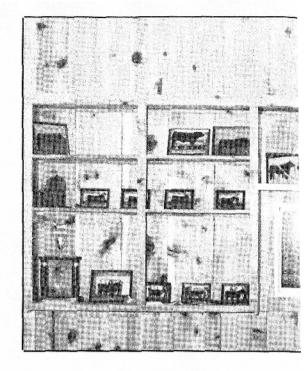
History Makers and Record Breakers

by Marilyn Barr **Assistant Director** Communications and Public Relations American Angus Assn.



ebruary 1980 headlines announced a history-making pair of calves. For the first time ever, two Angus embryo transplant calves—full brother and sister born 10 days apart and not yet nine months old-reigned as grand champion bull and female of the Ft. Worth stock show.

Two months later, sale reports proclaimed the first purebred Angus embryo ever sold at auction. And an 11-month-old female walked through the same ring to break the standing Angus female price record, commanding \$56,000 for one-half embryo interest.

November 1980-another first. Six calves, all out of the same dam, claimed the breeders' best six head banner at the National Angus Show. The same calves took six individual rosettes, then stood together as best six again at the 1981 Ft. Worth show.

History makers and record breakers. And they all came from R&J Ranch near Briggs, Texas, a ranch that's packed a lot of progress into four years thanks to the intense use of two tools. Embryo transfer and the show ring.

Owners Ray and Jackie Plumb of Houston (who also own Plumb Oil Co.) bought 4,200 acres of pasture about 45 miles northwest of Austin, some "average" Angus cows and some half-blood Simmentals in 1975. But it wasn't till two years later that they decided to "build a herd that could be competitive with the best in the nation,' Ray says.

Show Ring Influence

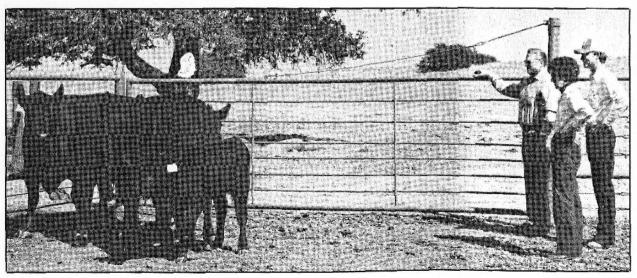
And they looked to the show ring for

"We went to Denver and to all of the shows that we could to really get an idea of who had the best cattle and what they should look like and to meet people," Ray says. "It was a reverse type thing with us in that we used it to get a feel for the Angus industry."

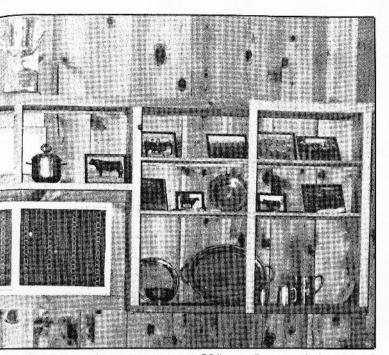
It was at the 1977 National Western that they took their first big step. They bought Premier Jackpot, high-selling and reserve grand sale bull, for their foundation sire. Later that year they launched their show career, leading Jackpot to the national supreme championship in Reno. The same year, Ken Conway came on the scene as ranch manager.

Since then, the show ring has remained a key element in R&J's activities, and they've led some 35 animals in for inspection, including this year's string of 14.

"We're naturally very competitive in everything we do, so once we got to where we felt like we could be competitive, showing was just the natural thing," Ray ex-



Owners Ray and Jackie Plumb and manager Ken Conway inspect donor



The show ring plays an important part in R&J's over-all program. And as this small sample of their trophy and photo collection suggests, they haven't been strangers to the winners' circle.



At left are R&J Ranch owners Ray and Jackie Plumb, and at right is ranch manager Ken Conway. Their operation is located on 4,200 acres of pasture land about 45 miles northwest of Austin.

plains. And they became familiar with the winner's circle.

"The thing we're more fond of than any other championship was with Ike and Mamie (R&J Ike and R&J Duchess 1239) at Ft. Worth last year. It was the first time ever, since they were a product of embryo transfer, and it came at a time when people were very, very skeptical of embryo transfer. It was a double milestone to us in that we were proud to win, but to have a full brother-sister out of the same flush (egg collection) had such an impact on our program. That's probably the most memorable.

More Memorable Wins

Then the success of Mamie this year at the futurity and the national (she was grand champ at both). She was undefeated this year. And Duchess' (Albern Duchess 5'73) best six head at the national. That's the first time ever for all six to be out of one cow."

R&J cattle have garnered a room full of trophies, banners, rosettes. But, although they wouldn't be satisfied with less, Ray emphasizes that R&J aims for a lot more than championships.

"A good solid program is what we're aiming at. We just utilize the show ring as advertising to promote our over-all breeding program. It brings the cattle to the people and represents what we're doing at the ranch. You could have great cattle and go broke. It's a combination of selling your program and your honesty and integrity along with your cattle and your people involved," Ray notes.

"Since we're in an area that hasn't had many show cattle in the last few years, it's helped get more emphasis and publicity to Texas and to us and to all of the breeders down here. It's an over-all advertising tool to reach as many as we can in our area that haven't seen the new style Angus."

Angus events don't just reach Angus breeders, though, he continues. "I think it's the main way breeders reach the mass of people, producers of all breeds. Everybody in Texas seems to remember the bad things, like the very small Angus bull. So through shows like Houston and all of the all-breed shows, it's really the only way you can reach all of the people at once to show them that we do have good, thrifty, bigframed animals. Because Angus are, in almost every quality, best.'

Launch Embryo Program

The show ring was merchandising their cattle, but at the same time embryo transfer was forming the heart of the R&J herd. They turned to transfer early in 1978, Ray explains, to speed up their breeding program and "add some great females in a short length of time."

First, they brought home the 1975 and 1976 Denver champion females, Albern Duchess 5'73 and Topp Hill Annie 4106, for the nucleus of their program. That spring they super-ovulated, synchronized and A.I.'ed the two cows at the ranch, then flew the fertilized eggs to Rio Vista Genetics in San Antonio. There the eggs were implanted surgically into recipient cows; 60 days later, pregnant recipients were shipped back to Briggs.

Their first venture netted 15 calves from the two Denver champs, and they collected eggs from 10 cows the next spring.

By then, they were convinced that transfer was just the tool they needed. They bought their own recipient cows and more donors, employed Dr. Joe Wright of Casterville to handle the flushing and transfer, moved the entire procedure to the ranch and switched to a completely nonsurgical

program. Changes that lent convenience. cost and time advantages.

The next change was adding young heifers to the program.

Ken notes that "It's gotten to be such a horse race that you want to turn the generations fast, and the best way to do that is to super-ovulate or single egg your top heifer calves."

Ray adds that "You can transfer young heifers so you can have a calf on the ground before you would let her carry one naturally. This allows the young heifers to go to their maximum as far as growth. You can allow them to carry a calf a little later, vet you haven't sacrificed getting a calf or calves."

Flushed Once

Young heifers usually are flushed just once to avoid a big investment before they're proven, Ken says. However, Mamie was an exception. Feeling that she'll provide a great genetic force, they'll have 10 of her calves on the ground by the end of this year's calving season. And she's just two

The latest development in R&J's transfer scheme is the use of frozen embryos. A relatively new procedure, there's still some embryo death loss in thawing. But it has advantages.

Freezing allows R&J to decide how many eggs they'll use from each female, then to freeze any extra fertilized eggs collected. If using a young heifer or checking how well a certain bull and female niche, they can produce a limited number of calves the first year. If they measure up, embryos are already on hand for the next year.

Sexing embryos may well be R&J's next step, probably within the next year. Ken says. Experts already can determine whether embryos are male or female, and it should become a reliable and more common tool in the near future. Sexing and freezing together will create quite an impact on sales, he predicts, allowing an embryo of a specific sex, produced by a specific mating, to be frozen and shipped anywhere in the country.

R&J cows are flushed first 45-60 days. after calving and up to two more times in 60-day intervals. Then they're bred back for natural pregnancy as soon as possible.

No Bad Effects

No adverse reproductive effects from R&J's embryo program have been noted, Ken says, adding that every cow transferred in their program has bred back and carried a calf naturally. A good share of credit for that goes to intense management, including careful selection of donor and recipient cattle, expert veterinary technique, excellent nutrition and skilled management of the stimulation, synchronization and transfer procedures.

But Dr. Wright points out potential for unfavorable fertility effects in a transplant program, especially if animals aren't managed right, because it involves "playing with a hormone treatment, fooling with a body

Ken adds, "If it's not used right, it's going to make you go backwards. You could ruin a good cow and not get any pregnancies. If it's not done with the proper management and personnel, you're going to cost yourself money. And I'm sure there will be cows transplanted that shouldn't be transplanted, and it's going to escalate the cost for people that are doing it. If they don't have the right stock in it, they're going to dig themselves in the hole quick."

"We believe very strongly that the female is 65-70% of your program, and that's why we're in embryo transfer," Ray explains. "Transplanting the great females is really going to rank U.S. cattle far and away the greatest Angus in the world. The great females will breed greater ones, and that spiral will just continue to go up."

Leader of the Ladies

Females have proven to be the roots of this Texas herd, and Duchess stands out as leader of the R&J ladies. She alone probably has influenced their program more than any other animal. She's produced 22 calves in the transplant program, her first arriving in April 1979. Among them were Mamie, the record-breaking female that brought \$56,000 for one-half embryo interest; R&J lke, many-times champ who drew \$80,000 for one-half interest; R&J Justice 1359, top-valued bull in their 1980 sale at \$36,000 for two-thirds interest and full possession; R&J Duchess 1349, who sold for \$20,500; and several members of this year's show string that have stood in the purple.

It pretty much goes without saying that Duchess and Mamie will be at the center of their transplant program in years to come.

Even their sales accent the females. Their

first, the 1979 Get Acquainted Sale, and the 1980 Wheel of Progress Sale offered some 90 females each. Last year's event averaged \$6,559, the third highest production sale of

In addition to 20 donor females, 200 cows rich in western Canadian blood graze R&J pastures.

But that's not to overlook the bulls. An important R&J transplant philosophy is to use more than one bull per cow. That is, if she's to be flushed two or three times, she'll likely be bred to a different bull each time.

"You shouldn't put all of your eggs in one basket," Ray warns. "You've lost a year if you find out a niche didn't work."

So the bull battery has to be strong, and R&J's has included Premier Jackpot, General JJ Patton, Briarhill Bartman, Sir Wms Warrant, R&J lke and Ken Caryl Mr. Angus 8017. And they're planning their first bull sale for this fall.

Acceptance Is Near

Some 150 transplant calves have been born at R&J, and 200 more will arrive this spring. But not everybody in the Angus business is that sold on the procedure.

"The acceptance of it in other breeds is ahead of Angus acceptance," Ray says. "But I think that with Ike and Mamie and the others we have here, acceptance is right



Jackie Plumb watches Dr. Joe Wright locate and evaluate embryos that will be transferred into recipient

around the corner. Total acceptance. I think we've already seen a swing to it. We've seen people lately that have sold their herd down and are coming back with the best they can buy, even if that's a much smaller number. They're going to transfer some of those cows.

"The embryo program enables somebody to go out and buy as good cow, or two good cows, and raise as good stock as anybody in the country. It allows him to show and get his portion of publicity and prestige-and the pride of being as competitive as anybody else.

'And breeders with small herds make up probably 80% of the Angus association. So their collective influence is really the great influence. Their acceptance of our program or any other program is vital to the movement of the Angus business."

The R&J story wouldn't be complete without a description of the ranch and facilities, up-graded nearly as much as the

A lighted stone gateway proudly bears the R&J brand, announcing arrival at the Texas Angus ranch. A 2-mile drive through gently rolling pastures and past lots surrounded by distinctive blue fences leads to headquarters-an office building, new show-sale barn and two large houses plus more blue fences enclosing show and sale cattle. And peacocks, several types of deer, antelope and wild pigs share the land.

Working Crew

The Plumbs give their working crew more than a small share of credit for making the ranch and the cattle prosper.

"Ken and Ray work well together," Jackie says. "They put their ideas together for the progress we make."

Ray adds that "It's a perceptive thing. We come from different backgrounds and different businesses. But business is business. It's been a good blend,"

"And," Jackie continues, "Bill Conley with our show and sale cattle just couldn't be better. Jan Cowan in charge of ranch maintenance-there isn't a time Ray and I go to the ranch that it doesn't look super. Lynn Thomson's super with the cow herd. And our newest addition with the cow herd, Steve Wythe, should be a great asset to our program. They all take pride in everything they do; and without those kind of people. you can't make a go of things."

Jackie also adds more than two cents worth to the ranch's well being, with ideas for ranch improvements and the cattle program. But perhaps more important, she's become a familiar face at Angus events across the nation, representing the ranch's program and extending the R&J welcome mat to old friends and new acquaintances alike.

Worthwhile

Speaking of friends and acquaintances, that's a big part of what makes it all worthwhile, the Plumbs agree.

'There're so many genuine people that we've met in the cattle business that it's been rewarding for both of us," Ray says. "And it's been a new release for us away from our other businesses. The more we're involved, and with the little bit of success we've had, it makes us work that much harder.'

On a closing note, Ray offers a piece of advice. Counsel that has—and likely will continue—to guide R&J progress.

"I think you have to pioneer a little bit. You'll never find anybody that made anything that didn't gamble a little. If you play it safe, you're not going to be very progressive.

"We need to keep the femininity and all of the excellent traits Angus have. But we always need to strive to be better."