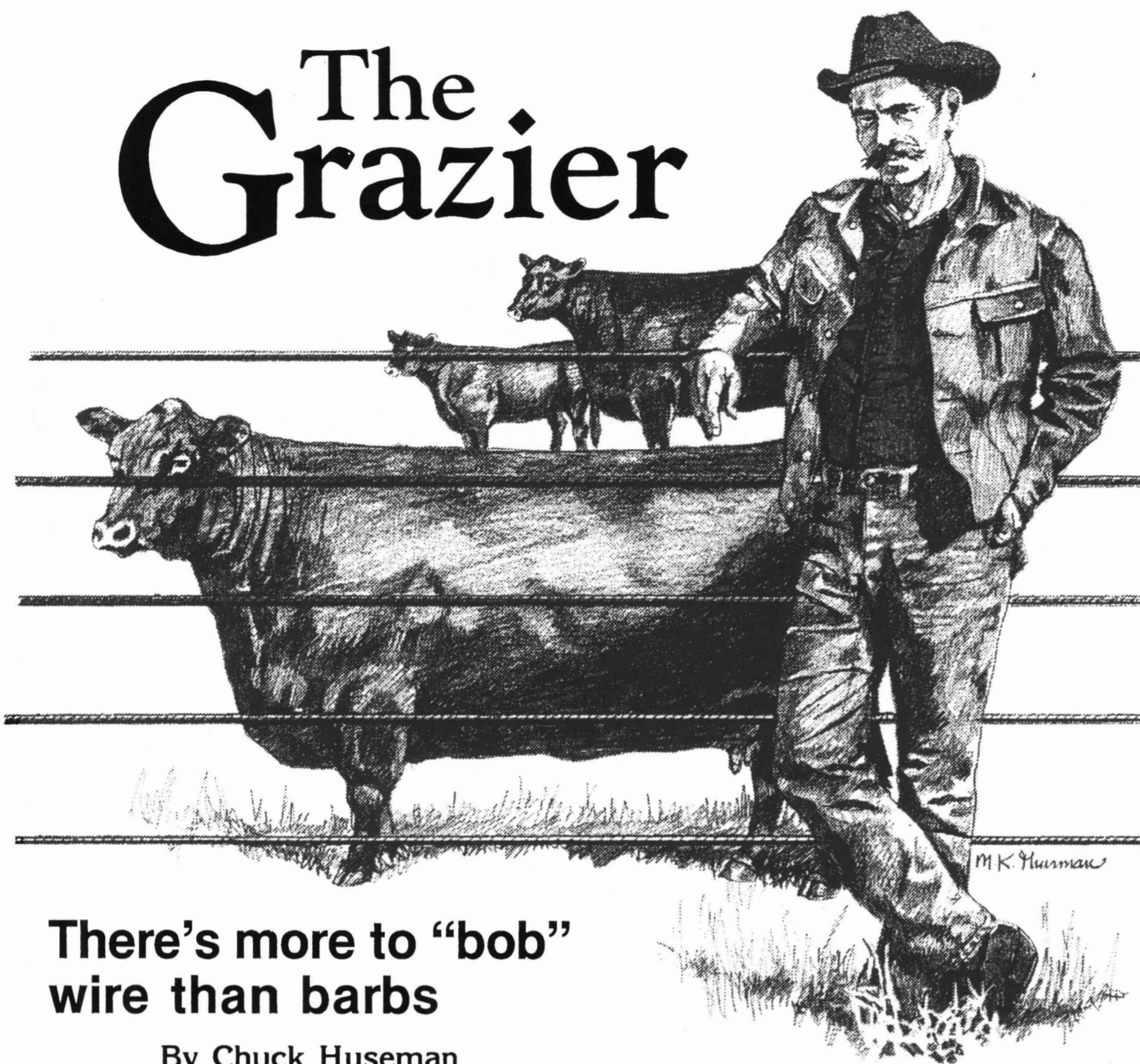


# The Grazier



## There's more to "bob" wire than barbs

By Chuck Huseman  
Cedar Lake, In.

In my last article I discussed the difference between a physical barrier and a psychological barrier when fencing livestock. Even though today there are many new options to choose from when building fence, when one thinks of a physical barrier, wire comes to mind. Also, when one thinks of wire, the old standby barbed wire is most often considered. To some "barbed wire" and "fencing" mean the same thing. However, there are differences even in barbed wire.

The old saying that the six gun didn't win the West, barbed wire did, may be true. The introduction of barbed wire about 100 years ago changed forever, not only the way livestock were raised, but the lives of the people of that time. Since barbed wire has been in use for so long, I think it safe to refer to it as "conventional" fencing. Also in this category is woven wire, or field fence as it is sometimes called.

The total volume of barbed wire sold in the United States each year exceeds 125,000 tons, so it is easily the most popular fencing material on the market today. Over the past 10 years, however, the volume of woven wire sold has steadily decreased causing barbed wire sales to jump even more.

Some reasons for the decline in

field fence sales, according to Rick Cloyd, director of marketing for Keystone Steel and Wire, are the farm economy and the reduction of the number of "mixed" farms.

Cloyd says that with the movement of livestock from the Midwestern corn, soybean, and hay operations of the past to the West and South, the areas to be fenced have become much larger. Rather than having 20- to 40-acre fields that would be planted to a row crop then pastured for the residue, with an occasional year or two in pasture, now most of the fencing being done is around much larger range-type areas. These larger stretches of fence call for a more affordable material—barbed wire.

The typical barbed wire is a 12½ gauge, 4-point product with type-one galvanizing. Thirty years ago, however, Bekaert Corp. introduced an imported, high tensile, barbed wire that was only 15½ gauge, but had a type-three galvanizing (.80 ounces of zinc per sq. ft. of wire surface).

Mr. John Breton of Bekaert says that this 15½ gauge product has taken over 20-25 percent of the total barbed wire market, and its popularity is still growing. At the present time a number of other manufacturers also offer a high tensile 15½ gauge

barbed wire—further proof of its popularity.

This 15½ gauge product has some very obvious advantages over the more conventional 12½ gauge type. The high tensile barbed wire has a much heavier coating of zinc. This means a substantially longer useful life. It has more tensile strength, meaning, it not only is stronger and harder to break, but that it stays tight much better and will "spring" back under pressure.

The only disadvantage to using a high tensile barbed wire is the high carbon content of the wire causes it to be more brittle and therefore a bit harder to work with. I've seen many instances where a farmer would be very frustrated and dissatisfied with high tensile barbed wire when working with it for the first time, only to swear by it after it's been in place for a few years.

The most striking comment about preferences in fencing material was made by Cloyd of Keystone Steel and Wire. He notes that the biggest determinant as to which type of fence is being sold in different areas of the country, is the custom of the area!

It would seem that livestock people had come farther than to make such a monetarily critical decision based on nothing more than what was done back in the good old days.

In my next article I will discuss a formidable challenger for barbed wire in the fight for number one fencing material: smooth high tensile wire.

## Whatever you're doing, STOP!

By Willy Kilmer  
Merriam, Ks.

I extolled the virtues of growing and grazing legumes in the introductory column. I have had innumerable discussions about that concept with little or no disagreement that it sure enough makes sense.

The problem appears to be that we're so busy doing what we've always done that we don't have time to stop and get headed in the right direction.

A visit with some neighbors recently demonstrated this vividly. They were repairing the bushhog in a break from repairing the big round baler in between repairing the planters, discs, tractors, combines, and swather. I had "opened one gate and closed another"

in a grass-legume pasture rotation requiring maybe 15 minutes, and it seems clear to me that that one simple operation replaced all of their activity and expense. We both have cattle. We both have trouble making a profit. Neither of us can control the market. It would appear that *expense control* is the name of the game.

What I'm trying to say is this: growing and hauling feed to cattle has become too expensive. They must graze every day of the year that they possibly can. An intense rotational grazing system is the only method I'm aware of that allows this. This then allows legumes to be established eliminating the need for purchased nitrogen.

I'm told there are seven tons of nitrogen in the air above each acre of earth. Legumes utilize it, provide nearly perfect livestock feed, then even go so far as to leave reserves in the soil. Seems foolish to pay for such an abundant commodity.

At a grazing conference in the Southeast some time ago, one of the speakers was quoted as saying "stored feed won't work and purchased nitrogen won't work in a cow operation." I couldn't agree more. Even when one has graduated to the grass-legume philosophy there is still too much expense if the crop is harvested, stored, and fed. The resulting expense and loss is too great to be covered by current or anticipated beef prices.

This time of year there is a lot of interest and attention to sports. At the upper end in any sport, there is seldom much difference in skill or ability. It is quite common for the announcers of most any event to discuss the attitude of one team or player versus another.

Perhaps we need a different attitude in the cattle business. As we approach each operation we might examine our attitude. If planting an annual crop such as corn, milo, or sudan, why not a perennial grass-legume mix? If harvesting a crop, why not let the animals do it?

There are a great many cattlemen of exceptional skill and ability, yet the losses chalked up in recent times are staggering. It's hoped, a change in attitude could correct this.

Whatever you're doing, STOP! If you're in the area I would appreciate the chance to visit with you. Come by and observe as I "open one gate and close another." I'd be honored.

## Bonding exists between grazing species

Cattle can defend meek and mild-mannered sheep from predators, U.S. Department of Agriculture animal scientists report.

Sheep and cattle, when grazing the same range together, normally ignore one another.

If the two animal species are introduced to each other when the lambs are very young, however, their behavior is quite different.

"The lambs form a social bond with cattle and develop an impelling need to be close to them as they move about on the open range," says animal physiologist Dr. Clarence V. Hulet of USDA's Agricultural Research Service.

Hulet and fellow scientists want to take advantage of cattle's distrust of strange dogs and coyotes to cut lamb losses to predators. If cattle and sheep mingle when they graze, the cattle, who butt and kick at predators, can keep them away from sheep.

"We lost nearly half of our sheep to coyotes the first year we had them alone on the range in New Mexico," said Hulet. "Such a loss would bankrupt a commercial operation."

Hulet and range animal scientist Dr. Dean M. Anderson found that the animal bonds became strongest when 45-day-old lambs were penned initially with yearling heifers for 30 days. Results: the two species freely intermingle as they graze pastures on the agency's 193,000-acre Jornada Experimental Range near Las Cruces, N.M.

Anderson, a cattle grazing research scientist, and Hulet, a sheep research scientist, are teaming up to see how the two animal species graze together. They are gathering information on the animals' behavior and what they eat, when and how much.

"Cattle eat mainly grasses while sheep prefer broadleaved plants and leaves from some small shrubs," Anderson said. "They co-exist on the same range very well."

He said research indicates that the wider the variety of plants on a range, the greater the potential for using this grazing technique for increased production at lower cost.

Hulet and Anderson recall that co-existence is nothing new in the animal kingdom. Over the centuries, various animals have shared feed in the same area. This type of grazing still exists today on the natural grassland eco-

system of the Serengeti Plain in Tanzania and Kenya in east Africa.

## Forage "team" can prove winner in many Southern pastures

According to university forage experts, livestock producers who subscribe to a comprehensive forage system achieve maximum production from their grazing land.

"Most livestock producers plant certain perennial grasses and legumes as the foundation for their pasture program," says Dr. Don Ball, pasture and forage agronomist for the Alabama Cooperative Extension Service. "For example, the climate in Kentucky, Tennessee, and Missouri is ideal for a pasture program based on a mixture of fescue and Ladino or other white clovers. Further south in Arkansas, the northern third of Mississippi, Alabama and Georgia, and the western portions of the Carolinas, a pasture foundation of fescue and some Bermudagrass is a good combination. Meanwhile, growers along the Gulf Coast mainly plant Bermudagrass and Bahiagrass. In many parts of Florida, Bahiagrass is the predominant base pasture."

Ball is quick to point out that these basic pastures will supply ample feed during peak growth periods. But during their dormant seasons, augmenting grazing from these perennial pastures with warm- and cool-season annual grasses and legumes is a key to profitable livestock production.

September to November and January and February are critical periods when many cattlemen experience deficits of high-quality forages in their pasture. Growth of warm-season perennial grasses and legumes declines and can be practically nonexistent at this time.

For stocker operators who are grazing calves during these months, additional feed sources are crucial.

According to Joe Burns, University of Tennessee forage specialist, growers can feed hay, haylage, or silage to fill in the energy gap, or they can supplement pastures by planting cool-season grasses and legumes.

He recommends that livestock producers interseed a ryegrass like Marshall and/or wheat into Bermudagrass fields for extra feed.

Marshall ryegrass makes an excellent winter pasture because of its high

*Continued on Page 82*

yields and cold tolerance, says Foy Campbell, forage product manager for Funk Seeds International. "In a recent four-year study by the Noble Foundation of Ardmore, Ok., Marshall proved to be the top-producing ryegrass," adds Campbell. "Marshall also has been consistently the top-producing annual ryegrass in university trials throughout most of the southern United States."

Marshall was developed through 29 years of natural selection of common ryegrass by the Mississippi Agricultural and Forestry Experiment Station, Mississippi State University.

Timing is so important in making the most of cool-season pastures. Burns suggests growers plant the crop from mid-August to mid-September on prepared seedbeds so that it will be ready for grazing in late October and November.

Cow-calf operators can take similar advantage of cool-season annuals.

"Planting Tibbee or Chief crimson clover at the same time Marshall ryegrass is planted will provide high-quality grazing for cows during the critical breeding period of March and April," explains Ball. "Research shows cows pastured in the spring on fescue have a 75 percent conception rate while a similar group grazing on fescue and Tibbee clover conceived 92 percent of the time."

Ball credits the legume's ability to raise the energy and protein level of the forage for the increased conception rates.

Another method of plugging the winter energy gap is to harvest and store an abundant supply of quality hay during the hot, dry summer months. Both Ball and Burns recommend Sericea Lespedeza, such as the new Auburn University-developed AU Lotan, which performs well in summer and fall. They characterize the legume as well adapted in most areas of the Southeast, except the deep sandy areas of the Coastal region, wet sites, and alkaline soils.

In locations where summer perennial pastures furnish inadequate production, livestock producers can turn to another product like sorghum-sudangrass to help meet their forage needs.

But whatever forage system growers adopt, efficient use of pastures is the key to success. These university forage experts suggest a per-

ennial summer forage should be kept grazed to a height of three inches or less. Cool-season pastures should not be grazed below three inches, with a pasture height of three to six inches being optimum, they say.

"The commodity livestock producers are actually producing is forage; their cattle are the machines that harvest it," concludes Burns.

## Lespedezas can help cure endophyte-stricken pastures

The perennial legume and grass pastures which dairy and beef producers rely on will not produce enough feed for cattle throughout the entire year. So many growers direct-seed crops on a part of their acreage to compensate for shortfalls of permanent pasture.

One such system cattlemen have found great success with is raising Sericea Lespedezas, such as AU Lotan, during summer months. AU Lotan is a new, low-tannin variety which is more palatable and digestible than the old standard varieties.

"Sericea Lespedezas planted in a prepared seedbed produce an excellent summer pasture," says Dr. Hiram Palmertree, superintendent of the Mississippi Agricultural and Forestry Experiment Station's Pontotoc Ridge-Flatwoods branch. "The perennial legume is well adapted to all places except the Deep Sands area of the extreme Southern belt."

Lespedezas make a good hay crop as well, according to Dr. Don Ball, pasture and forage agronomist for the Alabama Cooperative Extension Service. "Because it is a legume," he explains, "it provides higher protein forage than perennial grasses. And, it reaches peak production during June, July, and August, the best time of year from a weather standpoint to make hay."

To ensure an optimum stand, growers must take proper measures at planting time. The legume is difficult to establish when planted in existing forage stands. So if previous crops are not completely killed, the Lespedezas will be slow to establish a foothold. To grow a combination of Lespedeza and a perennial grass, such as tall fescue, it is better to establish the Lespedeza first. Add the grass in the second season.

Livestock producers should chisel plow future Lespedeza pastures in the

fall or spring. If spring tillage is used, prepare a smooth, firm seedbed by disking and cultipacking before and after planting. Fields should lie fallow for at least two to four weeks before planting.

Researchers recommend applying phosphate and potassium according to soil test recommendations. Although the crop will grow well on a wide range of soil types and pH levels, it's recommended the pH be at five to six, so liming may be necessary.

Dr. Vance Watson, coordinator of forage and pasture programs at Mississippi State University recommends seeding 25 to 30 pounds per acre with a broadcast planter or sod seeder. Depending on location, planting should occur sometime between early March to late May.

In most years, livestock producers should not cut or graze Lespedeza during the first season so the stand gets off to a good start. However, during the ensuing summer, Lespedeza will provide ample forage from May through September.

In the stand's second season, many growers interseed fescue during the fall to provide better forage output during spring months.

"This forage system gives cattlemen the chance to replace endophyte-infested fescue pastures with an endophyte-free variety and add a compatible legume to significantly enhance the quality and value of the forage," says Watson.

To prepare a seedbed for winter forages, livestock producers begin by disking pastures two or three times in July. Before doing any tillage, they apply 60 to 75 actual units of nitrogen, phosphate, and potassium with a broadcast application of a dry fertilizer.

Prior to mid-September, fields are seeded with ryegrass, or a mixture of wheat and ryegrass. Palmertree recommends Marshall as the superior variety. The ryegrass is broadcast at a rate of 25 to 30 pounds per acre with two to three bushels of wheat per acre when interseeded.

Cattle begin grazing on winter pastures between October 25 and November 25. To improve forage output, Palmertree recommends topdressing pastures with ammonium nitrate two or three times each season. Chief or Tibbee crimson clover interseeded will add greatly to the quality of the forage and replaces a large portion of the commercial nitrogen. **AJ**