# **Ranchers' Guide to Profit...**





#### **Udder Scoring**

Profitability of commercial operations is directly influenced by the ability of the cowherd to provide the optimum maternal environment in order for the calf crop to express its full genetic potential.

Females failing to do so create costly management challenges which ultimately result in their premature departure from the herd. Minimizing the number of females who are culled from the herd prior to 6 years of age greatly increases a cow/calf enterprise's profitability, by spreading the per unit cost of the factory over a longer productive lifespan. Additionally, reducing the number of cows leaving the herd prematurely reduces replacement rates, and allows a higher percentage of heifer calves to be cash cropped instead of being retained and developed as replacements.

One trait that is a significant contributor to maternal environment is udder conformation. Beginning at calving time, females that possess proper udder conformation are better equipped to provide essential nutrition to the newborn calf. Further development of the calf is dependent on the ability of the female to avoid mastitis; thus, allowing her to produce milk at her genetic level. The combination of these two successes provides females a greater opportunity to remain productive for an extended lifespan.

### **Built to Last**

Knowing the importance of udder conformation, Red Angus producers are now equipped with an udder scoring system to better characterize udder conformation. Following Beef Improvement Federation recommendations for udder scoring, Red Angus' system describes the two traits that significantly contribute to overall udder conformation: udder suspension and teat size.

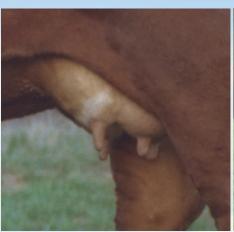
Udder suspension is predominantly controlled by a single ligament which is located parallel with the animal and between the teats. Ideally, the front of this ligament is attached close to the females navel and the back is attached below the vulva. The strength of this ligament's attachment combined with the location of the attachment results in the quality of the udder's suspension.

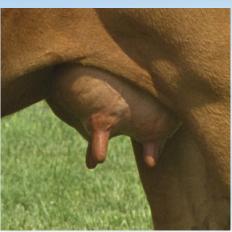
Teat size has a major impact on a newborn calf's ability to nurse. In the case of excessively large teats, calves have difficulty nursing, which leads to a number of adverse conditions: deficient immune system, mastitis, and decreased calf performance. In extreme cases, females must be "milked-out" in order to get colostrum into the calf.





Optimal forward attachment of the median suspensory ligament. This ligament connects the udder to the abdominal wall; ideally maintaining a level udder floor, supporting the teats above the hocks and perpendicular to the ground and ultimately enhancing longevity of the udder and productive lifespan of the cow.





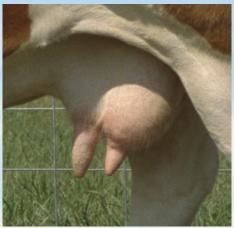
While the above pictured udders are not 'perfect', they are certainly acceptable. Their structure allows for optimal calf performance and extends lifetime functionality of the udder and cow, thus increasing profitability.







Teat size plays a vital role in the health of newborn calves and their dams. Smaller, cylindrical teats facilitate nursing and acquisition of colostrum by the newborn. They also make the dam less prone to mastitis as their udders are more frequently drained.





Larger, "bottle-shaped", non-cylindrical teats impair calves' ability to nurse, pose added management and labor challenges and greatly decreases the lifetime performance of both udder and cow.

These added labor and potential losses can be avoided with females who possess small to medium sized teats that are cylindrical in shape. Such ideal teat characteristics not only allow for optimal calf performance, but as well, they have a significant impact on the overall longevity of the female's udder.

With udder conformation being moderately heritable (udder suspension .25, and teat size .50), producers who place selection pressure on udder conformation can expect improvement. Similar to selection for other production traits, culling all females who aren't ideal isn't practical in most scenarios. However, a stepwise selection protocol can be highly successful and begins with culling females whose udder conformation generates additional labor costs. Next. continue collection and submission of udder conformation data which can be immediately useful for benchmarking. and ultimately for selection/mating decisions.

Obviously, RAAA's udder scoring system doesn't account for abnormalities such as: minimally productive or "dead" quarters, or white pigmented udders which are susceptible to sunburn. However, these characteristics can be simply documented and included in your culling/selection system.

While udder conformation can play a significant role in a female's long term contribution, it is only one of many traits that influence cow herd profitability. Thus, selection decisions should not be placed solely on udder confirmation. Instead, udder conformation should simply be added to the current list of selection traits. Such balanced approach will enhance producer's ability to achieve the overall goal of profitability.

## **RAAA Udder Scoring Guide**

#### Suspension and Teat Size

The ability to make genetic improvement in any trait is greatly enhanced through documented observations of that trait. This principle provided the foundation of Red Angus' development of the udder scoring system. When implemented, this system will provide producers with valuable information to facilitate mating and culling decisions related to udder quality and its impact on a cowherd's productive lifespan.

Red Angus' two score system allows for the separate evaluation of udder suspension and teat size. Udder suspension scores are subjective assessments of udder support and range from 9 (very tight) to 1 (very pendulous). Teat size scores are subjective assessments of teat length and circumference and range from 9 (very small) to 1 (very large). Use the following guidelines when collecting udder score data:

- Udder scores should be taken within 24 hours after calving.
- Use a cow's "weakest" quarter to score teat size and udder suspension.
- Age of the female should not be factored into her scores.
- It's best if the same person scores all females in each management group.

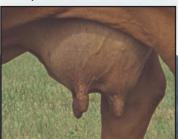
Udder Suspension			Teat Size		
Score		Example	Score	Description	
9	Very Tight		9	Very small	
7	Tight		7	Small	
5	Intermediate/moderate	0	5	Intermediate/moderate	<b>A</b>
3	Pendulous	0	3	Large	Q
1	Very pendulous, broken floor	0	1	Very large, balloon- shaped	



Suspension: 5 Teat: 6



Suspension: 7 Teat: 4



Suspension: 4 Teat: 5



Suspension: 7 Teat: 7

