

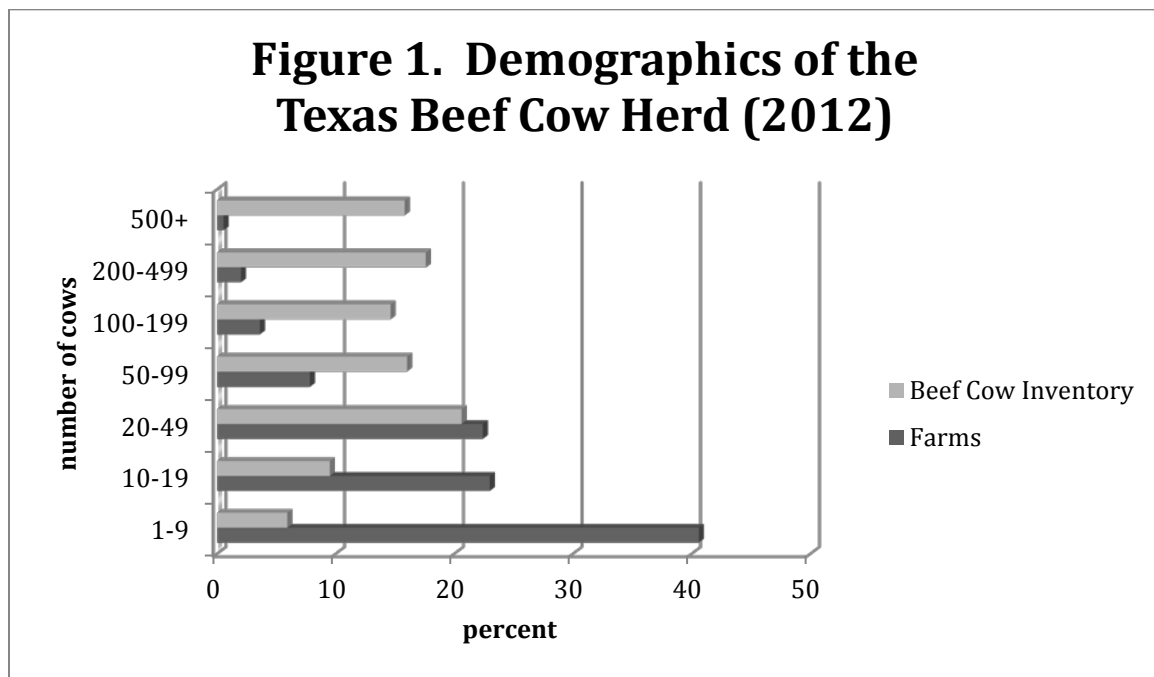
# Seven Things Every Small Producer Should Know

2015 TSCRA Ranching 101

Size is relative, so a definition of “small” is warranted here. For the purpose of this discussion, small beef cattle operations are defined as those maintaining a cowherd inventory of less than 100 head.

The reader should not equate “small” with insignificant or unimportant. Every domestic agricultural producer contributes to the safest, most wholesome food supply in the world and is obligated to share their personal story of quality assurance and stewardship.

According to the most recent USDA Census of Agriculture (2012), 86% of Texas’ cow/calf operations had 100 head or less (see Figure 1). The six percent of Texas’ farms with herds of 100 cows or more accounted for 48% of Texas’ total beef cow inventory.



## Environmental Stewardship is Job One.

Regardless of the size (acres) of an operation or the number of cattle involved, managers are called to first be stewards of the resources entrusted to them. Natural resource (soil, water, flora and fauna both domestic and native) stewardship is a responsibility, not an elective. If managers neglect to care for the resources, the ultimate losses are topsoil and water infiltration, degradation of the flora and the demise of the fauna.

As stewards of Texas ranges and pastures, stockmen manage the quality and quantity of water infiltrating Texas aquifers and impact the runoff supplying Texas streams, rivers and lakes. As Texas’ population continues to grow, water quality and availability will become all the more important.

### **A Preventative Herd Health Plan is essential.**

Nowhere is the old saying “*An ounce of prevention is worth a pound of cure.*” more true than with regard to animal health management. Small producers are often hesitant to engage the services of an animal health professional because of the associated expenses. Veterinarians are often used as a last resort – often in a ‘raise the dead’ scenario.

The significance/relevance of a preventative herd health plan is largely a function of potential health risks. Risk or exposure differs across operations and can differ over time. As the bare minimum, cattlemen should vaccinate calves against the clostridial complex. It is the responsibility of the cow/calf producer to castrate bull calves, preferably before four months of age. In addition, it is in the owner’s best interest to identify all cattle as a means of establishing ownership, deterring theft and for record-keeping purposes.

### **Are my cows getting enough to eat?**

One of the most frequent concerns voiced by small producers relates to nutrition. Body condition score is the most practical assessment of nutritional status. However, frequent observation of cattle often results in subtle condition changes being overlooked. In addition, body condition reflects the previous nutritional status of cattle; current and future nutritional wellbeing requires consideration of the available forage supply and physiological status of the herd.

Look at the grass. Does it look like there is enough to sustain the number of cows in the pasture? If cow’s hooves are consistently visible from a distance of twenty-five feet or more or the forage is less than four inches tall, cattle are likely not able to harvest all they want to eat.

Other practical indicators of forage availability include:

Plant selection – Cattle by nature are grazers with a strong preference for grass. If cattle are browsing the leaves on shrubs, bushes and trees, then grass supply is restricted.

Grazing behavior – Cattle typically have two major grazing events daily, one in the morning and another in the afternoon/evening. Grazing activity is also affected by weather conditions. During the hot summer months, cattle will usually defer their activity to the cooler times of the day (or night). Cattle grazing during the heat of the day and those grazing continuously throughout the daylight hours are indicators of restricted forage supply.

Gut fill – The rumen is the largest of the four stomach compartments and is the fermentation vat wherein microbial digestion of forage occurs. The rumen is positioned on the animal’s left side and when full, will occupy the space between the last rib and the pelvis or hipbone. A hollowed or sunken appearance between the last rib and hip on a cow’s left side is an indicator of restricted forage availability.

Never overlook the importance of drinking water. Water is the most important nutrient. Restrictions in water intake will result in reduced forage/feed consumption and compromised performance. Water deprivation during periods of cold weather will result in a very rapid erosion of cattle condition. Clean water troughs facilitate water consumption, especially among young cattle, and are an indication of good stockmanship and responsible stewardship.

**Reproductive performance is huge in the profitability picture.**

Reproductive performance is calculated:

$$\text{number of calves weaned} / \text{number of cows exposed to a bull}$$

Of the factors affecting profitability in a cow/calf enterprise (production costs, weaning weight, shrink, market price, etc.), reproductive performance is traditionally the single most important. Consider Table 1 and note that as production costs rise, reproductive performance becomes all the more influential.

Table 1. Relationship between % calf crop weaned and breakeven value at weaning						
% calves weaned*	Production Cost, \$/cow/year					
	200	300	400	500	600	700
Calf breakeven price, \$/lb.**						
100	.40	.60	.80	1.00	1.20	1.40
95	.42	.63	.84	1.05	1.26	1.47
90	.44	.67	.89	1.11	1.33	1.56
85	.47	.71	.94	1.18	1.41	1.65
80	.50	.75	1.00	1.25	1.50	1.75
75	.53	.80	1.07	1.33	1.60	1.87
70	.57	.86	1.14	1.43	1.71	2.00
65	.62	.92	1.23	1.54	1.85	2.15
60	.67	1.00	1.33	1.67	2.00	2.33
Calf weaning weight, lb..... 500						
*Calculated as # calves weaned / # cows exposed to a bull						
**Market price required to cover production costs only.						

**Hay – How to get your money’s worth.**

Hay is a replacement for forage rooted in the pasture. Hay is fed for one of two reasons: a) the producer cost-effectively grew more grass in the spring/summer/early fall than a sustainable [annually] number of cattle could efficiently harvest or b) the natural resource is overstocked.

Hay is expensive, whether raised or purchased. Hay growers continually consider the tradeoffs between tonnage (number of bales) and quality (digestibility and nutrient content). Hay baled to sell often has lower bale weights and lower nutrient content than hay harvested by the person who will ultimately feed it. When purchasing grass hay, consider these variables:

*Bale weight* – At the very least, hay buyers should be provided an accurate average bale weight. An illustration of the relationship between bale weight and cost per ton of hay is shown in Table 2.

*Potential waste* – Unprotected loose (lacking density) bales stored outside in poorly drained areas may contain 30% or more waste (the outer eight inches of a five foot diameter bale is 25% of the bale’s content). Mature sudangrass hay containing large

stems and seed heads, baled grain sorghum stubble or baled corn stalks will also have appreciable wastage.

*Plant maturity at harvest* – As forages mature nutrient content (protein, energy) and digestibility declines. Optimum age for cutting bermudagrass is 21-28 days. To achieve a balance of quality and tonnage, sorghum sudangrass (haygrazer) type forages should be cut just as the plants begin to form a seed head. Alfalfa is of such high quality most any age including full bloom is excellent cow hay.

*Management* – Nitrogen fertilization is essential to produce bermudagrass or sudangrass hay of both high quality and quantity. However, “highly fertilized” is a relative term and does not guarantee quality. Weed content should be minimal. Ideally, the hay was cut, raked and baled without being rained on.

*Color/Smell* – High quality hay will generally be green and have a pleasant aroma. Leached hay that is gray or straw colored or dark brown hay (characteristic of hay baled with excessive moisture) is generally of lesser quality.

Table 2. Relationship between bale weight and cost per ton of hay.							
	Bale Weight, lb.						
	600	700	800	900	1000	1100	1200
Cost/bale, \$	Cost per Ton, \$						
30	100	86	75	67	60	55	50
40	133	114	100	89	80	73	67
50	167	143	125	111	100	91	83
60	200	171	150	133	120	109	100
70	233	200	175	156	140	127	117
80	267	229	200	178	160	145	133
90	300	257	225	200	180	164	150
100	333	286	250	222	200	182	167

### **The economy of scale works against small producers.**

Beef producers’ most formidable competitor is not an ocean away, across a national border or producing another species of livestock. They are the beef producer just across the fence. Cost of production is the name of the game – if the competitors can consistently and profitably produce beef for less than your breakeven cost of production, they win, you lose.

Small producers (a cowherd of less than 100 head) typically cannot assemble a load lot (48,000 pounds) of like weight and quality of weaned calves, even if they mix steers and heifers. As a result, small producers find it difficult to individually take advantage of forward contracting, direct or video marketing. Comingled feeder calf sales are available as is the opportunity to sort similar calves into uniform lots and thereby take advantage of marketing calves in groups.

Purchasing in bulk or large quantities offers discounted pricing. Cost per unit (pharmaceuticals, ear tags, supplemental feed, hay, etc) is lower for larger operators. Equipment required for handling bulk supplements, commodities or large bales of hay can be cost prohibitive for profit-minded small producers. Cooperation among small producers affords the opportunity to realize large producer pricing.

**You never know enough. Be ever observant. Compare notes. Ask questions.**

When asked what he would do differently, a ranch-raised Trans-Pecos stock farmer said he would: 1) Find an older, experienced, successful farmer and follow him around for a year – even if he had to pay for the experience and, 2) Buy newer equipment.

The beef production arena is ever changing. Public policy, weather, markets, production costs, animal health regulations, environmental concerns, land fragmentation and urban sprawl are dynamic factors that shape and impact the business of animal agriculture. Successful cattlemen keep up with the changing times.

Be a part of something larger than yourself. Choose and support (both physically and financially) an agriculture industry organization that:

- represents your interests in Austin and Washington,
- keeps you informed of changes with potential to impact your operation,
- facilitates interaction with other beef producers,
- calls attention to opportunities for enhancing production efficiency, lowering cost of production, adding value or improving marketability and
- offers relevant goods and services that might be either unavailable or unaffordable for individuals.

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