# The Irish Foundation

Behind the herd that set the NACC all-time high CAB acceptance mark.

Story & photos by Steve Suther

the Celtic Highlands where Angus cattle evolved, a sign on Texas FM 1094 proclaims "Real Angus Cattle." This is 50 miles west of Houston, where the Gulf Coast environment contrasts with the breed's ancestral misty hills of heather and gorse.

It is an unlikely spot for, arguably, the largest conservatory herd of original Angus genetics in the world, but there they are, nearly 700 registered cows. This is Woodstone Ranch, owned by Bill and Yvonne Woods and their young son, Will. Besides these 1,500 acres there are another 1,000 acres near Bill's hometown of Hackett, Ark.

From New Ulm, Texas, Woods can provide exact directions to the headquarters: "East 5 miles on FM 1094 till the end of a long wooden fence, then right at the first cow without floppy ears — she'll be small and black."

That's because she's an original. Woods grew up helping with his grandfather's



► An orthopedic surgeon by profession, Bill Woods built the Woodstone Ranch herd that set the all-time high combination Prime and CAB® acceptance rate (95%, with no discount) in the 2006 NACC competition.

herd of imported Hereford cattle, but he looked toward the Angus breed. "We wanted to find original types: highmarbling, goodmothering and easy-tomaintain on grass," he says. "We wanted our cattle to hit the Certified Angus Beef® (CAB®) and USDA Prime targets."

### **Proving performance**

In 1980, Woods committed to developing a herd that traced back to the first Scottish records. With the help of consultants, he found a dozen cows and a few foundation bulls in small Irish herds, importing them to Arkansas in 1984 and 1988. Sure enough, one of them traces directly to Old Grannie 1 and Greybreasted Jock 2.

An orthopedic surgeon by profession, Woods hired help as needed and built the herd, mainly by retaining heifers. It was a slow process, but it was given a boost a few years later when the ranch bought another small herd of Craigie, Scottish cows from a West Virginia dispersal. He also sampled a few American sires, but even as the herd grew to 500 cows in this decade, most individuals in Woodstone pedigrees came from Irish stock with no ties to other U.S. herds.

That presented a challenge for anyone who wanted to evaluate the cattle using American Angus Association expected progeny differences (EPDs). "When they come into our system as unknowns with no ties to pedigrees or performance data, their EPDs are just blanks until they build progeny records," says Bill Bowman, Association director of performance programs. Sometimes an ancestor has a link so that a pedigree estimate is possible, but accuracy starts at the default 0.05.

After 25 progeny records, regardless of pedigree ties, Bowman says that accuracy rises to about 0.35.

"We knew we needed to prove our cattle with progeny data," Woods says. "We started retaining ownership 16 years ago, but it was a problem to get carcass data. Especially at first, relying on college students to be at the plant on a certain day, and maybe they would have a test or something."

In 2000, he began feeding with Dale Moore, Cattleman's Choice Feedyard, Gage, Okla., which became CAB-licensed in 2004. "It's easier to get the information now, and Dale understands our program," Woods says. Moore appreciates the program enough to buy 100 of the top "American cross" Woodstone cows last year.

"They were getting too big for Bill," Moore says, "but they're just what I was looking for, and I know they can do it all."

The patriarch bull, 14-year-old Autrey of Woodstone, affectionately known as "Art," has built up a weaning weight (WW) EPD of +12. He and his sons have sired more than half of the herd, and although his progeny shine in carcass merit, the EPDs are no better than breed average.

"If a producer is really trying to buy based on EPDs, he won't buy from us," Woods says. "Sometimes a customer asks if we have EPDs, and we say, 'Yes.' Then he asks us to

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select a bull for him to put on his Brahmancross cows."

A few years of feedlot and progeny carcass data told Woods the cattle have at least average gainability and better feed efficiency. Moore says, "Their average daily

gain (ADG) is in the low 3's (pounds) without implants, and they convert in the upper 5's (pounds of feed per pound of gain)."

Traditional EPD numbers would never impress buvers. Woods says, so he coined a new phrase for the acronym: "Our EPDs are 'extra premium dollars' on the grid."

To prove carcass merit, Woods entered 80 steers in the 2002 Best of the Breed (BoB) contest and would have won a regional prize but

for a disqualifying technicality. A couple of years later, he and Moore made headlines by winning the steer championship in the 2004 National Angus Carcass Challenge (NACC). More recently, the ranch set the all-time high combination Prime and CAB acceptance rate (95%, with no discounts) in the 2006 NACC heifer competition.

Those were the tail-end heifers and daughters of heifers sired by 14 different bulls in the uniform Woodstone herd.

"We can't afford to feed heifers anymore, because we have so much demand for the bred animals," Woods says. He began DNA

testing with 117 steers last year but found inconclusive results. Maybe that's because each steer from the ranch is as capable as any other.

"Something will happen to different individuals throughout a year," he says. "We can't expect to have CAB and Prime above 90% all the time — but I think we can legitimately aim for the range of 80% to 90%."

How? It starts with the selection of genetics that

represent "the butcher's breed," intensified in a closed herd, Woods says.

### Close relationships

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- Bill Woods

"You can make some progress with what you might call 'modern' Angus cattle by stacking EPDs, but inconsistency will always come back to bite you. With my Irish linebred cows, I know every daughter will look and perform like her mother. The sons will perform and grade accordingly."

The cow families go back at least 50 and as many as 150 years. "You could linebreed with some of today's promising sires, but nobody has that much time," Woods says. "CAB needs more cattle now."

Strict linebreeding is a technical art, particularly trying to avoid crossing over to inbreeding. A common breeder joke goes, "It's linebreeding if it works, inbreeding if it doesn't." Andy Herring, Texas A&M University (TAMU) geneticist, says, "Linebreeding is a slow, methodical approach to inbreeding."

Woods says he is "more of an opportunist than a linebreeder. I had the good fortune to purchase two distinct Irish lines — my imports and the Craigies - and what I know is just what they've taught me.

"I look at linebreeding as a lifelong adventure," he says. "What makes these cattle special is they were selected for carcass quality and functionality by trial and error for all those years. I don't know that you have to be scientific, but I think the more closely your cow herd is related, to a point, the greater the carcass consistency."

Indeed, Herring says a closed herd does not have to be linebred, but will eventually become more inbred over time. That will decrease genetic variability within a herd, he explains, but two herds that are closed and linebred to different ancestors will likely become more different over time.

Bowman points out that Association members can log in to www.angus.org and calculate relationship coefficients between any two registered animals. "Most linebreeders try to maintain a high level of relationship in the herd, but a low level of inbreeding," he notes.

Woods agrees, in general. "But I don't care how many times a certain ancestor appears in an extended pedigree," he says. "I think the purpose of linebreeding is to fix type. If all family members look alike standing in the pasture, they will grade alike hanging on the rail. This I have proven. This type of cow can make almost any bull look good."

However, it is impossible to produce bulls that make any cow look good.

"It's a waste of resources to put a linebred bull on a random group of cows. Not even half-sib[ling] bulls can reduce cow or carcass variability unless you focus on the cows, too, because there are still too many random genes."



►In 2000, Woods began feeding with Dale Moore, Cattlemen's Choice Feedyard, Gage, Okla., which became CAB-licensed in 2004.



▶Left: The Woodstone Ranch patriarch bull, 14-year-old Autrey of Woodstone, affectionately known as "Art."

► **Below:** Lady Elizabeth, standing with her daughter, is one of the leading donor cows in the Woodstone Ranch embryo transfer program.



## On outcrossing

Woodstone Ranch cattle would likely represent an "outcross" to other Angus herds, Texas A&M University (TAMU) geneticist Andy Herring says. Many cattle traits are about 30% heritable, referring to the variation in gene content. "The other 70% is due to gene combinations and environment[al] variation," he notes.

"We do not think about heterosis aspects within a breed, but certain family crosses seem to really work better than others," Herring explains. "This old concept is referred to as 'combining ability,' and in that respect, the crossing of inbred lines within the same breed does show heterosis."

Herring cautions that a balanced approach must focus on both genetic and environmental variation. Besides the genetics, "we must

also consider the average level of performance and how different the linebred animals are in merit vs. the new herd they are going into.

"The art, application and science of linebreeding was forgotten by most commercial producers when crossbreeding became widespread in use, but the true value of line- and crossbreeding complement one another very well," he says. "They also allow for the production of uniform crossbreds that benefit from desirable gene content and gene combinations."

# **Breeding tools**

From the start, Woods has used modern breeding tools, collecting semen from those imports, heat-synchronizing heifers for artificial insemination (AI) and using embryo transfer (ET) to magnify the cow lines.

He exhibits a linebreeder's patience in evaluating stock. "I can't decide if I like a bull until I see what his granddaughters can do, so that's often seven years or more. We don't generally flush a cow until she's



► Dale Moore, Cattlemen's Choice Feedyard, Gage, Okla., appreciates the Woodstone Ranch program. "They're just what I was looking for, and I know they can do it all," he says.

10 or more and has earned her way there," Woods says. Currently, teenage cows named Lady Elizabeth of the Manor and Lady Jane Blessington are leading that program.

"We also have some 10- and 15-year-old frozen embryos," he says.

The "diet pen" is an interesting aspect of the ET program. Although all cows, including donors, raise a calf each year, natural fleshing ability on grass is so great that several of them need to trim off a few pounds, so they are restricted to a lower-calorie hay diet periodically.

Heifers weigh about 600 pounds (lb.) at breeding, which includes clean-up sires for up to four months. Cow breeding is restricted to 60 days, and the first calves arrive in November. This year, 100 ET calves are expected to help boost the pure Irish percentage in Woodstone cattle, which should also improve yield grade.

### Full circle

The herd makes money, whether the offspring sell as registered or through the feedlot, Woods and Moore say. The 800- to 900-lb. cows, including several Pathfinders,® may wean only 400-lb. calves, but those gain so well on grass that they have no problem entering Moore's feedyard at 750 lb. to 800 lb. Steers typically reach a finished 1,200 lb. at two years of age. Premiums for the last four years have exceeded \$80 per head on the Angus GeneNet™ grid.

Marketing is slowly growing into a kind

of alliance with mostly beginning and likeminded local producers who can work through Woods and Moore — who have become good friends — to feed and get carcass data back to develop their consistent cow herds. Moore recently helped recruit new Woodstone operations manager Justin Packard, who started in March.

TAMU animal scientist Jim Sanders has visited the ranch and may help Woods document full-system profitability. "Angus cattle have changed so much in the last 30 years," he observes, "it is only logical that some of them have lost traits that used to be common in the breed."

Woods keeps enterprise records to show cost of weaned and backgrounded calf production, "and Dale knows exactly what we put into them at the feedyard, so we have the information," Woods says. "We just need to piece it all together."

EPDs and other performance measures are monitored to ensure conservation of type rather than progress toward higher numbers. If customer demand supports it, Woods may use a portion of the herd to generate terminal, American-crossed lines for those who want a bridge to the smaller frame and type.

"In the back of my mind," he says, "I think it would be kind of neat if we sell some stock back into Ireland and Scotland, where it all began. I think that will happen, and it will complete a circle."