

Grass is basic at Lil' Ponderosa Angus.

Story & photos by Janet Mayer

ob Boyce likes to describe his operation as being machinery-intensive. He is so proud of his machinery that he will be glad to take any visitors on a tour of the central Pennsylvania farm and let them watch all 70 of the machines harvesting grass while spreading manure. A new kind of machine? No, just 70 cows that comprise the operation's Angus herd.

"With management-intensive grazing (MiG), there is no better equipment than the cow herself," Boyce explains. "On the front end of the cow there is a grinder, and on the back end there is a manure spreader. All you have to do is feed her good grass in the field where you want the manure spread, and she will take care of the rest."

Boyce and his wife, Kate, in partnership

with friends Ron and Judy Deihl, farm 450 acres of owned and rented land near Carlisle, Pa. Always true to a grass-based system, the operation has been so successful in management of their resources that they were awarded the Forage and Grassland Conservation Farmer Award in 2001, and the Pennsylvania Cattlemen's Environmental Stewardship Award in 2002.

and wanted to return to farming after working in data processing and communications for 30 years.

"I grew up on my family's farm in Virginia, and I never lost my interest in farming, even though I worked 30 years in data processing and communications," Boyce says. "I would often say to Kate that it would be nice if we could show people how to make a living on a 100-acre farm, because I feel the family farm has been dying out, and people have kind of lost touch with the land."

When his company sent him to Harrisburg in 1986, Boyce saw the opportunity to buy an 80-acre farm. The couple quickly closed on the deal even though the house was rundown and the fields abounded with brambles and jack oaks.

Building an infrastructure on the farm became a labor-intensive project for Boyce throughout the next decade. With the basic premise to farm with as low an input cost as possible, he initially put in miles of fences,

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▶ Boyce believes in calving in the spring, as nature would dictate in a natural setting.

#### As Nature Intended CONTINUED FROM PAGE 207



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and constructed buildings, handling facilities and water systems. Seventeen years later, he says they are still in a building mode, with the establishment of a feed station with the Natural Resources Conservation Service (NRCS) and the drilling of a 200-foot (ft.) well being the most recent additions. The well, capable of pumping 75 gallons per minute, will be used along with a constructed pond to irrigate pastures during the hotter summer months.

# **Creating worm heaven**

Initial soil tests on the fields showed Boyce that the shaley ground had little or no organic matter and a pH of 5.3 or less. Since he has always considered lime the most economical way to release fertilizer, he started a liming program and still extensively uses it along with pullet manure to keep the fields productive. In 2003, 350 tons of lime were bought for the main acreage and another 150 tons for 48 newly acquired acres behind the farm.

"I farm like I am inviting earthworms to a party," he says. "If they aren't there, who wants your soil, and if your soil isn't right, how can you grow good grass or cattle? With this system, as the soil comes up, the vegetation improves, as the vegetation improves the quality of the feed comes up and after awhile you can see it in the livestock improving."

On the production side, Boyce knows he must select plants to fit the season and also

anticipate the volume that will be needed for the cattle during the grazing season. After researching and experimenting with different varieties of legumes and grasses, millet, oats, orchard grass, clover and rye have proven to be the most successful crops on the shaley soil.

"Oats provide an excellent crop for

grazing as well as making good baleage for winter," Boyce says, adding that they usually sow a crop in spring, summer and fall, often adding red clover in with it for nitrogen. "We also grow sorghum to graze and bag, getting about two cuttings. We stockpile it after frost to graze it through the winter. I know it doesn't have the nutrients, but it fills them up and then you put the good stuff, like alfalfa, in the hayracks. This gives good balance

and is just better economics in managing your inputs."

# **Herd management**

Each day, from April to December, Boyce enjoys the walk out into the fields to move the temporary fence about 100 ft. to give the herds access to about ½ acre of new grass.

Maintaining the MiG system not only keeps the 61-year-old fit and lean, but it also allows him to observe the herds, spotting any problems, watching for calves and looking at what the cattle are eating. He says it also makes the cattle easier to work with since they are used to having him among them.

Boyce calves in a 42-day period during

May and June to allow the calves to take advantage of the flush of new grass. "Since cows are intended to eat long strands of grass and fibers, I don't think they should be bred to calve in January when there is mud and snow on the ground," Boyce says.

Divided into separate herds made up of firstcalf heifers, cow-calf pairs, dry cows and steers, the cattle rotate through the pastures according to need, with the calves usually going into pasture

first. All cattle have unlimited access to a mineral mix year-round.

# **Quality-driven**

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"While most people don't understand that a grass-based operation doesn't require near as much machinery, they also don't understand that it does require a quality



▶ Boyce observes cattle on his daily rounds. He thinks it makes them easier to work with.

product and a consistent product," he explains. "That is where the Angus come into the picture. We bought our first Angus in 1996 and have found them to be predictable, with a tremendous amount of yield off the carcass relative to other breeds. And best of all, it is also edible and tastes good. We are going to stick with Angus, developing and adjusting the genetics for easy finishing on grass."

During the past 15 years, the operation has established a respectable freezer beef business, first with commercial cattle and now with Angus cattle.

"I like to describe our beef as a natural product, and I think that is why we have been successful," he says.

The operation finishes about 25 steers on grass each year, with intentions of doubling that number in the next few years. Since Boyce believes that cattle develop a more distinctive taste with age, they are not harvested until they are 16-18 months old and weigh about 1,200 pounds (lb.).

In setting objectives for this type of market, Boyce has intensified his efforts to breed for genetics capable of a high yield, plus tenderness and flavor on a small frame score. His breeding strategy has included linebreeding.

When selecting purebred genetics, Boyce says, "I think you need to look at it as a business decision, and the Angus breed has more information than any other breed."

"When do you think God would be breeding these cows, and what do you think he would be feeding them if I wasn't here today? If you really look at how things go in a predator-based system, we see everything that runs on the ground and eats grass is born in the spring flush. The first thing I want them to eat after their mother's milk is nice green grass."

Bob Boyce

Although he would like to keep all of the heifers from their breeding program to increase the cow herd to about 100 head, the need for cash flow necessitates selling some of them, Boyce says. To date, most have been sold by private treaty to others starting a herd. They have also sold bulls to traditional dairy operations in the area and to Natural Acres, an organic operation at Millersburg.

"We are being recognized as having the kind of animals that can finish at the size and yield grade the market is demanding," he says. "For two years we sold steers to a feedlot in Willow Grove who sent them to Taylor Packing for slaughter. They showed us the cut sheets, and the yield was tremendous.

"That kind of story gets around," he continues, "and right now we are selling more than we really want to, but we are in a business and if you have the opportunity to sell, I feel you should." Production

#### The three keys

When Boyce reflects back on his 17 years in farming, he points out three elements that he thinks are key to good management in any operation: production, marketing and finance.

"With MiG, [production] means getting down off that tractor to see what the cattle are eating, to observe how much they are eating and to know at what stage they are eating it. And keep records on the cattle, on forages, and on everything else involved with your operation. If you can't measure it, you can't manage it."

Boyce says producers shouldn't do anything if the market isn't there.

As a cow-calf operator, Boyce points out, he has several avenues for marketing cattle — as heifers, breeding stock, steers or club

calves. "Sometime in the future, I would like to make our reputation with the sale of replacement heifers to others who want the genetics of a grass-based operation."

When managing finances, take into account the inputs, Boyce advises, "As my mother always said, it isn't how much you make, but how much you spend. I think that is so true of an enterprise like ours where you have the conflicts of having the need to build infrastructure while also trying to build the herd, yet generate income to keep it going and perpetuate it. It's difficult to try to strike a balance."

Boyce is a firm believer that there are exciting times ahead in the cattle business. With demographics showing that the consumer is looking for a more wholesome, nutritious, healthy product, he foresees

many changes.

"I consider our operation to be on the front curve of that change by producing grassfed beef," he says. "This really is almost like a spiritual thing to me because I Marketing

feel we are doing something that is more noble than just producing beef. We are enhancing the quality of life for the people who eat it by giving them better nutrition, and this goes well

beyond the dollar.

"At the same time, however, we are hopefully proving to others that the family farm can survive by creating a higher dollar market for our farm that may help prove to others that the family farm can still survive."

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