



Performance is important. But it's not enough any more. At least that's how Conrad Grove, manager of Devereux Soleil Farms, Downingtown, Pa., sees it. In his estimation, it is going to take more than performance—it is also going to take efficiency and predictability—to insure future success in the beef cattle business.

And if there is a place set up to nurture a program based on performance, predictability and efficiency, it's Devereux Soleil. It has a 300-cow breeding unit, pinpointers to measure feed intake, a feedlot, a slaughter facility, a retail outlet. The farm raises its own feed, its own replacements, tests its own bulls, merchandises its own beef. It's the beef cattle industry in microcosm. There a calf can be followed from birth to maturity and/or slaughter. It offers a unique opportunity to appraise beef cattle, and Grove and herdsman Nancy Ann Sayre are making the most of it.

Cattle Since 1941

The cattle end of Devereux Soleil started

in 1941 as Soleil Farm, the property of Mr. & Mrs. H.A. Myrin. They were wealthy, thanks to their affiliation with Sun Oil Co. (hence the name Soleil). They had the means to put together a good herd and they did but, says Grove, they insisted the operation be kept practical. They expected it to earn money.

With Mrs. Myrin's death in 1972 (her husband had passed away previously), the operation was left in the hands of a Philadelphia trust company with instructions to find someone to take the entire operation and run it as it had been run—as a practical producer of beef cattle.

Enter Devereux. Devereux Foundation (a school for exceptional children—those with learning or emotional problems or physical handicaps—that treats more than 1,900 residents in branches in seven states) had a small Angus herd, a farming operation, a feedlot and a butcher shop near Downingtown. So when the trust granted Soleil Farm to Devereux Foundation in 1974, the

result was a facility capable of handling every aspect of beef production from calving to consumer.

Self Sufficiency, Efficiency

When Grove, a Virginia native, first came to Soleil in 1959, there were 125 head on 900 acres. Now there are 300 brood cows (which makes it one of the largest herds in the northeast) and the acreage has expanded to 1,600. Those acres (on four different farms within a 15-mile radius of one another) grow some oats and barley; the major crops, however, are hay and corn, with corn silage the important winter feed. About the only feed bills are those for the protein supplement fed to young cattle and cattle in the feedlot.

It's an efficient operation geared to producing efficient cattle—a concept, Grove feels, whose time has come. "Efficiency," he says, "has to be something we have to consider. Prices are getting too high. We have to know which cattle are efficient and we have to produce them. It is going to take

Efficient Size —A Philosophy

"I question whether with 1,500-1,600-lb. cows, the number of cows you can graze on a given tract of land will wean you more pounds of calf than 1,100-lb. cows will. You will raise more cows that may not wean as heavy calves, but they will wean you more total pounds of calves," says Conrad Grove, Devereux Soleil manager. He believes a cow that weans approximately half her weight in calf is an efficient cow.

"We are very close to three of the top eastern markets, and any time you send cattle into any of these markets—cattle you want to feed to a choice grade—if they have to go to 1,350 lb. or 1,400 lb. to do it, they are going to discount you on price per pound. It took you longer to get him there and it took you more feed and you took a discount.

"We checked with supermarkets in the Washington-Baltimore area," Grove continues. "All of those fellows said that they would pay the most money for a carcass weighing 600-700 lb. and grading choice. This ought to tell you how big a steer they need.

"So why should I keep a 1,500-1,600-lb. cow to produce a 1,100-lb. steer? That steer probably won't be finished at 1,100 lb., especially if he is sired by a 2,400-lb. bull. And we couldn't run 300 1,500-lb. cows on the acreage that we run 300 cows on now.

"We are playing into the exotic breeders' hands. Angus cattle were never meant to compete with other cattle for size. They were never draft animals.

"So why should we play into their hands? Let's compete quality-wise. I believe there are still enough people who want choice or prime beef to consume all the beef the Angus breed can produce."

"Has any other breed attempted to start a certified meat program? Could they compete?"

"Yes, in many cases we need more stretch and we need more size, but we probably need some facts to support how much. We can't afford to go too far."

a lot of time and effort, though," he admits, "to sell people on the concept of efficiency. It took 20 years or more for people to accept the concept of performance."

Fifth Year With Pinpointers

Twenty years from now, Devereux Soleil may well be looked upon as a pioneer in efficiency testing. The firm is now into its fifth year of evaluating the trait with pinpointers, devices that measure the amount of feed an animal consumes. Each pinpointer, a chute-like apparatus with a self-feeder at one end, has room for only one animal at a time. When an animal enters the self-feeder area, its special eartag activates a computer which measures, then prints the amount of feed consumed, the animal's identifying number, even daily and weekly consumption. With that information and weight gain in hand, efficiency is easy to compute.

Nancy is in charge of the pinpointers; three years ago when she took over, Grove already had run two tests, so now she is measuring some second-generation bulls. The results are interesting.

"We are using basically the same rations," Nancy says, "and it's the same environment, so any measured improvements should be genetic. We are changing the cattle and increasing our gain and feed efficiency."

Definite Patterns

"As far as revelations go," she continues, "we don't have any. We don't have enough figures yet. But you can see some relationships; there seem to be definite patterns. You can look through our data and see that calves by a certain bull will be higher in feed efficiency . . . And there's a lot of cow influence. We can see from year to year cows whose calves seem to do well no matter what bull is used.

"Most assumptions are made that the fastest gaining calves will be the most efficient because they are putting feed toward body growth, not maintenance." But the pinpointer shows that's not a direct relationship. "You will get calves that aren't gaining as high," Nancy says, "but they are not eating as much and that's an economic point. But if you can identify the calves that are fast gaining as well as efficient, you will be one step ahead. And hopefully, as more and more people become aware of it, this information will become more valuable."

A Difference of 720 Lb.

Their 55 bulls most recently on pinpointers had an average conversion of 5.96 lb. of feed per pound of gain. Their ADG was 3.17 lb. and their lifetime weight per day of age was 2.67 lb. The high three at 7.84, 7.51 and 7.42 (an average of 7.59 lb. of feed per pound of gain) were all by the same bull. Another three half brothers by a different bull measured 5.65, 5.7 and 6.1, an average of 5.82 lb. That's nearly 2 lb. difference. In a feedlot situation where steers are expected to gain about 400 lb., that 2 lb. of feed per pound of gain difference could mean a difference of 800 lb. of feed per steer. Multiply that by several hundred

or several thousand and it's not hard to see the potential economic impact of efficiency testing.

Although it isn't practical to test their females for feed efficiency, Grove and Nancy feel keeping the most efficient bulls out of a sire group, then using those bulls' daughters has to affect the cow herd.

Efficiency adds to and works hand-in-hand with performance, the foundation of Devereux Soleil program. Grove has weighed Devereux Soleil cattle since 1969 and the operator has been on AHIR, the American Angus Assn.'s performance program, since that time.

The records were there but, says Grove, they took on a special polish after Nancy's arrival in 1978. A graduate of VPI, Blacksburg, Va., she had spent the previous summer in South Dakota at long-time performance breeder Martin Jorgensen's and she patterned Devereux Soleil's records after his.

AHIR Plus

She started with 1974's information and built a file on each cow that includes pedigree, yearly breeding and calving information, performance figures on the cow and on her progeny. To help keep information easy to read and in perspective, progeny are listed by sex. Also, just a glance at each card will reveal calving interval and current breeding value information, indicating how the cow is progressing and which bulls have worked, which haven't.

It is all AHIR data, Nancy explains; her only addition is feed efficiency information on the bulls on test.

The cow cards—proof positive of performance and productivity—are important in merchandising. And interestingly enough, Grove and Nancy are finding more commercial than purebred breeders want to see the records. "The commercial man," Grove says, "is interested in pounds."

And performance does much more than help merchandise at Devereux Soleil. For example, selection stressing maternal traits and relying on records had a lot to do with the operation's 95% calf crop last spring. "With records," Grove explains, "you keep cows that are fertile and cows that calve early, breed back quickly, milk good and make good mothers." They are the producers.

But value of performance doesn't stop there.

Predictability

"The poultry people, the swine people, the dairy people—they all know what it is going to cost them to finish their product," Grove points out. Likewise, a cattleman is going to have to know what he can expect from his cattle. Predictability, then, is important and selection pressure via records lends itself to that. "You can expect cattle backed by records to wean off at approximately so much," Grove says. "This is inheritable. Yearling weights are inheritable. Feed efficiency is inheritable."

Uniform bloodlines—genetic conformity—also lead to predictability. So although



Devereux Soleil Farms manager Conrad Grove started with the operation in 1969 when it was still Soleil Farm; herdsman Nancy Ann Sayre joined the operation in 1978. The two are in charge of a complete beef production program that includes 300 brood cows, feed efficiency tests, a feedlot, slaughter facility and retail store.

Devereux Soleil is not a closed herd, very few females are purchased and most of the brood cows, then, are closely related. Outside blood is introduced through herd sires. If a bull works, his daughters are mated to the next bull, a system that builds a uniform genetic foundation.

Although Devereux Soleil buys bulls (like Paintrock Raven 44 and Rito 8206 of Ideal 028-36), the firm does keep and use several of its top calves every year (like DS Band 658 and DS Band 998). And some outside bulls (but only those backed by a good set of performance records) are used A.I., mainly to give Grove and Nancy something to compare calves of their own breeding to.

About 45-50 cows were bred that way last year. "By limiting our use of outside bulls," Grove explains, "if a bull doesn't work it doesn't hurt us badly. If he does work, we stand a chance of getting a good bull calf or two we can use."

Some Student Involvement

Although the day-to-day cattle operation is almost entirely independent of the school, some work—mostly in maintenance or building or farming—is done by some school residents and selected students do get a chance to participate in 4-H steer projects. A Devereux Soleil student stood second in last year's state farm show; five students showed steers this year.

According to Grove, experience in agriculture appears to be good for the youngsters. "Very few of the kids that have been exposed to the farm haven't liked it. In fact, most really like it. They don't want to be hemmed in; they like to get out. They work off their tensions and they learn to do something with their hands. Maybe when they leave here," he adds, "they will be more employable and be able to contribute to society."

Although the school is only loosely connected with the cattle operation, there is one thing important to both—the butcher shop.

It was built originally only to supply Devereux school kitchens but then, because students were paying tuition, the shop had to pass federal inspection. That's when the doors opened to retail trade, and it turned out to be an ideal arrangement. The school generally uses less costly cuts; retail trade generally prefers what's left. The cattle operation has an outlet for any animals not kept for breeding.

Around 350 Head a Year

Around 350 head are processed each year, with about one-third used by the school. The other two-thirds go to the retail shop, where choice beef is sold along with fresh and cured pork, sausage and scrapple (from hogs raised on another Devereux unit).

Not all slaughter cattle are home-raised. In order to keep the retail supply constant, some cattle must be bought, then finished. These are selected by Grove with a consistent top-quality product in mind. The only reason customers come to the farm is to buy meat, so he can't afford to do it any other way. And although Devereux Soleil does keep its prices competitive, Grove says customers don't mind paying for quality.

Word of mouth takes care of the store's advertising.

The butcher shop does more than supply beef; that's where Grove and Nancy see the results of their labors. With carcass information at their fingertips, they can compare sire, dam, performance and efficiency information with the finished product, adding the final touch to the Devereux Soleil program.

Obviously, then, it is a complete program—from calving to consumer, with emphasis on performance, efficiency and predictability. And the people involved are devoted to it.

As Grove puts it: "You put effort in; you have a goal. You are not just merchandising cattle, you are breeding cattle. There's a difference."

Devereux Soleil customers know that. More than half of them are repeat buyers.

