. Start by determining what breed, or breeds, you are most interested in. Then, research the seedstock breeders within your region who are producing genetics that have been working for other grass fed beef producers or grass fed beef branded programs. Talk with other grass fed beef producers, consultants, and peruse the publications that are focused on grass-based production. Many of the top grass-based genetics seedstock providers routinely advertise in these publications.

Visiting a Breeder

Once you have identified seedstock breeders that possess the genetic base you desire, pay them a visit. This needs to be an extended visit where you request a tour of their entire operation. You want to see ALL their cattle, not just the yearling bulls and heifers for sale.

Once you have thoroughly reviewed the seedstock cattle, ask to see all performance and pedigree data. Often, producers believe they should review the data first, then go look at the cattle. However, this often clouds a person's opinion and they get bogged down in the details of data and don't ever really see the cattle. Look at the cattle first. If they fit what you are looking for phenotypically, then ask to see the data. If they do not fit what you are seeking phenotypically, no need to bother with reviewing data. Instead, move on to the next seedstock breeder.

Ask for actual performance data, not just EPDs. The actual performance data tells you what the cattle are truly doing and not simply what they are projected to do.

- What was their birth weight?
- Weaning weight?
- Gain performance on grass?
- Carcass performance data on related relatives?
- Average live weight at harvest?
- Ultrasound data?

These can all be important indicators of how the seedstock will impact performance in your herd.

What to Look For

- How well do they manage their pastures?
- What kind of body condition are the cows in?
- Do they rely on creep feeders for the calves?
- Are they supplementing the cow herd heavily or routinely or are cows relying primarily on forage?
- What is the average age of the cows?
- Do they manage their herd similar to the way you manage your herd?
- How uniform in phenotype are the cows?
- Do they have a sound genetic selection program and consistency in their genetics or are they relying heavily on outcrossing?
- How sound are the cattle in terms of feet & legs, eyes, udders and teats? This is easiest to assess shortly after the calving season when cows are heavily lactating.
- What type(s) of forage are the seedstock cattle grazing? Is it similar to the forage available in your pastures? This is of particular importance if your pastures are predominantly endophyte-infected fescue. You want to select cattle from seedstock herds that have endophyte –infected fescue as well so that the seedstock are already adapted.
- Are cows and heifers feminine in appearance? Bulls masculine in appearance?
- Moderate to small framed cattle that are Frame Score 3.5 to 5.0 on the Beef Improvement Federation (BIF) Frame Score Chart. For mature bulls, Frame Score 3 to 5 bulls will be 52 inches to 55 inches high at the hip. Frame Score 3 to 5 cows will be 48 to 52 inches high at the hip at maturity.
- Look for cattle that are deep bodied, with tremendous gut capacity and spring of rib, and average to thick muscling.
- You want cattle that can finish on a grass fed diet at an average of 24 months of age or less, weighing 1150 – 1350 pounds on a live weight basis at harvest, with a USDA carcass quality grade equivalent of High Select or better. However, your particular market may call for or allow smaller cattle that may finish at 1000 – 1100 pounds live weight. Choose your genetics based upon your most viable market, but always keep in mind that you may still have to sell cattle on the open market as well.

The Cow

The first thing to look for in a cow is proper phenotype. A cow should be very feminine in appearance, being refined and slender about the head, neck, and shoulders; possessing great gut capacity with tremendous spring of rib and depth of body; relaxed in the heart girth and adequate depth at the flank (Picture 1). She should have moderate muscling, adequate length from her hooks to her pins, and be very sound on her feet and legs and possess a sound udder and teat structure. A good cow will essentially be wedged shaped from front to rear, her body widening from her shoulders to her hindquarters.

Picture 1: Ideal Cow Phenotype.

A feminine cow should not look like a bull or steer. They should not be coarse or thick about the head, neck and shoulders. The pictures above clearly illustrate the cleanness and leanness a cow should exhibit through the front end. The cows in the pictures above appear to "explode" in capacity as you view them from front to rear. In addition, a good cow should shed her winter coat readily in the spring and have a sleek, shiny appearance throughout the warm season months. Her coat should possess almost an "oily" sheen to it. Cows that have trouble shedding their winter hair coat in the spring, having a rough or dull appearing hair coat, often are not functioning optimally.

Says Jan Bonsma, "*The body of the highly fertile cow is in beautiful proportion; she looks feminine or broody. Her brisket is not full and she has a dewlap running around the brisket. She has a tremendous stomach capacity.... If you stand behind such a cow, her midrib or spring of ribs is the widest part of the body...*" (Picture 2).

Picture 2: Body Capacity When Viewed From Rear.

Once you have determined that a cow is sound on her feet and legs and carries the proper body phenotype, then make sure she has a sound udder and teats. Since longevity is the most important economic trait, a sound udder is essential. A good udder is one that will last the lifetime of the cow.

Udders can go bad in a number of ways. Teats that are too long or wide will usually balloon and "swell up with milk" at calving so a newborn calf can't nurse. At this point, you are either forced to get the cow up and strip milk out of the teats to reduce their size so the calf can nurse or let the calf perish. These cows have no place in a herd and should be culled, along with any of their daughters. Additionally, suspension of the udder can break down over time, especially in heavy milking cows.

In our selection process, we should always place an emphasis on cows that have never missed a calf and still have a good udder. These are the cows we want to keep replacement heifers or herd sires out of. There is no reason to keep replacements produced by a cow with a bad udder. If we rigorously and continually cull based on udder quality, we will be building a good cow herd, regardless of the breed. However, to accomplish this, we must first understand how to score cows for udder quality.

The best scoring system is a simple one. First, the udder and teat scoring should be done as soon after a cow gives birth as possible. Score a cow for udder quality when the new calf first attempts to nurse. This is the most critical stage in the newborn's early life as that initial dose of colostrum from the cow is necessary to establish the immune system of the calf. If a calf cannot nurse and obtain colostrum from its mother within the first few hours of birth, then the cow has failed to do her job. The initial fullness of the udder and teats prior to the first nursing of the calf allows us to easily determine udder and teat quality.

When selecting heifers for replacements, you obviously cannot select based on a fully developed udder. Therefore, you have to place emphasis on the udder/teat scores of their dams and related females in the herd. Make it a policy to keep replacement heifers only out of cows that have acceptable udder and teat scores. Finally, check the records of their dams, grand-dams, and great grand –dams. Did they calve every year and deliver a live calf at weaning? How long have they lasted in the herd? Do they demonstrate longevity, fertility, and adaptability?

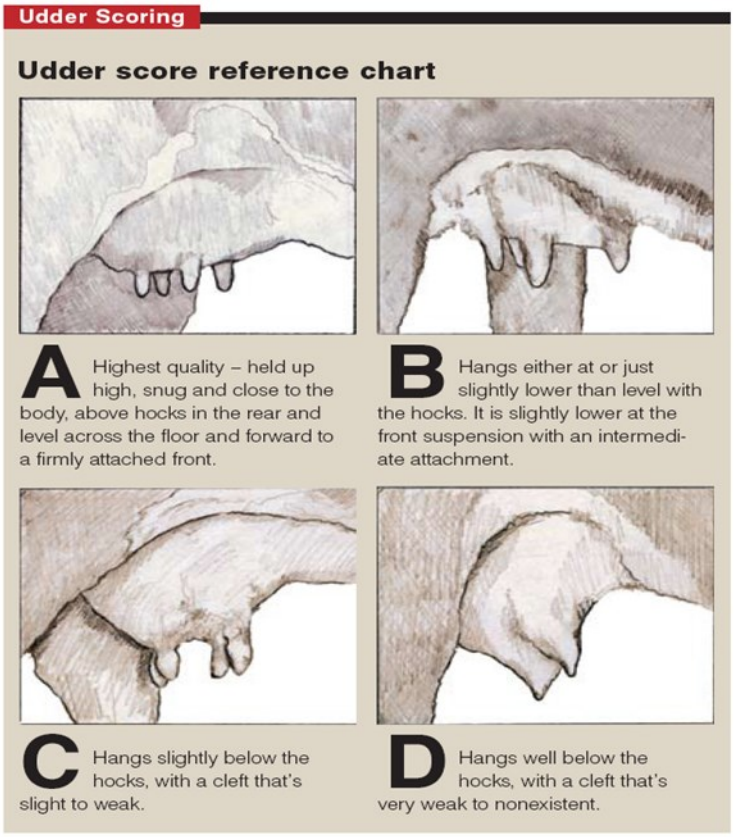
Scoring Udders and Teats

Here is a very basic 4 grade scoring system for udder quality (A, B, C, D) and a four number scoring system (1, 2, 3, 4) for teat quality.

Scoring udders

- **An A udder** score is the highest quality — held up high, snug and close to the body, above the hocks in the rear and level across the floor and forward to a firmly attached front. From the rear, the udder should have an extremely strong cleft.
- **B udder** — hangs either at or just slightly lower than level with the hocks. It is slightly lower at the front suspension with an intermediate attachment.
- **C udder** — when viewed from the rear is slightly to below the hocks, and the cleft will be slight to weak. The front attachment is loosely connected and beginning to hang low.

D udder — very deep, hanging well below the hocks, with a cleft that's very weak to nonexistent. The front suspension is extremely loose, hanging well below the midsection of the cow, and the udder is absent of structure, shape and conformation.



Scoring teats

Teats are scored individually and separate from udders. A score of 1 represents the best teats; a score of 4 is the lowest quality.

- A **1** score reflects a small diameter teat of short length. For comparison, a 1 teat would be similar to comparing the little finger of a human hand to the rest of the fingers.
- A teat scoring **2** is larger in diameter and length but still very functional. In the context of the human hand, a 2 teat would be an index finger, with a 1 teat being the little finger.
- A **3** score represents a diameter and length that could become problematic for the calf to begin nursing in the next year or more. In relation to a human hand, it would be a thumb compared to the little finger, or a teat three times the diameter of the teat with a score of 1.
- A **4** score is reserved for teats that most likely will require management assistance to get a calf started nursing. These teats would be comparable in size to the entire fist of the hand. These cows should be recorded and culled at weaning or before the next calving season.

The following photographs illustrate the differences between a good udder and a poor udder. The Udder/Teat scores are provided for you using the A-D Udder scoring chart and the 1-4 Teat scoring method.

Udder/Teat Score of A1.

Udder/Teat Score of B3.

Udder/Teat Score of C2.

Udder/Teat Score of D4.

Udder/Teat Score of C4.

The last picture is of a Hereford that won a livestock show grand prize as the "Best Cow" in the show. However, she received an Udder/Teat score of C4. This cow is a perfect illustration of the fact that just because an animal wins first place or even the grand prize at a livestock show, does not mean that they are anywhere close to being an ideal animal. Livestock show judges are too often looking solely at what is deemed asthetic or "pretty" about an animal and not how productive or functional that animal actually is out in the pasture. Over time, this cow's udder and teats will break down and she will have to be culled from a program early.

The Bull

Many people make bull purchase decisions on how that individual looks on sale day or that individual's EPDs. Relying heavily on either of these can be a huge mistake. Buying bulls because they are slick and fat is not a sound decision making process. Fat can cover a multitude of problems. Likewise, relying heavily on EPD values can be a big gamble that may or may not pay off. Since the majority of cow/calf producers keep and develop their own replacement heifers, the first thing you should look for in a bull is maternal value. We have to keep in mind that each individual cow in the herd contributes a single calf annually, while each bull should be responsible for the production of 30 or more calves annually. Therefore, the genetic contribution of the bulls you use shapes and molds your cow herd genetics.

So, what is the best way to approach bull selection and purchase? First, just like when selecting females, insist on seeing the seedstock breeder's entire herd. If the cows in the herd exhibit problems — bad udders, unsound feet & legs, not the right phenotype, hard fleshing, rely on supplemental feedstuffs, and do not exhibit longevity, adaptability, and fertility — then why select bulls from that seedstock breeder? The bulls cannot be any better than the cow herd they came from. You will certainly want to see the dams of the bulls you are interested in, as well as all related females. Buying a bull without seeing the related females in the seedstock herd would be like buying a vehicle without checking under the hood. Look at the fertility traits in the bull's genetic makeup. Is the mama's udder sound? Are the teats the right size and placed correctly? Are the females the ideal size and shape for converting grass to beef in your environment? This should be the starting point for each and every bull purchased.

Next comes examination of individual confirmation. Does he look and act like a bull, meaning is he masculine in appearance and in action? A bull should look like a bull and not resemble a steer. Are the testicles of adequate size and correct shape and attachment? Stay away from extremes in testicle size (scrotal circumference), either too large or too small. Ask yourself, "Is he balanced in the economically important traits"? Remember, extremes in any one trait take away from the overall performance you can expect from the bull. It takes discipline and homework to find the right bull to build your cowherd. These decisions should not be made based off hype or slick advertisements. Beware of most semen sellers, bull sellers, auctioneers, ring men, and seedstock consultants as often their agendas are simply to "sell" as many bulls as possible without true consideration for what you need in your cow herd and in your environment. If they don't know anything about your operation, your cow herd, or your current genetics and phenotype, then it is almost impossible for them to make solid bull purchase recommendations. If they tell you that "this bull will work in all situations" then walk away. They are NOT helping you. Make sure you are working with folks that have your best interest in mind and truly care for your operation.

Bulls must travel the pastures or range on a daily basis in order to service the cows in your herd. They must be sound on their feet and legs and able to travel well. Structural issues will eventually cause a bull to break down and not be able to breed cows on an efficient basis. As bulls age and get heavier, they will break down if they are not completely sound about their feet and legs. Bulls that are too post legged or sickle hocked will not last long as breeding bulls in the pasture. Likewise, carefully examine any bulls that you may purchase for the presence of corns between the toes. Corns are a moderate to highly heritable trait, so ask to see the sire and older siblings of the bull. If they have issues with corns, especially at an early age, do not buy the bull.

Eyesight is critical to a bull being able to function properly and breed large numbers of cows. Carefully check a bull's eyesight prior to purchase to make certain he does not have any problems. If purchasing a breed that has known susceptibility to cancer eye, such as some bloodlines of Hereford cattle, make sure to examine relatives in the purebred herd to determine their prevalence to contract cancer eye. When visiting the purebred herd, is there evidence of incidence of cancer eye and pinkeye? Are there females missing that should be in the herd? Were they culled because of eye problems?

It is important to note that bulls, just like their female counterparts, have to make their living off of forage. Therefore, they should have excellent gut capacity, depth and spring of rib, deep heart and flank girth, and enough efficiency to gain weight on forage alone. Just like with a cow, a bull, when viewed from the rear, should be widest at his barrel rather than his hindquarters (Pictures 1 and 2).

Picture 1. Angus Bull Viewed From Rear.

Picture 2. Red Angus on Pasture.

Bulls should be very masculine in appearance, even from a relatively early age. Bulls that are of breeding age should exhibit definite signs of masculinity. This includes thickness about the neck and shoulders, a definite crest to the neck, and adequate thickness through the hindquarters. The hair of a bull should be course textured and exhibit a definite sheen due to the influence of the male hormone testosterone and other androgens. Their testicles should be of adequate size for their age, well developed, and even in development with no twisting or distortion. Both testicles should be fully descended into the scrotum with one not being higher than the other. The neck and body of the scrotum should be free of fat deposits, as heavy fat deposits impair fertility.

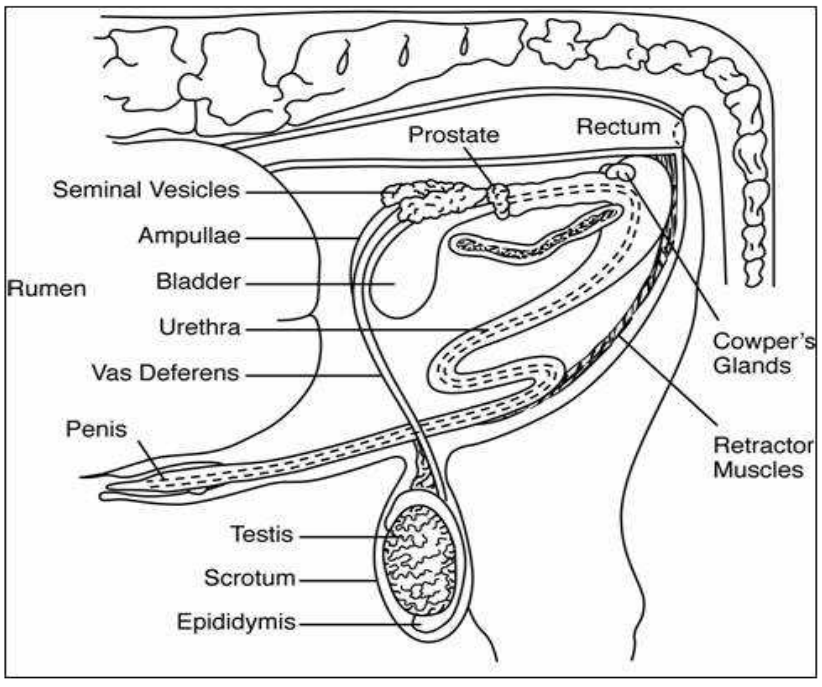
Pictures 3 and 4 show bulls that are very masculine, sound on their feet and legs, and have excellent testicular development. By the way, both these bulls are proven sires in the grass fed beef industry.

Picture 3. Red Angus Bull on the Range.

Picture 4. Desired Phenotype in an Angus Bull.

The reproductive organs of the bull should be fully formed and functional once that bull reaches puberty. These include both the external organs such as the testis, scrotum, and penis and the Internal organs such as the Ampullae, Seminal Vesicles, Prostate, and Cowper's Glands. Figure 1 illustrates the important reproductive organs of a mature bull.

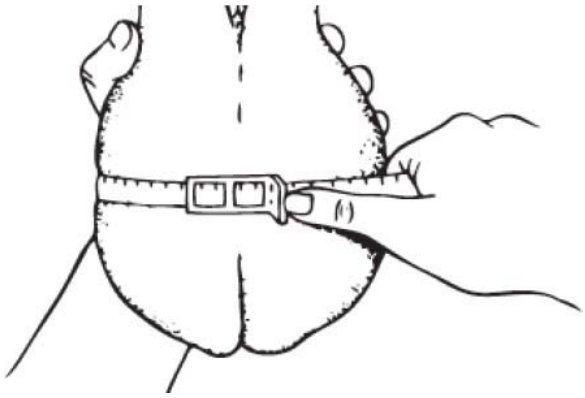
Figure 1: Reproductive Organs of the Bull.



In order to determine if a bull has adequate testicular development, careful examination of the scrotal circumference and testicles should be made. One of the first measurements that can be taken is the scrotal circumference. Scrotal circumference is highly correlated to a bull's potential fertility and servicing capacity (how many cows he can breed in a given breeding season), and to the potential fertility of his daughters.

Figure 2 shows how to properly measure scrotal circumference using a scrotal tape. Picture 5 shows scrotal circumference being measured in a live bull.

Figure 2. Scrotal circumference is measured by holding the testicles to the bottom of the scrotal sack, placing the tape around the widest point, and measuring the circumference with a scrotal tape.



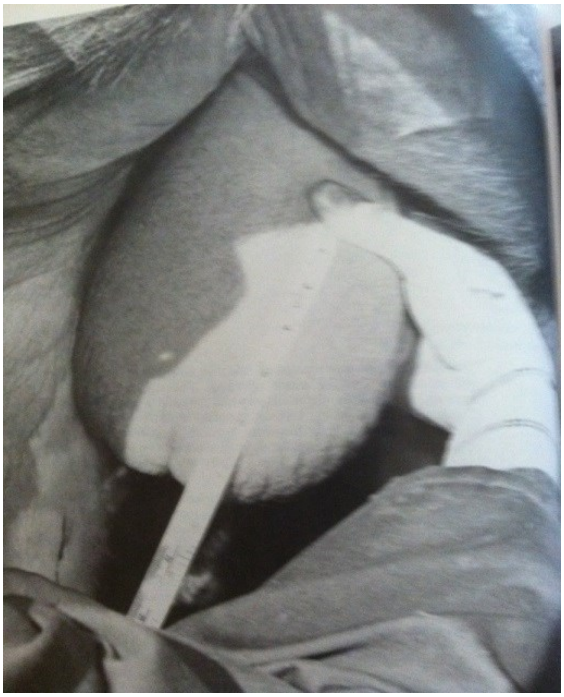
Picture 5: Measuring Scrotal Circumference.
Herd Bull Fertility. James E. Drayson. 1982.

Scrotal circumference is the most frequently noted measurement for potential fertility in a bull and often the only measurement taken outside of an actual semen examination. However, testicle length and orientation are equally important and should be measured or noted as part of a complete physical exam. As mentioned earlier, both testicles should be of equal and adequate length and orientation in a fully functional bull. Weakness in these areas typically indicates future fertility problems. In addition, these weaknesses are moderately to highly heritable, so bulls with uneven testicle length of poor testicular orientation generally pass along those weaknesses to their offspring.

Picture 6 shows how to properly measure individual testicular length. To take this measurement, first make sure that both testicles are fully descended and can be palpated. Take a measuring tape and place the top of the tape at the top of the right testicle where it tapers. Pull the tape down to the bottom of the testicle and note the measurement in inches or centimeters. Repeat this process with the left testicle. Both testicles should be of approximately the same length with little variation in overall size and shape.

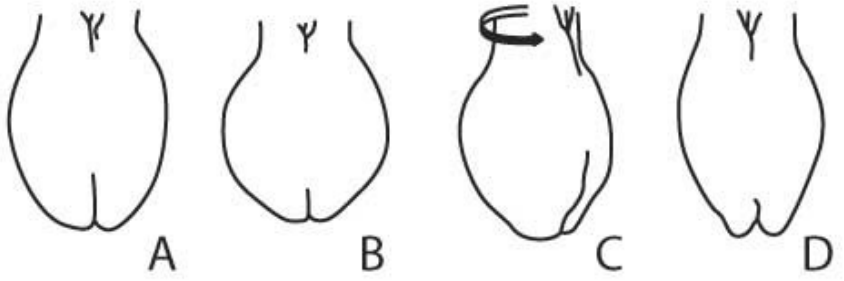
Testicular orientation is just as important as scrotal circumference or testicular length (Figure 3). Both testicles should be fully descended in normal conditions and temperatures with each testicle positioned parallel to the length of the body.

Picture 6: Measuring Testicle Length.
Herd Bull Fertility. James E. Drayson. 1982.



If we designate the head to tail orientation of the body (or body length) as "North-South", then we also designate the body width as "East-West". Each testicle should have and "east-west" orientation and not a "north-south" orientation. This is sometimes referred to as "twisted testicles", a condition you want to avoid. Additionally, deep cleavage in the scrotum between each testicle is undesirable. Both twisted testicles and deep cleavage in the scrotum can interfere with a normal and required process called "thermoregulation". Thermoregulation is simply explained as the bull's natural way to regulate temperature in the testicles for proper semen or sperm production. For highly fertile sperm production, the testicular temperature must be maintained within a reasonable range at all times. To accomplish this, the bull has the ability to raise and lower the testicles in relation to external air temperature. When it is cold, the bull will raise the testicles to where they are close to the body cavity and therefore warmer. When it is hot, the bull will lower the testicles so that more air can circulate around the testicles and have a cooling effect. Improper orientation, such a twisted testicles or deep cleavage can interfere with this thermoregulation process and therefore overall fertility of the bull.

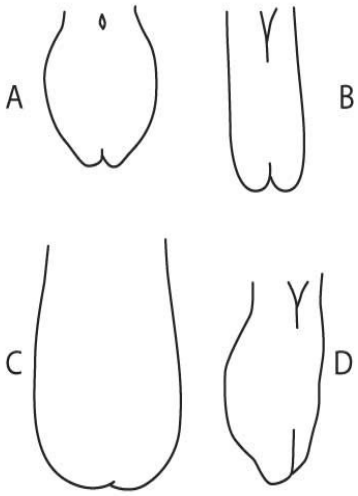
FIGURE 3: Testicular Orientation.



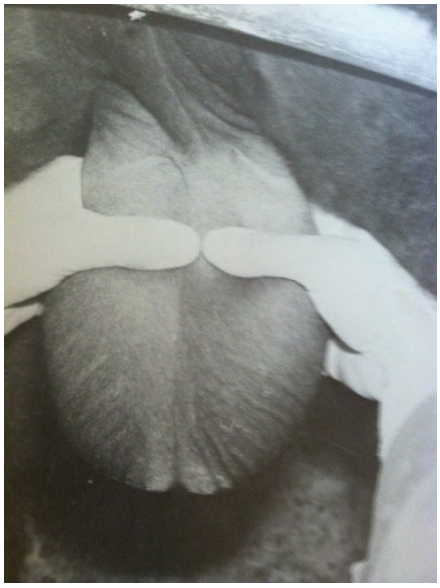
Scrotal confirmation: (a) cold bath scrotum, (b) bilateral hypoplasia, (c) scrotal hernia, (d) unilateral hypoplasia

An external examination involves the palpation of the testes, epididymis and scrotum. The upper portion of the epididymis should be soft, pliable, and free from any lumps or enlargements. The following pictures provide illustrations of normal vs abnormal testicular development and orientation.

FIGURE 4: Testicular Abnormalities.

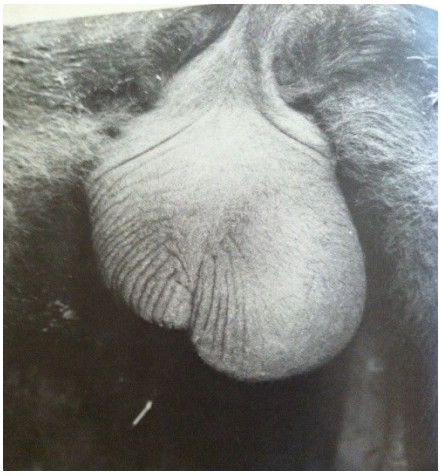


Picture 7: Normal Testicular Shape and Orientation.
Herd Bull Fertility. James E. Drayson. 1982

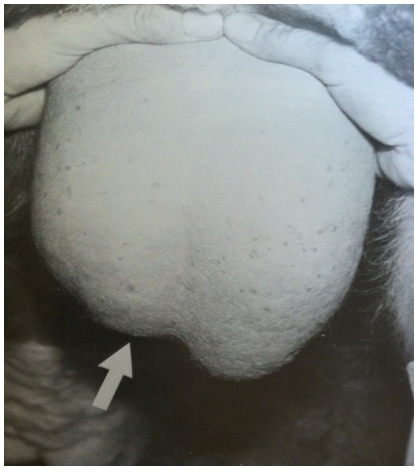


Note that both testicles are pulled down so that they are fully descended. Palpation of both testicles is important to determine if there are any abnormalities, abscesses, hypoplasia, etc. The arrows are pointing to the bottom of the epididymis on each testicle. Each epididymis should be soft and pliable, but firm to the touch and equal in size as well as prominent. The epididymis stores sperm cells and delivers them to the Vas Deferens for deposition into the vagina of the cow at mating.

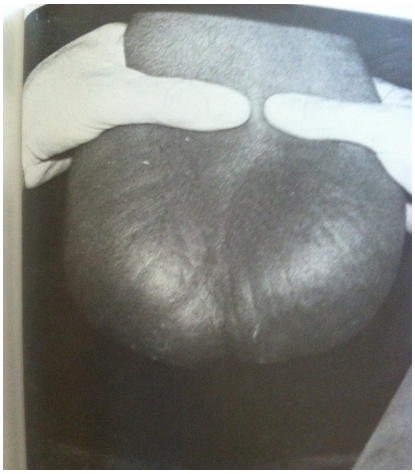
Picture 8: Totally Degenerated Left Testicle with Partially Degenerated Right Testicle.



Picture 9: Completely Collapsed Left Epididymis



Picture 10: Round, "Bowling Ball" Testicles.



Herd Bull Fertility. James E. Drayson. 1982

With proper scrotal and testicular development, along with excellent semen quality and structural soundness, a mature bull should be able to service a minimum of 40 cows in a 60-75 day breeding season. DNA evidence has shown that bulls with superior fertility can service 80-100 cows within the same time frame. A great way to determine true breeding potential and libido of any individual bull is to put them into a multi-sire herd situation and allow for competitive breeding to occur. You can then perform DNA analysis on each calf to determine parentage. More often than not, you will discover that one single bull within the multi-sire group was the dominant individual, often breeding more than 50-60% of all cows within that group. These are the individuals you should be selecting replacement females from.

Select bulls that meet the criteria you want in your cow herd – longevity, adaptability, and fertility first. Soundness of feet & legs, eyes, and testicular development is critical for breeding performance and ultimate performance of the replacement females that bull will sire. Just remember, the bulls you select through the years will be fully reflected in the cow herd you have.

The Feeder Steer

Just like selection for seedstock cattle, selection for cattle to grass finish is primarily a matter of proper phenotype and genotype. For cattle to perform both in terms of desired average daily gain on forage and final carcass quality, they need to be produced by parents who have been selected from the proper seedstock genetic base.

To determine the desired phenotype and genotype, we first have to identify the end product target. For high quality eating experiences on a consistent basis, one should target cattle that finish at a minimum standard of USDA High Select to USDA Choice equivalent. This means that finished cattle will possess a Slight to Moderate degree of marbling or higher, fit securely into the "A" Maturity range of 30 months of age or less at harvest, possess a light to moderate cherry red color to the lean and have a moderately fine to very fine texture to the lean. Meeting minimum standards in carcass quality is important for assuring uniformity and consistency in both red meat yield and eating quality. To learn more about beef grading, visit http://meat.tamu.edu/beefgrading/.

On a live animal basis, to achieve the desired degree of finish on a consistent basis, most steers will need to weigh between 1150 lbs to 1350 lbs and be 22-24 months of age, on average, when ready to harvest. Just as in breeding stock, animals selected for grass finishing should be very moderate in frame score. Preferably, the frame score should be between 3.0 and no more than 5.5 (Guidelines for Uniform Beef Improvement Programs, Ninth Edition, 2010. Chapter 3, pg. 28-30. Beef Improvement Federation). Larger framed animals will have a hard time obtaining a high degree of finish on forage alone and will often have to weigh 1300 lbs or more, plus be 30 months or older before being ready for harvest.

The phenotypically correct animal should be very deep bodied with well sprung ribs and exhibit depth in both the heart girth and flank (Picture 1). Animals that are tight middled and pinched in the heart girth and flank typically will not finish well on grass (Picture 2).

Picture 1: Desired Phenotype for Grass Finishing.

Picture 2: Poor Phenotype for Grass Finishing.

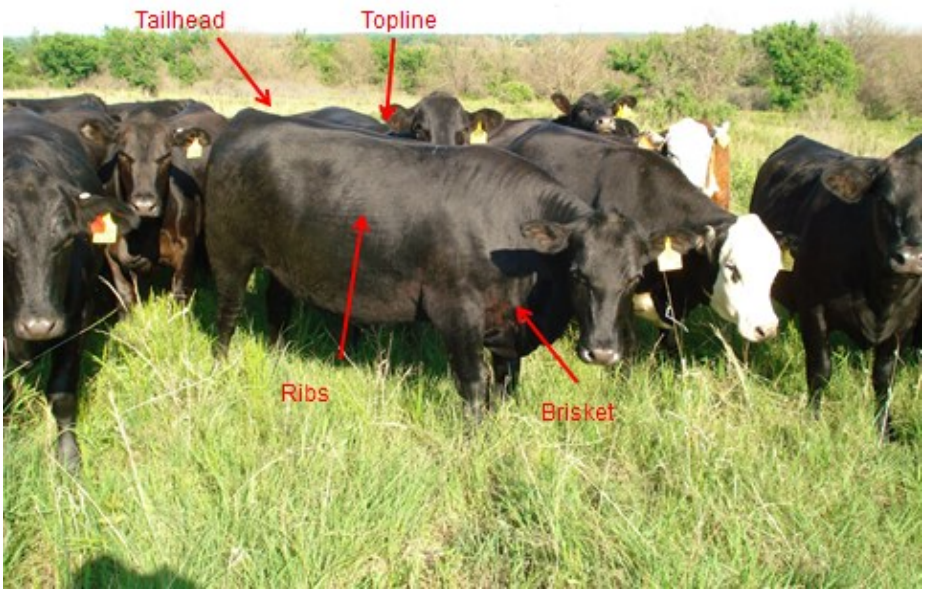
Animals selected for grass finishing should be sound on their feet and legs as they will have to cover ground each day to consume adequate amounts of forage dry matter for desired gains. Average daily gain targets for the finishing phase should be a minimum of 2.0 lbs/day and up to 3.0 lbs/day. Cattle that are not performing well on forage should be culled or sent to the feedlot. Once you become skilled at forage finishing and in recognizing a truly finished animal, you will find that as they get close to 800 lbs or heavier, they will start to sort themselves out. It becomes rather apparent which animals will obtain a high degree of finish at 1100 to 1200 lbs and which ones are simply too large or too tight middled and will take much longer to reach a desired degree of finish. Quite frankly, the ones that start to fall out at 800-900 lbs should be sold into other markets rather than attempting to finish them on grass.

To achieve optimum grass finished targets, both on a live weight basis and on a carcass basis, one first has to understand what a properly finished animal looks like. To reach minimum marbling and backfat standards for USDA High Select to USDA Choice, cattle have to exhibit the phenotypic characteristics for the proper degree of finish. To visually determine this, you look for adequate fat cover over the ribs and back, around the tailhead, in the cod of steers or udder of heifers, and in the brisket.

A well-finished animal will have a nice spongy fat cover over all ribs with no ribs visible to the eye, all the way back through the 13th rib. The topline or back of the animal should be either level in appearance or have a slight dip at the top of the spine. If a steer or heifer has a sharp appearance to the spine or topline (spinous processes are visible), they are not adequately finished. As a matter of fact, sharpness of any of the primary skeletal structures indicates lack of finish.

There should be depth and fill in the heart girth and flank areas, fullness over the top of the rump between the hooks and the pins (front to back of pelvic structure) with fat cover over the hooks (Picture 3). In addition, the brisket should be wide, deep, and distended showing evidence of heavy fat deposits (Picture 4).

Picture 3: What To Look For In A Grass Finished Animal



Picture 4: Desired Fat Deposit in the Brisket.

Picture 5: Arrows Indicate Pones of Fat Surrounding the Tailhead.

One of the final areas of fat deposit will be the region around the tailhead. In the feedlot industry, deposits of fat on both sides of the tailhead are called "Pones" or "Poning". When there is strong evidence of pones of fat around the tailhead, then individual animals are very close to being fully finished (Picture 5).

The Final Product

To determine how good a job you are doing in producing animals that are uniformly and consistently finished, you must determine your optimum target end point. Do you want a leaner product (USDA Standard or Low Select), a USDA High Select or a USDA Choice end product?

I recommend spending time in the processing plant examining your carcasses in the Holding Cooler (Picture 7). It is important to verify how well you are meeting your end product targets on a consistent basis. Routinely take pictures and measurements of your finished animals prior to harvest. Record live weights and make use of live animal carcass ultrasound data. Compare live weights, pictures, and ultrasound data to actual carcass quality measurements to see how well they match your perception of degree of finish.

Picture 7: Measuring Carcasses in the Holding Cooler.

Remember that raw product quality and uniformity equals a high quality eating experience (Pictures 8-9). The big packers have trained retail grocers, restaurants, food service, and the actual consumer to have certain expectations about beef and beef cuts. Due to their ability to "sort up" product in the plant, they have been able to deliver product that is quite consistent. Not necessarily consistently great, but consistent nonetheless. The true bottom line is pleasing your customers time after time and that is the key to grass fed success.

Picture 8: Raw Product Quality and Uniformity.

Picture 9: Quality Raw Product = Quality Eating.



For more practical advise on grazing and grassfed production, visit www.pastureproject.org

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