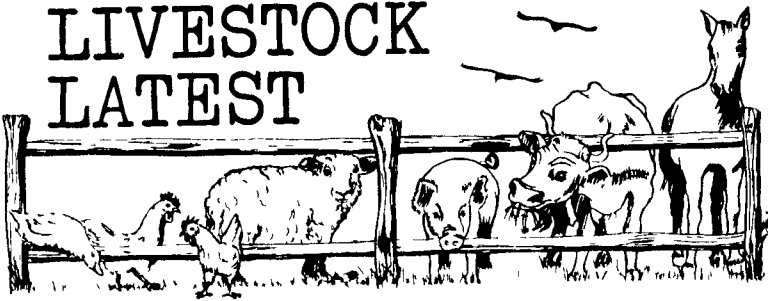


# LIVESTOCK LATEST



## Charolais sires gain roll of excellence status

KANSAS CITY, Mo. — Two Charolais sires, Poker King Junior GV 18G and ACF Apocalypse 40, gained Roll of Excellence status with the American-International Charolais Association.

Poker King Junior GV 18G owners Stone-Del Farm, Hartville, Ohio, San Dan Charolais Farms, Ltd., Erskine, Alta., Can., and Thorpe's Whiskey Trail Charolais, Palo Cedro Calif., and ACF Apocalypse 40 owners, Adams Charolais Farms, Springfield, Ohio, Miller Farms, Osceola, Iowa, and Gentry's Double Hook Ranch, Whitman, Neb., were honored Jan. 19 at the annual Charolais National banquet at the Airport Hilton Inn in Denver, Colo.

Poker King Junior GV 18G was calved May 12, 1975 and was bred by Gotthold Reich, Green Vale, Bashaw, Alta., Can. He is sired by Poker King 1006 and out of Lady Ava GVIE, a daughter of Caid who is noted for his outstanding daughters. Poker King Junior GV 18G was the Grand Champion bull at the 1977 National Western Stock Show for Green Vale and San Dan Charolais Farms, Ltd., Erskine, Alta., Can.

Progressive Charolais breeders across the country have chosen Poker King Junior GV 18G for their breeding programs. His progeny have a tremendous growth rate and strong sex characteristics. They are eye appealing cattle that are accepted in the showing and by commercial cattlemen.

Poker King Junior GV 18G has sired numerous champions including the 1982 National Reserve Grand Champion Female, Miss JXN Junior 135, and the 1984 National Reserve Grand Champion female, JXN Dancing Queen

19P. An outstanding son, six-time R.O.E. Champion bull, Sir Stone-Del King 019, contributed many points toward the recognition.

ACF Apocalypse 40 established himself as the youngest bull in the Charolais breed to gain R.O.E. status, as his progeny had a tremendous day at the 1983 American Royal.

ACF Apocalypse 40 was calved March 25, 1980 and bred by Adams Charolais Farms, Springfield, Ohio. This extremely flat-muscled, large-framed son of R.O.E. sire Riverwood Elevation 44 is out of an outstanding matron, Euphrasie Fauchelevent, a 4T/Yates-bred cow.

ACF Apocalypse 40 had an exciting show career. He was the 1981 National Calf Champion bull, 1982 National Reserve Grand Champion bull and 1983 National Reserve Champion bull. He was also selected Grand Champion bull at the 1982 National Western and 1981 Houston Livestock Show.

ACF Apocalypse 40 is playing an important part in today's Charolais industry. His progeny are sought after to improve frame size and body structure. He is popular among purebred and commercial breeders in all parts of the country.

ACF Apocalypse 40 sired the Grand Champion female at the 1983 National Junior Heifer Show, ACF Sabrina 342. He is also the sire of the popular 1984 National Grand Champion female, BR-MF Lady Tyger. He sired the first-place Junior and Senior Get-of-Sires at the 1984 National Show.

ACF Apocalypse 40 met an untimely death on Oct. 31, 1983. He will undoubtedly leave his mark on the Charolais breed.

## Take guesswork out of boar selection

NEWARK, Del. — "Now, what do you think of that boar?"

"Well, he's deep enough, he's got good feet and legs. But I'd like to see a little more width between his shoulders."

A typical conversation. Two people trying to appraise a boar as best they can, by looks alone.

"Choosing the right boar should rank high on your importance scale," says University of Delaware extension livestock specialist Ken Kephart. "The fact is most, if not all of your herd's genetic progress rests in the hands of the seedstock producer."

Why?

"Even if you have only eight or 10 boars, they make up half your herd," he says. "One boar can easily crank out 1,000 pigs a year. But more than 20 to 22 pigs per year from a sow is rare."

Selection for genetic superiority (bigger litters, faster growth rates) in the sow line alone is not enough, says Kephart, quoting Maurice Richard of the Pig Improvement Company who points out that by selecting for improved performance among sows and not among boars, genetic progress will stop after only four or five generations.

In other words, producers who are seriously interested in im-

proving the genetic performance of their herds had better find boar producers who are just as serious. Do they have solid records of farrowing performance? Can they prove with numbers that the hogs on their finishing floors perform? Do they test boars at home and/or in central test stations? That is, can they provide proof that they're selecting for improvement?

What else should a grower look for in a seedstock source and the boars produced?

Low levels of disease. "Go to the farm if possible and keep your eyes open," Kephart advises. "Ask what disease problems are present. If there's a problem you don't have, you don't want to add one more to your list."

Confirmation and type. "Visual appraisal is still essential — and always will be," the specialist says. "A lot can be learned by looking at a boar. We can see the difference between straight legs and those with some slope and cushion. We can see fat. We can see muscle. And with some practice, we can detect differences in breeding stock that will make the right changes in the end product. Just remember that appearance isn't the only factor worth considering."

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# His cattle lab is a Missouri barn

JEFFERSON CITY, MO. — David Snyder's laboratory is a barn, really. Its straight, practical steel walls, nearly uninterrupted by windows, topped by a steel roof, make it look like a barn — just like all other such livestock- and hay-holding facilities across rural America.

David Snyder does most of his work on a farm — Lincoln University's Greenberry farm, just beyond the subdivisions of Jefferson City, Missouri's capital. It looks like a farm, it sounds like a farm, it smells like a farm. And on it is Snyder's laboratory.

David, 32, is an animal scientist, having obtained a Ph.D. at Michigan State University in 1977. He, along with other animal scientists in various countries, is trying to improve the efficiency of beef cattle growing. Even during his undergraduate days, he specialized in the study of animal reproduction. In post-doctoral work, he became interested in Lincoln University. Already recognized for its research in other fields, especially nutrition, Lincoln planned to upgrade its livestock research. David was hired.

David set out immediately to establish a beef herd with a high-rate of twinning. On a national or international scale, his purpose is clear. If each beef cow produced two calves instead of one, it would take only half as many cows to produce the same amount of beef.

In reality, of course, cattle twinning is not so simple. Cows bearing twins need more personal care at calving time. Twins are born earlier, smaller and weaker than most single calves. Furthermore, there is some difficulty in cleaning out the birth canal. While it is difficult for some cows to provide enough milk to feed even one calf, cows bearing twins must provide enough milk for two. Many of them just can't do it.

For all these reasons, twin calves need to be weaned earlier and put on strength-building supplemental feed.

To complicate David's project, nearly all the female calves that are born as twins with males are born without the ability to reproduce. Their hormones intermix with those of the male twin in the mother's uterus and this, somehow, is believed to sterilize the females.

Those may be the reasons so few efforts are underway to build twin-bearing beef herds. Even so, another such herd is being developed on a much larger scale at the Roman Hruska Animal Research Center, a USDA facility at Clay Center, Neb. Scientists there helped David start his own herd by telling him about some twin-producing cows which could be bought.

Similarly, research on "manufactured twins" is advanced at Colorado State



University, another land-grant institution. There, embryos consisting of about 70 cells are placed under a microscope and divided in half with a microsurgical blade. The resulting demi-embryos are then placed in foster-mother cows, usually one per recipient cow, in a procedure similar to artificial insemination. Scientists at Colorado State stress the value of identical twin calves in research. The technology has been transferred to more than a dozen commercial firms.

David now has eight cows with very good twinning records and four of their calves. He bought both cows and calves from Midwest farmers who could prove these cows usually bore twins.

One problem that David faced immediately and which has discouraged other scientists from building twin-producing herds, is the problem of waiting for the genetically inclined cows to bear twins. Cows carry their calves nine months and are not usually bred again for at least a few weeks.

David cut this time with embryo transplants. In this system, the cow with the desired traits — such as twin-bearing tendencies — is treated so she produces several eggs, then bred either artificially or with a bull. A week later, in David's case, he transfers several embryos with the desirable

hereditary characteristics to ordinary milk cows, which serve as surrogate mothers until the calves are born.

Meanwhile, the original cow with the twin-bearing tendencies is taken through the same routine again, and her new embryos are transplanted to milk cows. So a cow with desirable genetic characteristics might be bred three or four times a year instead of once.

In a room adjoining the operating room, David pored over samples of hundreds of cubic centimeters of fluid, looking for embryos. At the end of two hours, however, he concluded there were none. This was quite unusual and unexpected. Furthermore, another cow was waiting in the operating room for an embryo transplant. David decided to transplant a frozen embryo into waiting cow No. 110, a sturdy Holstein-Friesian dairy animal. She had come into heat the same day as No. 23 and so was considered well suited to receive No. 23's embryo.

From a canister of frozen embryos recently flushed from other twin-bearing beef cows, David selected the embryo of a Simmental cow. He added fluid to warm it up and examined it under a microscope. It had survived storage at a minus 196 degrees centigrade.

## Interest high in NY bull test

ITHACA, N.Y. — Interest in the 1984 New York Bull Test has heightened with the issuance of the report for the second 28 day weigh period.

The 103 registered bulls on the current 140 day performance test program at Cornell University's Livestock Teaching and Research Center at Harford had an average daily gain of 3.77 pounds for this second period.

The three Shorthorn bulls recorded the highest breed average daily gain for the period, 4.95 pounds. The son of Stony Brook Improver 8106 owned by Stony Brook Farm of Locke is leading the "Class of '84" with an average daily gain of 5.39 pounds for the period.

A Polled Hereford bull owned by Elm Farm of Richmondville and a Graystone Granite son was the second highest gaining bull with an

average daily gain of 5.21 pounds. An Angus bull and a Simmental bull tied for third place honors with an average daily gain of five pounds. The Angus bull is a Progression son and is owned by Gallagher's Farm of Ghent.

Another Progression son consigned by Gallagher's Farm topped the 1983 Bull Test Sale at \$4,000. The highest gaining Simmental bull was a son of RCF Sir Duke Signal 3A owned by JoAnn Srebnik of New City.

The one Hereford bull on test recorded the second highest gain per breed, 4.43 pounds and the one Salers bull recorded an average daily gain of 4.07 pounds for the same period. This was followed by the five Red Angus bulls with an average daily gain of 4.02 pounds.

The 32 Polled Hereford bulls on test had an average daily gain of 3.97 pounds; the 14 Simmentals,

3.70 pounds; the seven Charolais, 3.63 pounds; the 37 Angus, 3.60 pounds; the one Welsh Black 2.75 pounds; and the two Beefalo bulls, 2.23 pounds.

Seventy-six breeders from New York, Pennsylvania, New Jersey, Maryland, Vermont, Delaware, Massachusetts, New Hampshire and Montana are participating in the Bull Test program which is jointly sponsored by the New York Beef Cattlemen's Association, Cooperative Extension, the State Department of Ag & Markets, and Cornell University. The bulls are evaluated under uniform, unbiased conditions for such heritable traits as rate of gain.

The performance testing program will culminate with the Bull Test Sale May 4 at Ithaca when those bulls meeting certification standards will be offered.