

Editor's note: A new, regular feature can acquire surprising dimensions as it progresses through succeeding issues of the magazine. Such may be our experience with "The Grazier."

Clearly, those in the production of seed stock need a forum for exchange and exposure to pasture management and all the fields allied toward deriving the most and best from the land and forage resources. Fencing, legumes, cell grazing, rotational patterns, grass management know-how are exciting subjects. They're your tools, and their proper, most effective usage can add both dollars and personal enrichment to the Angus enterprise.

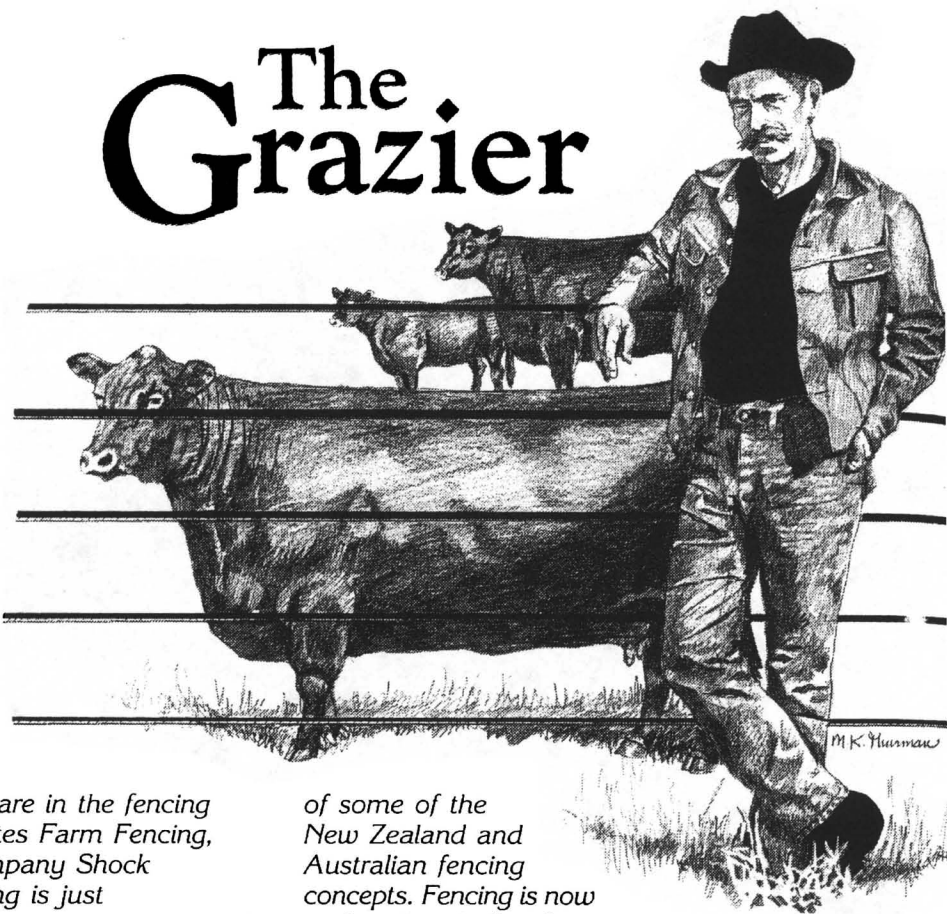
So, the decision became to offer a column we hope will prove both topical and influential.

It's a joint effort. Mr. Huseman discusses fencing, and Mr. Kilmer will comment on legumes, grasses, and all the aspects of grazing. Both are in the fencing business. Huseman owns and operates Farm Fencing, Inc., and Kilmer has labelled his company Shock Tactics. The impact of modern fencing is just surfacing. Chuck Huseman says:

"If there has been one area of agriculture . . . changed by applied technology . . . it's been the area of fencing. From the time barbed wire revolutionized ranching until a very few years ago, there was a long period of fencing being thought of as nothing more than a necessary evil, with little or no thought given to improving the technology.

"This changed dramatically with the importation

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of some of the New Zealand and Australian fencing concepts. Fencing is now undergoing similar changes the cattle business experienced in the late 1960s, early 1970s. 'The exotics' have been introduced to the fencing market."

Both men raise cattle; Huseman's Angus herd has been in existence on his Homestead Farm since 1910. They "know whereof they speak," and if we can keep them on target and out of each other's hair (or paddock), our purpose will be served. Send in your questions.

Proper fencing deserves some forethought

By Chuck Huseman
Cedar Lake, Indiana

For many people involved in livestock production, fencing is the largest expenditure and investment they make. Instead of purchasing a \$100,000 combine, these people rely on their animals to do the harvesting of forage, their main crop. To be successful, livestock producers must make their fence purchases as intelligently and with as much planning as a grain farmer would a tractor or combine selection.

When faced with purchasing or building a fence, today's livestock owner has a much wider array of options than were available in years past. The old notion that woven or barbed wire were the only types of fence is being challenged by many new types of fence and also by entirely new con-

cepts in fencing.

The first thing one should do when deciding on a fence is consider the type of livestock to be contained. By type of livestock, I mean, not only species but the individual herd or animals that are going to be fenced.

Next, consider the pasture or paddock conditions that are likely to exist throughout the life of the fence. Last, but maybe most important, the management ability of the animal owner must be measured.

What type of livestock? The answer requires more than just "a horse" or "some cows." Will the horse be an easy-going 25-year-old mare or a yearling stud colt? Will the cows be easily handled, or will they be some Western feeder calves just off the

truck?

What will be the pasture or lot conditions? Will it be a lush 15-acre pasture for one horse, or a half-acre dirt lot for 30 head of feeder calves?

What kind of management is available from the animal owner? Will the owner be near at hand 24 hours a day to check the feeder calves, or is the owner an attorney that usually gets home after dark and whose daughter owns a horse?

Only when these questions are answered should a person make a decision on which type of fence to install.

Fencing is, in effect, a "livestock barrier." It can also be thought of in many other ways such as an investment, a decoration, or improvement to a property.

"Livestock barriers" can be broken down into two major categories: physical barriers and psychological barriers. A fence that is a physical barrier would be one that, by its size and physical strength, would not allow an animal to escape. This type of fence would lend itself well to the application above with the feeder calves "fresh off the truck." Such livestock will often run right into a fence. They will surely walk the fence lines for a couple of days looking for an escape route. The barrier in this case must be able to stand up to intense "livestock pressure."

On the other hand, a psychological barrier relies on the animal's conditioned responses. This type fence would probably be ideal for the 25-year-old mare mentioned above. Once she was conditioned that the fence line was as far as she could go, the livestock pressure on that fence would be nil.

An example of the physical barrier would be a 10-wire high tensile fence or a 5-board 2x6 fence with large posts set eight feet apart—obviously, expensive fences to build but worthy of consideration if the conditions warrant. Other conditions that might require this much fence would be the person that's fully employed away from where the animals are kept. This person could not afford to be called home to chase livestock should they not follow their "conditioned response."

An equally extreme example of the psychological barrier would be a single electric wire strung on light-weight posts set 45 feet apart—quite obviously, a very inexpensive fence to build. This fence, however, can be very effective under the right conditions.

A fence becomes the most effective when the two types of barriers are combined. A fence doesn't need to be as formidable a physical barrier when electricity is added. And an electric fence is more effective when it is built to allow for occasional pressure.

First and foremost, a fence should contain and control the animals that it's built around. Considering the factors above before building will help it do just that.

In future articles, I'll discuss the many different fences that can be categorized as physical barriers and psychological barriers. I will also examine the new innovations and products available for controlling livestock.

The invitation to write a grazing column for the *Angus Journal* is surely an honor. I am grateful. I will try to fulfill the trust and obligation thus created.

Three widely divergent and seemingly unrelated experiences have occurred during my life. Combining them, it seemed, would solve many of the problems that had emerged.

Briefly, those experiences were these; I had somehow begun the practice of rotational grazing dairy cows on

pasture in 1949. The resulting increase in efficiency of the forage was so astounding, I had no doubt that this practice would become routine across agriculture. This did not happen.

Next, I was privileged to work for the company selling a product called "Bloat Guard" and began to see the potential in grazing legumes. Third, I was exposed to New Zealand-style smooth-wire electrified fencing. The implication of combining these concepts and the good that could occur in the production

of beef began to sear into my thinking.

As energy costs soared, as soil erosion due to the production of rowcrops on unsuitable soil became a national scandal, as interest rates on the debt needed to buy the "iron" and related inputs reached new highs, it seemed to me growing and grazing legumes was such an obvious solution that cattlemen would flock to the practice. Barely a trickle.

Well, we'll try to ease a few of you in that direction with this column. Welcome aboard.

Save soil, oil, water and toil . . .

Grow legumes and graze 'em

By Willy Kilmer
Merriam, Kansas

The economic plight of the American crop and livestock producer has been discussed at length with little results other than it's left up to the government to bail them out.

Boiled down to simple terms, the following are the critical problems and some ideas to help solve them.

I. ENERGY—availability and cost.

Problem—Energy required for plowing, fitting, and cultivating is one of the highest costs involved in the production of row crops.

Solution—Grow legumes and graze 'em. Legumes such as alfalfa only need the ground prepared for planting once and then no more tilling is required for several years.

Problem—Energy requirements are high for the production of nitrogen fertilizers and row crops require large amounts of it.

Solution—Grow legumes and graze 'em. Legumes produce their own nitrogen from the air, reducing the need for and cost of energy required.

Problem—Energy requirements are high for harvesting and drying row crops.

Solution—Grow legumes and graze 'em. There is no energy required for either harvesting or drying.

II. IRON—original and interest costs.

Problem—In the vicious cycle of trying to produce cash flow, the grain farmer has bought bigger tractors, combines, and equipment which then require more land to justify the investment, which requires more equipment, etc., etc.

Solution—Grow legumes and graze 'em. For the minimal amount of tillage required to grow legumes,

either smaller equipment will suffice or existing large equipment can be hired or leased, thus releasing large amounts of capital. The fencing to adequately utilize legume pastures costs a mere fraction of the cost of the "iron" used in row crop production.

III. SOIL CONSERVATION—erosion and tilth.

Problem—Soil is left "naked" for long periods of time in the production of row crops allowing erosion to occur. Frequent cultivation also enhances erosion by water and wind.

Solution—Grow legumes and graze 'em. Legumes protect the soil from both water and wind erosion with their thick cover. The root system of legumes also helps to keep the soil in place. Since legume stands are not broken up frequently, there is little opportunity for soil erosion to occur.

Problem—Many acres of rolling and hilly soil have been plowed in recent years that will not long support the abuse from row cropping.

Solution—Grow legumes and graze 'em. Legumes will prevent the erosion of this irreplaceable resource. Cattle can easily graze land that is difficult to cultivate for row crops.

Problem—The removal of organic material from the soil depletes its ability to produce.

Solution—Grow legumes and graze 'em. Cattle grazing on legumes return most of the organic matter to the soil in the form of manure.

These problems facing the American farmer will not go away. Why haven't legumes been utilized if they are as simple and easy as the previous answers suggest? One of the major

objections is that grazing legumes produces bloat in cattle which can be fatal.

Fortunately, there are products available in the form of blocks, liquid, or granules that are effective in controlling bloat. In addition, there are management practices such as filling cattle with coarse forage before turning them out on "bloaty" pasture and having coarse roughage available while grazing legumes to help control bloat.

Another objection to legumes has been the cost of establishing a stand. Careful analysis will show that the cost of seeding a stand of alfalfa is the same as for a crop of corn. The difference then is that the alfalfa will last for several years, producing crop after crop with no additional tillage; whereas corn will produce only one crop.

Also, it's been commonly believed that soil had to be worked extensively in order to provide a fine seedbed for alfalfa. Experience has shown, however, that soil can be left rather coarse and open, seed can then be broadcast with either dry or liquid fertilizer, and left alone. The seed will lodge in cracks and crevices in the soil. And as the first rain washes dirt over it, it will sprout and grow very nicely. By leaving the soil coarse, the danger of erosion and crusting is greatly reduced.

The argument's been made that if any number of producers adopted the legume grazing practice, it would be disastrous to cattle prices. This isn't necessarily so; rather it's more likely that we would raise approximately the same number of cattle as with current row crop practices but with much less wear and tear on our soil, our machinery, and our wallets.

It's hoped this will stimulate some discussion, thinking, and action that will prove beneficial to our land and the people that farm it.