Nature's Reward For Working With Her Is A Reduction In Cattle Production Costs

By Steven D. Lukefahr

KINGSVILLE, Texas: In recent presentations, tours, and visits with ranchers, if I could earn a penny for every time I've used the phrase “Working with Nature” I could indeed retire. The reason is because this is such an important focus in my beef cattle business.

You may ask: Why so important? An anticipated response would be: To make more money. However, for me personally it is more about leaving the land in a better state and building relationships with landowners, rather than examining my new monthly bank statement.

In the November 2013 issue of SGF, I penned an article about my new drought management model. The article explained the model, which emphasized the need to work with Nature, especially to avoid economic disaster.

A brief overview of the article is that by conserving the forage base (which is even more critical during serious drought) and using appropriate genetics, production costs can be dramatically reduced and a profit can still be made.

The model also assumes the timely implementation of various practices (e.g., adjusting stocking rates, rotational grazing, and culling less productive cows and sometimes even selling yearling breeding heifers).

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was sold and stocking rates were reduced by 50 percent to about 16 acres per cow. Half of the remaining cowherd was moved to temporary leases so that main permanent pastures would not be overgrazed to maintain healthy plant communities.

By implementing these decisions in a timely manner, it was not necessary to feed hay or expensive supplements or wean calves early. Cows were bred on schedule between mid-July and the end of August so that calves would be born mostly in May of the following year.

Between mid-July and the end of September, 20 inches of rain was received. Pastures literally exploded! Whereas at the peak of the drought there was less than 1,000 pounds of forage per acre, by mid-fall this figure increased to about 3,300 pounds per acre. In early September, cattle were returned to permanent pastures albeit at conservative stocking rates while pastures continued to recover which may still take a couple of years.

Over the next two months, cattle expressed their genetic ability to flesh out quickly on green grass. In fact, between birth and weaning, bull calves had an overall rate of gain of 2.60 lbs/day. However, two months prior to weaning there were certainly major compensatory gains achieved in excess of three lbs/day - only on grass.

By November, all calves were weighed. The actual (non-adjusted) average for weights of calves was 545 pounds at an average age of 187 days. For 2013, the average feed cost per cow was $19.51 and total cost per cow was $345 (half this cost was in lease payments). Despite the drought and considering record high feeder prices, a good profit was made in 2013.

The drought management model, which pivots around working with Nature, is the basis for my business and/or management decisions. As 2013 was drawing to a close (a big sigh of relief!), I contemplated on still other ways that I could fine-tune my model of working even more closely with Nature. In the late fall, I applied several practices to achieve this goal, which is explained in this article.

FORAGE STOCKPILING

As previously stated, by mid-fall
By overwintering his heifers unweaned on the mothers, Steven Lukefahr has cut his wintering costs to less than five dollars a calf.

there was an estimated 3,300 pounds per acre of forage. Across my main permanent leases (a total of about 500 acres), most pastures had not been grazed for months. There is now enough stockpiled forage available to last to the fall of this year.

Although I have been stockpiling forage for years, this practice sets the stage for other innovative, cost-reducing practices (as well avoiding certain costly practices) as mentioned below. Of course, stockpiled forage is best utilized with the practice of rotational grazing.

Readers know that there are various systems of rotational grazing, but I am being general for the purpose of this article. One benefit of rotational grazing livestock on tall and dense stands of forage is that it serves as an effective barrier against internal parasites, which are typically found close to ground level. It has been three years now since I last used chemical dewormers.

To further ensure that my cattle do not have parasite issues, I use a 2:1 mix of loose minerals to diatomaceous earth, which is regularly provided to the entire herd. If you are not familiar with diatomaceous earth, it looks like ground chalk but consists of microscopically-small fossils of organisms called diatoms.

Diatoms have sharp edges made of silica that are believed to wreak havoc on worms by literally ripping them to pieces while not harming the gut wall of the animal. Soon I may decide to add dried kelp meal for possible enhanced nutritional benefits.

For years I have weaned calves in the fall. With typical fall rains and the last flush of grass before winter, I considered this as an ideal time to wean (as opposed to calendar age
of the calf). The abundance of green stockpiled forage offers a one to two month window of opportunity for cows to recoup their body condition before winter when forage usually becomes dormant and less nutritious. Working with Nature in this way has avoided the need of costly winter supplements.

Likewise, fall-weaned calves can graze on the nutritious forage instead of consuming unfamiliar and costly feeds such as hay and energy and protein supplements.

If it ain’t broke don’t fix it? Last summer at a grazing conference held in Ft. Worth and sponsored by NRCS, one of the key guest speakers, Kit Pharo, turned my head by asking me privately why I weaned my heifers in the fall? He retains heifers (“wintering”) on their dams during the winter as animals like deer and bison do in the wild.

However, he and his cooperator producers only wean their bull calves so that they can be developed - and more importantly tested - on forage before they are later sold in either fall or spring bull sales.

**WINTERING HEIFERS**

During Kit Pharo’s presentation, I learned a little bit more about the rationale for wintering heifers. Besides it being the natural thing to do, there appeared to be some clear economic incentives, which I will mention later. Other advantages include more time for heifers to adopt or enforce desirable traits behaviors as learned from their dams (e.g., grazing preferences, coming when called by the manager, respecting fences, and gentle dispositions.

During this time, heifers obviously continue to nurse, although the milk supply is lower. However, the milk in late lactation is likely to be more concentrated in nutrients (e.g., fat and protein) so there should be no need to creep feed. As winter progresses and the nutritional value of forages declines, so too will the cow’s milk supply. Again working with Nature.

From the cow’s vantage point, if there is some green forage available there is little harm in allowing the heifer to winter at her side. So far this winter, my cows have maintained or even increased their body condition scores (BCS), which were also measured last fall. In fact, on 25 October the average BCS of cows was 5.65 (range of 5 to 6.5). On 18 January the average was 6.1 (range of 5.5 to 7), being achieved only on grass. This was possible because in some years in south Texas there is the unfair advantage of no hard freezes in winter, so there is still some green forage.

I have also identified a new selection tool: to promote the sales of a young breeding bull that is from a dam that previously had a BCS

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of 7 while raising a good heifer during winter without supplements. Another reason for maintaining good BCS this winter is management.

Stockpiling forage in tall and dense stands produces an insulation effect such that temps at near ground level are high enough to protect a basal layer of green forage. No wonder why ungulates in the wild are always moving throughout the year!

However, if Nature is not so kind and a hard freeze does occur then it may be necessary to wean heifers in a timely manner in order to spare their dams from experiencing a potential deterioration in BCS during winter, which could otherwise result in having to feed cows expensive supplements. In my opinion, cows should not be allowed to drop below a 5 BCS during winter.

Another positive aspect of wintering heifers is less stress of weaning. By March or April, the dam may have already weaned the calf herself. By this time another decision needs to be made. The heifers could either remain in the cow herd (and be exposed later to the same bull/s) or they could be transported to a separate pasture where they could benefit nutritionally from the spring flush of grass in a rested pasture. I plan to do the latter so that heifers can either be artificially inseminated or bred naturally to a different bull that will produce lighter calves at birth.

Another reason is that sometimes the herd bulls are the sires of most of the heifers. Too, their breed-type may not complement that of the heifers in so far as achieving high levels of hybrid vigor in future calves is concerned.

I previously mentioned that there are also economic incentives of wintering heifers. Prior to 2014, it was costly and time consuming to feed whole cottonseeds to weaned, developing heifers. Over the last three years, the total cost of developing heifers from weaning to date of bull turn-out at roughly from 6 to 15 months of age, ranged from $103 to $130 excluding labor. Feed accounted for 71.8 percent to 81.4 percent of total costs.

By mid-January 2014, this heifer-on-dam wintering practice has cost only $3.26 per heifer (only veterinary costs). No feed costs. In addition, this has been the first winter where I do not have to feed heifers.

Vacations are a good thing! ■

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