

# Ranch Review: Durham Ranches, Inc.

Since the first printing of Buffalo Management and Marketing 1983, many things have changed for Durham Ranches, Inc. Most of these changes have occurred since our introduction to a fairly new and definitely different style of management called Holistic Resource Management (HRM). It has certainly enlightened us and has helped us to open our eyes to new concepts and ideas. I will touch on some of the concepts here, but I will not go into too much detail. If any of this sparks your interest, I would highly encourage you to look further into it. There is a non-profit center with a full-time staff which offers courses all over the United States, and there is also much literature available. For further information write: Center for Holistic Resource Management, PO Box 7128, Albuquerque, NM 87194.

Probably the most important change that we have gone through was sitting down as owners and deciding what our goals for the ranch would be. Through HRM, we learned that we needed a 3-part goal, consisting of Landscape Description, Quality of Life and a Production Goal. After much time and thought, we came up with a "Mission Statement" and a list of "Ideal Goals" which encompass our 3-Part goal. I would like to share our Mission statement: "The Durham Ranches is a family-owned business that is dedicated to returning its land to that of the past where history records tremendous grasslands of unlimited potential. The environment is stable and balanced, the wildlife is visible and healthy, the creeks and springs flow, the land is covered with a complexity of grasses, the countryside is clean with the care and concern of all clearly evident."

These goals have not only made all of us as owners a bit more proud of the ranch but have also given all of our staff a bit more to bite into and also to take pride in being a part of our operation. All of the staff were included in helping us to put this together as well. We realize how important they are, and in turn they feel as though they are a real part of what happens on the ranch.

Once we got all of our goals down on paper, we started looking at the tools that were available to help us attain those goals. We learned that we

can actually improve the quality of the land by using our animals and what better animals to use than our Native American Buffalo?

## Time Controlled Grazing

Years ago when the bison roamed freely, there was no "overgrazing," and our history books tell us that these animals were seen roaming in herds in the tens of thousands. We have learned that "over-grazing" does not deal with animal numbers but solely with the element of time (which the animals spend in a given area or come back to the same area.) Those huge herds of bison rarely stayed in an area long enough to severely damage the vegetation and most commonly did not return until all of the plants had recovered sufficiently from prior grazing. We try to plan our grazing so that the plants are allowed enough time to recover between grazing and so that the animals don't stay too long in one area.

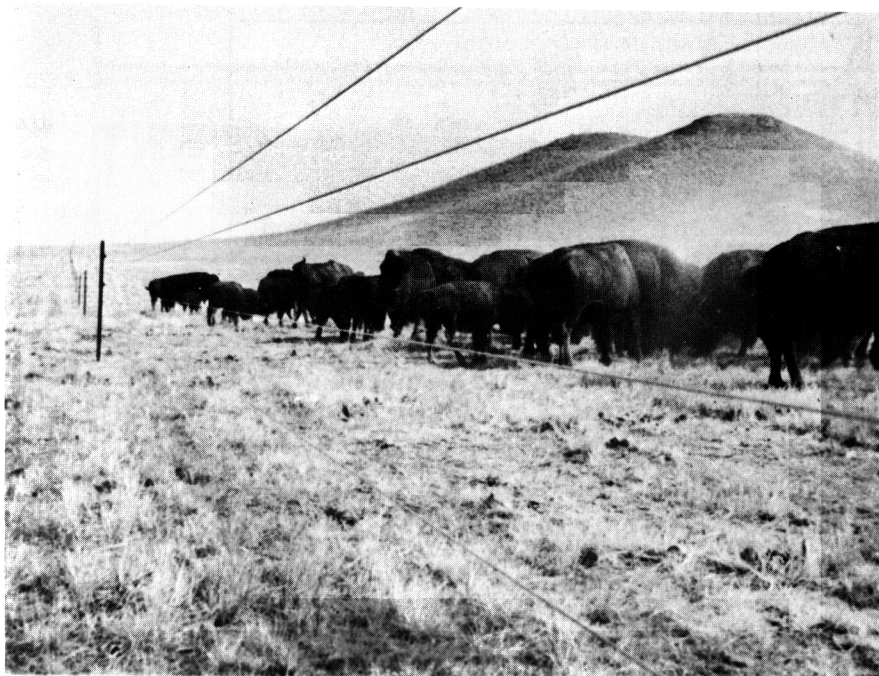
We have also learned that many of the plants in our area (and most of the Great Plains) have evolved in the presence of large herds of animals such as bison and require some sort of disturbance such as grazing and trampling in order to be healthy and vigorous. If they do not receive this

disturbance periodically, they will eventually wither and blow away with the prairie winds. We have determined that we must better control the amount of time that our animals spend in any given area of the ranch.

## Fences

We also decided that in order to more effectively control time intervals, we would need to do some cross-fencing. It is just too hard to effectively manage time with our style of management when we have pastures of up to ten thousand acres and herds of no larger than 2500 animals. We then decided that it would not be feasible to continue to build our conventional six-foot, very expensive buffalo fence, so we started looking for alternatives. Immediately the idea of an electric fence came up, and we decided to give it a try. We were very comfortable with the idea of controlling the buffalo with fences costing no more than half of what we paid for our others.

Our first attempt at a cross-fence had mixed results. We started out trying to get by with a minimum of fence - two wires on the flat ground, bottom wire grounded at 30 inches off the ground, and the top wire hot at 36 inches with about 90 feet between steel posts. For about half of a day, it ap-



A 4-wire fence seems to be just right for animals two years or older. The wire heights are bottom 30" cold, second 37" hot; third 44" cold, top 51" hot.

peared that this would be sufficient. Unfortunately, we miscalculated with the height that we needed for the top wire. When the buffalo were walking, the 36 inch wire was fine, but as soon as the buffalo got to the fence, they would step and raise their heads right over the top wire. We started to have a little trouble with some of the animals going over the fence. They would walk up to the fence and by putting their noses about 3 inches away from the hot wire were able to tell whether or not the fence was charged. If they decided it wasn't hot they would just step back and jump the fence. We did decide that if it wasn't such a dry year (they had to crowd into a corner for water), and if the bulls hadn't been fighting so much (heavy breeding going on), that we would probably have had better luck with our "training fence."

Since then, we have added another wire above and raised the fence on the flat to 42 inches which seems to be just the right height for animals two years or older. We are just now trying out some 4-wire with the wire heights looking like this: bottom at 30 inches cold, second at 37 inches hot, third at 44 inches cold and top at 51 inches hot. This looks like a good fence, and we will probably go with it for a while. The distance off the ground gives the calves (and wildlife) lots of room to move back and forth (which is fine because they never go far). We have watched antelope go under this wire at a dead run and never touch it! Helpful hints: any place where animals will be crowded - watering holes, corners, gates, etc. - make sure the fence is plenty stout. These pressure areas are where you want your fence to be physically able to contain (as much as practical) the animals. I should also point out that we are still experimenting, and I'm sure that we will probably do a lot more learning. For now, let's move on to other things.

## **Operations - Calves**

We are going to try to handle our herd only once this year instead of twice as we have normally done in the past. This will help us to reduce the amount of stress to the animals as well as to our people and our equipment. We are planning to brand and wean our calves and preg-check and cull our cows all at once in November. We will still de-horn all of our heifers, but this

year we are going to try out a power de-horning saw. We believe that this will allow us to handle the larger horns that the heifers will have since they will be about two months older (5 to 7 months as opposed to 3 to 5 months) when we work them. (Normally, branding and de-horning are done in late August or early September). We are excited to see how this works out.

Once we've weaned our calves and preg-tested our cows, we send the cows out to pasture at least two fences away and out of visual range of the calves. This helps us to avoid any potential problems with the cows trying to stay with their calves. The calves, weighing an average of 400 pounds, then go on free choice around grain and hay mixed in self-feeders. After a couple of weeks, we will run the calves back through the corrals and vaccinate the heifers for Bangs. We have found this necessary, because other states require this procedure on any breeding heifers entering their state.

We also select off our top 10 - 20% of bulls to keep for breeding and any heifers for breeding stock sales we will have are selected at this time. The excess bulls are also readied for shipment to the feedyard. We are currently feeding the bulls in Idaho and have been realizing over 1 1/2 to 2 pounds per day during the winter months - about twice the gains we've achieved at the ranch. We start killing these feed-bulls in Idaho in August when they weight about 1000 pounds. Then hanging halves are then transported by refrigerated truck/trailers to Durham Meat Company's San Jose plant for fabrication into steaks, roasts, ground, etc. and then shipped all over the U.S., including Hawaii.

We have recently entered into some agreements with buyers of our breeding stock where we guarantee the buyers a minimum price for the offspring of their stock and we are guaranteed their production. We believe that both parties will benefit significantly from this arrangement.

The calves that we keep here are moved from smaller pens gradually (hopefully fast enough to avoid any health problems) up to larger pens and finally out to pasture to winter. They are never without the option of using the grain/hay mixture as move the feeders around to wherever the calves may be. We are also trying a free-choice "cafeteria style" mineral

supplement. The feeders have ten separate compartments in which a different vitamin or mineral is stored. The animals then have their choice of ingesting the particular vitamins or minerals that they need at that time. These animals do know how to balance their own diets and will do so if given the opportunity. At this point, we're not sure of the necessity of any mineral supplements but time will tell.

## **Yearlings**

Currently we are keeping our yearlings separate from our main breeding herds until they are bred as twos. However, we are now undergoing a test to see what the calving percentage difference is between 2-year old heifers kept separately with their own age bulls through breeding and the same age heifers mixed in with our breed bulls containing bulls aged two to five years. (we now have a higher ratio of younger bulls in this herd). If the calf crop is relatively equal then we will probably start turning our twos in with our breeding herd in the spring, thus eliminating the need for an extra, separate herd for the spring and summer months.

## **Breeding Herd**

We have been running our threes together with our big herd and hope to run our twos with the same herd. This would give us a larger group of animals which would give us a higher stock density. In time this will aid in our goals to improve our land. At the same time, we would be maintaining a high percentage calf crop (90 -95%) which is also one of our goals.

We are running approximately one bull for every eight to ten cows in our breed herd. We now keep our bulls to a maximum age of only five years before they are utilized for hunting purposes. This has aided us in keeping the number of "renegade" bulls to a minimum, since the older bulls are usually the problem animals.

## **Hunting**

We have been selling all of our cull bulls for hunting purposes. These bulls are either hunted here at the ranch or sold to outfitters who buy them FOB the ranch and truck them elsewhere for hunting.

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## **Gathering**

Another change in our method of handling the buffalo is that we now try to work with the animals as opposed to against them. Last year for summer round-up, one man with a feed truck and a whistle moved our big herd (over 2000 animals with calves) over six miles, through four pastures, and into our holding pens all by his lonesome! It took a few days, but the animals were grazing the entire time that they were moving and at no time did they feel threatened. This resulted in no weight loss, no damaged equipment, no stressed folks.

Needless to say, this is how we move the buffalo. We actually try to allow them to move themselves as much as possible. We just go out and blow the whistle (a referee's whistle) and open the gates. These critters love to move, so there are usually no problems. (Of course it did take some training with good pastures and feed to get the buffalo to respond to the whistle in the first place.)

Occasionally we will end up trailing the slow pokes with a couple of pickups after a day or two. We let them set the pace whenever possible. If they run, it's their idea. We just give them plenty of room. When we're in the holding pens and traps, we crowd them a bit with our grill-guard protected pickups. Generally, this works quite well.

## **Working Facilities**

The basic design of our working facilities has remained the same but they have undergone some recent

upgrading. The "infamous" Jack Errington has done it again with his creativity as he worked out the master-plan on the remodeling.

Our alley-ways have become more like the walls of a fort than those of a stock-working facility. Our walls are now made of 3 1/2 inch thick reinforced concrete panels which are seven feet high at the top. We built a new solid circle which is on a wheel and also doubles as a gate so we can have access to another alley and scale.

We finally retired our old Powder River squeeze chute after fifteen years and have replaced it with a modified Jim Hartman squeeze. We converted it to hydraulics and also added in a single-animal digital scale right in our chute-alley, so we can weigh each animal as it is being worked. Leave it to Jack to design such a "high-tech" first class facility.

## **Supplemental Feeding**

Winter feeding at the Durham Ranch consists of supplementing the range with hay and/or alfalfa cubes and cake. The hay is usually ranch-raised alfalfa or alfalfa/grass mix, and we have also put up some wheat hay in the past as well. The cubes are normally of a very high quality, and they are purchased from farms in Wyoming. The cake contains barley, wheat, molasses, vitamin A, calcium, and phosphorus. This cake is made at our locals Farmer's Co-op.

The amount of supplement used at the ranch varies from year to year depending mostly on the quantity of standing forage available and the severity of the winter. We try not to over-feed in the winter as we realize

that is only natural for the animals to lose a little weight at this time of year. We also do not want them to become too dependent upon us for food like many cattle have become.

When we do feed, we try to use our poorest quality hay early in the winter when the maintenance requirements of the animals are low. As the winter progresses and the cows are nearing lactation, we utilize our better quality hay and might double the amount of cake-feeding to two to three pounds per head per day. Otherwise they may only be getting about one cake with some cubes and minimal hay.

If the quality and quantity of feed available is poor, as we have experienced this year, we will feed the cows prior to and through the breeding season about 2 pounds of cake per head per day. This practice has worked for us as he have suffered poor calf crops the year following a drought if we do not feed. This practice insures us our normal calf crop the following year.

## **Farming**

After seriously looking over our farming enterprise, we have decided to minimize the acres involved in it. We know that we can do far better with the land if we are producing buffalo off it. We are also pretty well decided that we should leave the farming to the people who are in places more suited to it. In the meantime, we are scaling way back and going to more of a low-input, organic style of (hopefully) regenerative farming. We'll see how it goes!

## **General Information**

Through HRM we have learned that we can increase the number of animals that we can maintain on the ranch if we use time-controlled planned grazing and better utilize our land. Therefore we are currently in another herd-building program. Our objective is to increase our breed herd by 10% for five years. This will give us close to 1500 cows. While in the process of this increase, we are continually monitoring our land and other resources to make sure that they are improving and not down-grading. By monitoring, we are allowed to make the necessary adjustments that will help us to continue working toward our long-range goals.

