

# All in the Family

*Long-running linebreeding program works for this Angus operation.*

*by Becky Mills, field editor*

You've heard the joke about breeding closely related cattle. If it works, it is linebreeding. If it's a wreck, it's inbreeding. At Wye Plantation, it is most assuredly linebreeding.

"They are easy-fleshing, they cycle, they rebreed, they have a calf every year and do well on forage. They do what cattle are designed to do," says Scott Barao.

The Buckeystown, Md., cattleman should know. For the last 15 years, he's headed up The Jorgensen Family Foundation/Hedgeapple Farm — a direct-marketed, forage-finished operation, which currently has four Wye bulls in residence.

Before that, he was the Maryland

beef cattle extension specialist and beef program leader for Wye Angus for 12 years.

The Wye Angus story started in 1937 when Arthur Houghton, chief executive officer of Steuben Glass, bought the farm and hired former dairyman James Lingle to manage it. Lingle liked the production traits of Angus cattle, and Houghton agreed.

They bought 18 Angus heifers and one bull. While Lingle did import a total of 25 bulls, he closed the herd in 1959. The only exception was a research trial conducted after the herd was donated to the University of Maryland in 1978, and then the resulting outcrosses were sold.

"Over 70 years of closed-

linebreeding facilitates the removal of any genetic abnormalities," Barao says. "It is certainly a pure line of Angus genetics. That's what made this herd famous. When dwarfism reared its ugly head and people were panicking, they were paying \$250,000 in real dollars for bulls. The bottom line is they are extremely predictable genetics, whether it is with live animal performance or carcass characteristics."

Ed Draper, manager of the Queenstown, Md., operation, says the linebreeding continues because of Lingle's influence.

"Mr. Lingle said the cattle had two purposes," Draper explains. "First, they have to function on grass.

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## Grass meets the goals

When manager Ed Draper says Wye cattle have to function on grass, he means grass. For the most part, they graze rather than eat hay.

"Our goal was to not feed hay until after Thanksgiving. Then we changed our goal to not feed hay until after Christmas. The better we got at stockpiling fescue and rotational grazing, the longer we could go without feeding hay. There have been a few mild winters where part of the cows didn't get hay at all."

The secret of the long grazing season is stockpiling, or using forage as standing hay. While Draper uses it for dry cows, Fauquier County, Va., extension agent Tim Mize says it can even work for lactating cows.

"Fescue stockpiles beautifully. It holds its quality and condition. When we've tested stockpiled fescue, I can't think of a case where it isn't higher quality than hay."

If he tests it during early winter, he sees values averaging around 16% crude protein (CP) and 60% total digestible nutrients (TDN); at the end of winter, 12% CP and 50% TDN.

At Wye, Draper usually stockpiles around a fourth of the pasture acres each year. He starts the stockpiling process around August 15 by either letting the cattle graze the fescue and clover pastures short or haying them. He then takes the cattle off and lets it regrow until the first or mid-November, which is usually the time of the first frost.

He uses temporary electric fence to portion off a week's worth of forage, typically 3 acres for 50 cows.

"If we moved them more frequently, it would take too much time putting up electric fence and taking it down," he explains.

He starts the strip-grazing as far away as possible from headquarters, so by the time the cows start calving in February, they're close by so he and his team can keep a close watch on them.

After the cows have strip-grazed the pastures clean, he frost seeds the places where clover is getting scarce. He tries to keep the pastures diluted with red clover so they are about 60% fescue, 40% clover.

"In March, the cows that have calved get hay. The 2- and 3-year-olds get the best hay, the second or third cutting of alfalfa. The mature cows get the tough stuff if they get any at all."

Then, by mid-March, the pastures are starting to green up again.

While there are a few fields of alfalfa-orchard grass, he typically saves it for young, growing animals or baleage.

He is also careful not to overgraze. Counting 24 acres of ryegrass for late winter- and early-spring grazing, which is also for the young cattle, and a few unfenced acres that are used for hay production, the operation has around 400 grass acres for 120 cows, 40 replacement heifers and five herd bulls. Draper says, "As former manager Jim Lingle said, we are comfortably understocked."



Ed Draper, manager of Wye Angus, says the herd has been developed to turn grass into meat and milk.

Second, they have to have the capacity to turn one protein, grass, into milk and beef. Those have been the goals since 1937, and the goals and functions of the cattle haven't changed that much."

While it is a simple statement, scores of producers have learned the hard way getting cattle to function on grass is easier said than done. To make it even tougher for the Wye cattle, most of their grass is the old-style fungus-infested Kentucky 31 fescue. The tell-tale signs of fescue toxicity in the herd are familiar to those from fescue country: failure to breed, abortions, lowered milk production, lowered gain, inability to shed out in the summer and decreased heat tolerance.

To make their job description even tougher, the cows and heifers at Wye are expected to breed in May

and June when temperatures are already starting to heat up. Heifers are synchronized with a five-day CIDR® protocol and artificially inseminated (AI) at a fixed time.

Draper and his team check heat for 15 to 18 days. If a heifer returns in heat, they'll breed her AI one more time. Cleanup bulls are turned in for the remainder of the 60-day season.

This past summer, 25 out of 40 heifers bred AI, and only two were open at the end of the breeding season. Around 75% of the 120 cows are synchronized with the seven-day CIDR protocol and are time bred once, then the bulls are turned in after three or four days.

Their conception rates are usually in the 90-plus percent range, too — on fescue, in hot weather. Some cows repeat the process for as many as 17 out of 19 years.



“If you can do it, you stay here. If not, you go,” Draper says.

When it comes to bull selection, Draper says they depend on production records, which are extensive, rather than expected progeny differences (EPDs). If there is a downside of a completely closed herd, it is that there isn't much variation in EPDs.

“They don't drive many of our breeding decisions at all,” Draper says. “Production is our driver. We have an extensive record bank. I've learned from other breeders that you look at the grandparents and great-grandparents. You want as many outstanding cows in the pedigree as possible. We are maternally driven. Good topline, udder, feet and legs.”

Longevity, calving ease and disposition play into decisions at the operation, too.

“Every breeding we do, we preface it on what the heifer calf is going to do for us,” he adds. “If it is a bull, we're always looking for a bull that's going to produce these daughters.”

Maternally driven or not, Draper acknowledges these ideal females need to produce a steer that will work in the feedlot. To that end, in 1991, Wye changed the feed ration for the on-farm bull test from a high concentrate to a more forage-friendly feed of corn silage, whole shell corn, soybean meal and minerals. The target average daily gain (ADG) on the 140-day test is 3 pounds (lb.) a day.

However, Draper says, “We provide enough feed so if the bulls want to gain better, they can.”

Besides providing data, this gets the bulls ready to go to their new homes after the annual sale, hosted the first Saturday in April.

Data is also gathered on steers, both those that are grain finished and

forage finished.

“Every steer we've produced the last ten years, I've got a picture of him when he's alive and a picture of the ribeye, his data and his performance,” Draper says. “We've only had three Prime animals from the grain-fed steers. Most are Choice. The grass-fed steers are 50-50 Choice and Select.”

The grain-fed cattle tend to finish in 14 to 16 months, while it takes 21 to 22 months for the forage-finished cattle to finish. The end point is around 1,100 lb. for both.

Draper adds finishing steers on forage has been a learning experience.

“I thought you just put them out there on grass and let them graze. I was wrong,” he says. “You need a legume component.”

As a result, he does supplement his cattle with alfalfa-orchard grass baleage.

The forage-finishing trials mirror what part of their commercial bull customers are doing in their operations. Wye bulls have developed a reputation for producing steers that gain efficiently on forage. Draper says probably 40% of the bulls now go to customers who forage-finish steers. He predicts that will ease up to 50% in the future.

Whether the end point for the calves is conventional grain finishing or forage finishing, Wye bulls are still proving their worth from Rhode



The bulls at Wye Angus are expected to produce females that can function on grass.

Island to Florida to Montana.

Draper laughs when he tells about delivering a set of bulls to South Florida. “There were maybe two thin trees in a 90-acre pasture. I turned the bulls out and told them ‘Good luck.’”

Apparently, they lived. For the last eight years, the producer has continued to buy six to 10 bulls a year.

Draper says it goes back to Lingle's original philosophy. He repeats, “Cattle have two purposes. One is to function on grass, and the other is to have the capacity to turn grass into meat and milk. The goals and functions of the cattle haven't changed much.” 