



These family members represent the third and fourth generations to own and operate the Moss farm near Enfield, N.C. From left are daughter Eva, Harriet and D.S., and son Tom. Another daughter, Dannie, was not available for photos.

# D.S. Moss Crops & Cattle

by Susan Holston

*In an area where crops normally take precedence over cattle, the D.S. Moss farm grows both side by side. On this family owned-and-operated enterprise, row crops and performance-tested cattle don't compete; they compliment one another.*

To the east lies the coastal plain—to the west the rolling hills of the piedmont area. On the dividing line, 12 miles west of Enfield, N.C., the world's largest raw peanut market, is the home of the D.S. Moss Angus herd.

The D.S. Moss family farm produces both row crops and performance-tested cattle. The two compliment one another—peak work loads for each occur at different times of the year, thanks to Moss' management, so there is simply no competition between the two agricultural enterprises.

## Three Generations

At the turn of the century, Doc Schuyler Moss purchased a tract of land near Enfield. Primarily a tobacco farmer, the senior Moss

grazed his land with various types of livestock including at times 1,000 head of sheep, western horses that he broke for plow horses, beef and dairy animals.

His son, Thomas Benton Moss, acquired the land in 1940. Over the next 25 years he added land to the original farm while maintaining a grade herd of Herefords with an occasional infusion of Milking Shorthorn blood. With the hopes of someday owning Angus cattle, a commercial herd was purchased in 1948. That herd was later sold to a neighbor and the search was on for registered Angus cattle. Moss recalls, "Around 1950 the first registered cattle were bought at a couple of dispersal sales. The one bull bought was Moles Hill Eileenmere 49, a son of Homeplace Eileenmere 999 35."

The first draft of registered cows included such families as Queen Mother, Blackcap Bessie, McHenry, Blackbird and Miss Wix.

In the beginning cows were selected only for milking ability. This trait, common to Angus, was very important to Thomas Moss and he instilled its importance in his son's mind. "I believe even stronger than my father," Moss says, "that a cow should first and foremost, milk, raise her calf on grass or other roughage, have a calf each year, or be put in hamburger." Milking ability still plays an important part in the selection process today.

## More Goals, More Cattle

By 1970 more goals were set and new bulls were added. Brookwood Bardoliermere 2 was purchased from Gentry Bros. at King through a North Carolina Angus Assn. graded bull sale. He was a 2-year-old at that time and many of his granddaughters and great granddaughters are still in the herd. In 1971, five open heifers were purchased from Woodlawn Farms, Creston, Ill.

Later that year Moss purchased five more open heifers and a yearling bull, Montgomerys Marshall 432, from Jim Montgomery of Grandfield, Okla. After visiting with Montgomery and studying his program, Moss then decided to concentrate on Marshall-bred cattle and 16 additional Marshall-bred cows and a proven bull, Montgomerys Marshall 264, were bought from Othol Patton at Chattanooga, Okla. They were selected by Jim Montgomery and were from Montgomery Marshall breeding. Additional purchases made to intensify that line included 10 more heifers from Jim Montgomery. The die was cast.

## Management Makes It Work

The present day farm is solely owned and managed by the D.S. Moss family which includes D.S.'s wife Harriet, daughters Dannie and Eva and son Tom. Moss this year employs only one full-time farmhand and three men on a share-farming basis. Moss, by the way, has a lifetime of agricultural experience behind him and, like his father, earned a degree from North Carolina State University. Daughter Dannie is now a senior in economics at NCSU. Eva is a sophomore at the University of North Carolina and Tom is a senior in high school.

The 1,300 acres comprising the farm include presently 400 acres of row crop land, 100 acres of coastal bermuda grass and 200 acres of fescue. Plans are being made for an additional 250 acres to be cleared for fescue.

Pastures are managed so cows graze year-round. It was the addition of the coastal bermuda that makes it possible—last year 150 cows grazed for 12 months with the exception of the 45 days they were in the A.I. lot. The abundance of coastal bermuda allows Moss to stock anywhere from 3-5 cows per acre during the summer months.

To maximize use of the grasses, Moss feels it is necessary to have one acre of coastal bermuda to every two to two-and-one-half acres of fescue. "The fescue fits in from the 15th of September until the 15th of December then again from the 15th of March to June 15," Moss explains. "The cows flesh easily on fescue."

Approximately 400 acres of rye are maintained as a winter cover crop on the row crop land.

Moss gets the most out of his grasses by using them when they are at their best. Moss explains, "Fescue is a cold weather plant. Rye is used in the spring. The cows are taken off the row crops, then put on fescue for spring growth. The coastal bermuda is grazed in the summer."

#### Row Crops—Tobacco

Tobacco, peanuts, cotton, sweet potatoes, soybeans and corn have played major roles in crop production at various times at Moss'. Crops now produced include tobacco, peanuts, sweet potatoes and corn.

In late summer tobacco is first in Moss' mind; that's when the crop is harvested (on shares with three other men). A lot of hand labor is involved and the majority of the work is done by these men's families. Large machines carry the workers across the fields so they can pick the leaves, starting with the bottom ones first.

The Moss tobacco crop produces in excess of 100,000 lb. per year. Moss shoots

for a 2,400-2,500 lb. yield per acre and he explains that irrigation will add anywhere from 300-400 lb. more per acre in dry years like 1980 and 1981.

Moss describes the process involved after the harvest. "After being selected from the field the leaves are cured for one week using controlled heat and air. A temperature varying from 85° to 160° is maintained at this time. After curing, the leaves are sorted, then put into 250 lb. market-ready sheets (or bundles)."

In the fall the tobacco beds (5 yards x 20 yards) are treated with methyl bromide. Tobacco is seeded in the beds the last part of January and transplanted to the fields the first part of May. Harvesting begins in mid-July. Tobacco is a row crop and Moss grows it in strips alternating with rye to prevent spring wind and sand damage. Crops are rotated on a three-year basis.

#### Peanut Champion

By the time the tobacco has been harvested, fall has arrived and it is time to harvest the peanuts. (Incidentally, the Moss family was the first in this area to plant peanuts.) One hundred forty acres have been allotted for this crop which is harvested in late September and through October. Moss uses more than just the peanuts. "We save all the hay once out of every third year," he explains. "The peanuts are plowed up to dry on the ground and the vines act as a buffer. If the ground is wet the vines decay and that hay will be bad. But if it is dry at this time then we have a type of hay that can approach alfalfa in value. The cows just love it."

In 1974 Moss was named county Champion Peanut Producer for his 3,624 lb. per acre crop.

In addition to tobacco and peanuts, 130 acres of sweet potatoes will be marketed this year and 40 acres of corn will be used by bulls on test. The 1981 sweet potatoes, as well as the peanuts, were cash rented.

#### Focus on Cattle

In late fall, Moss' attention shifts from the crops to the cow herd. With the popularity

of fall calves in this part of the country, Moss cows calve from late September through January. Since Moss would like to have all his cows calving in October and November, he plans to move the January calving cows back a month this year either at the sacrifice of the cows or by holding this group over for December calving. Moss has decided that he will have no cows calving later than Dec. 31.

Not many cattle are found in the eastern and southern part of North Carolina so Moss is forced to reach out to his customers. And reach he does. He does his best to give them the kind of cattle they need.

Bull customers are given their choice of bulls grown out by two different methods. The first gives customers the opportunity to purchase 2-year-olds grown out on grass with no grain after weaning. The second offers buyers bulls grown out on 140-day test.

#### On Farm Test

Performance testing young bulls became a practice at the Moss farm in 1970. For the past 11 years the bulls have been fed a ration of ground corn, peanut hulls and cottonseed meal. Since no changes have been made in the ration Moss feels any changes in the cattle "have been in the genetics, not through feeding."

Bull calves are weaned at seven months with prospects for the 140-day test selected at that time. Bulls on test are weighed every 30 days.

Feed efficiency information is an important tool for Moss. This is why a Pinpointer has been used for the past six years. "A Pinpointer is the way to go for feed efficiency. On the average, it takes seven pounds of feed for each pound of gain," Moss says. "I had one bull on test that converted 4.98 lb. of feed for each pound of gain."

The bulls that complete the 140-day test sell in Moss' annual production sale along with a selection of 2-year-old bulls and cows with new calves. (This sale is always held at the farm the Thursday after Thanksgiving.) This year Moss is sending bulls to North Carolina Central Test Stations (Rocky Mount, Salisbury and Waynesville). Recent data showed a Moss bull at the top of the Rocky Mount test.

Most of the cattle marketed stay within the state; in fact the largest number of buyers are within a 100 mile radius from Southside, Va., to South Carolina, Tennessee and Georgia.

Volume I of the "Moss Marshalls" sale was held in 1976. The average was a little more than \$700. Last year's average was \$1,100. Moss cattle are experiencing wide acceptance in the area and a large number of customers return each year.

#### A.I. and Jones

Artificial insemination has played a very important part in the development of the present herd. Moss credits Earl Jones, a professional A.I. technician from Rocky Mount, with turning the A.I. program around. One of the best according to Moss, Jones is available to travel to various herds on a custom basis.

*Performance testing bulls began at the Moss farm in 1970 and for the past 11 years bulls have been fed a ration of ground corn, peanut hulls and cottonseed meal. Pinpointers are used to record feed efficiency information.*



Breeding season begins Jan. 1. and is completed by the end of that month. During this time the 100-150 cows are brought into an A.I. lot where they are fed corn silage and chicken litter (as a source of protein) twice a day, ideally with feeding time never varied more than 10 minutes. On the average, heifers are bred to calve at 24 months.

All heat detection and breeding is done by Jones. No marker bulls or synchronization practices are used. Last season in a 30 day period Jones had a 71% conception rate on 100 head. With a percentage like that, his salary, Moss says, was more than paid for by savings in semen cost alone. Jones' secret? He spends a lot of time watching the cows to learn their habits—and he loves his work.

#### Sire Selection

When selecting sires, Moss makes it a practice to use those with superior performance records. Both performance and show bulls have and are being used but Moss says, "Show bulls must have a lot of performance to get into the A.I. program." Each year Moss introduces into the A.I. program three sires—one already proven in his herd and two new bulls.

In 1975 while on a 2-week bull inspection trip Moss visited Eugene Coltrane at St. Charles, Iowa, and saw for the first time Bon View Winton 1342, an International and National Western grand champion. Moss was so impressed he bred 35 cows to the bull. Moss claims that 1342 has influenced his herd more than any other bull he's used; he added two inches to the calf crop in one year.

Moss decided to bring in other outside bulls for several years to compare their progeny to that of 1342 but he could not find a bull to replace 1342 in his breeding program. Six of 1342's best sons were used in the Moss program.

To further the maternal influence of 1342 Moss also has used Bon View Connection. The two are maternal brothers out of Bon View Gammer 440.

#### Brute

While attending a North Carolina Angus Assn. sale, Moss purchased what he thought was the longest cow he had ever seen. Feminine but poor, this cow dropped a bull calf on Leap Year's Day in 1972. The bull, Moss Roan Mountain Brute, was the first bull in the Moss herd to have a 1,100-lb. yearling weight.

Now the Brute, 1342 cross is the heart of the production sale; it's also produced many sale toppers and 4.0-lb. gainers for Moss. Brute also has left his mark in the herd by transmitting his length to his daughters (10-15 of which remain in the herd today). When compared in the Moss herd to top A.I. sires no other bull could out-produce him on weaning weights. But frame was a different story.

#### Enter Bartman

In the spring of 1979 Moss joined 14 others in becoming a charter member of Bartman Breeders, a group that acquired

one-third interest in Briarhill Bartman. Moss was interested in using this bull to increase frame in his heifers. A pleasant surprise was that two Bartman sons bred by Moss have returned to the herd as natural sires. One bull calf is a maternal brother to Brute. Bartman already has played a major role in the herd's progress and he will be used heavily in the program again this fall.

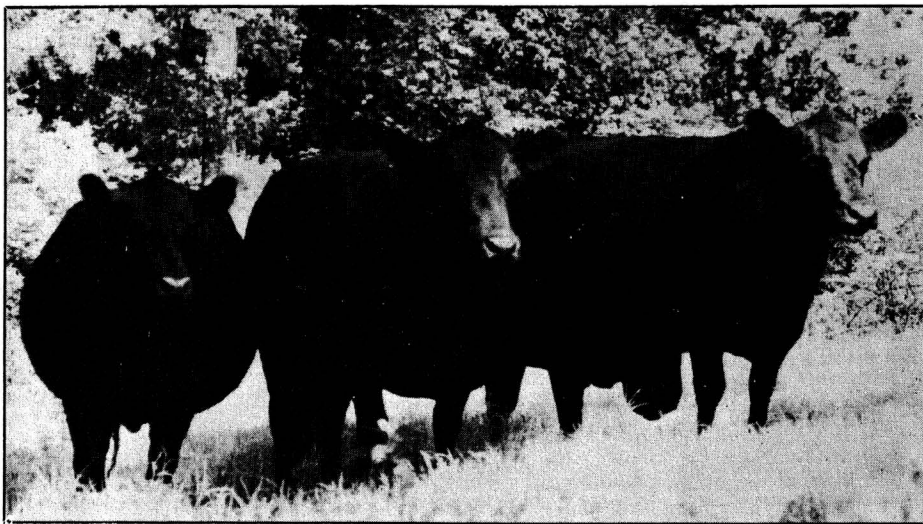
Other outside A.I. sires used include Schearbrook Schoshone, Sir Wms Warrant, Ken Caryl Mr. Angus 8017 and LEMAR Eileenmere Lad 549. Junior herd sires used in natural service include Moss Sunrise Marshall A919 (gain 4.54 lb./day on 140-day test and a 3-generation Moss-bred bull); Moss Buckshot Marshall 970 (gain 4.01 lb./day on 140-day test and a Connection son); and the two Bartman sons, Moss Super Marshall H31 and Moss Dandy Marshall H38. All these young bulls were bred by Moss.

#### No Creep

"To have profit you must keep concentrates (corn/grain) out of the cattle's diets unless it is used for a specific purpose like testing." That's Moss' philosophy and for this reason his calves do not receive any type of creep.

At weaning measurements are taken on both cows and calves. Bull calves are weaned at seven or nine months, heifers at nine. After weaning, calves are grown out on grass, peanut hay, coastal bermuda hay or silage.

*These cows are expected to produce. D.S. Moss believes that "a cow should first and foremost milk, raise her calf on grass or other roughage, have a calf each year, or be put in hamburger."*



A combination of eye-balling and records is used in the culling procedure. The stockyards are used to cull the cows. "If 40 heifers go into the herd," Moss says, "then 20 cows go to the stockyards." Some cows sell in the production sale and those must have a daughter in the herd, be less than six years old and have ratios that average 100 or more.

#### Both BCIA and AHIR

Moss uses AHIR (Angus Herd Improvement Records) as a tool for herd improvement and he is also an active member of

Beef Cattle Improvement Assn. (BCIA). "This duplicates the work," he says, "but I feel it is worth the effort so as to have the records my customers are familiar with."

Included in data available on bull calves are 205-day weights, any 140-day test results and yearling weights taken on the AHIR Code 7 option.

Moss uses the national AHIR program. Moss Roan Mountain Brute recently was listed on the national sire evaluation with +19 weaning, +17.8 yearling and a 100 ratio for maternal traits. Moss currently has five Pathfinders in the herd. The AHIR Sire Summary is important to him, Moss says—he calls it a tremendous step forward.

Moss' records reflect a breeding program with substance. The 1981 records for the first weaning group have returned and they show that 24 bull calves averaged 589 lb. at 212 days with an average height of 43.9 inches. Twenty-eight heifer calves averaged 540 lb. at 209 days with an average height of 43.1 inches. Moss feels, "Cows should be bred to bulls that sire calves that continue to grow. And there is no other way to know those facts except through performance testing and record keeping."

#### Future

And that's where the herd's future lies. Moss will try to add more pounds every year while continuing to keep the cattle as correct as possible. He firmly believes that

"ultimately every cow's offspring somewhere down the line will be sold by the pound...if we keep the Angus attributes present now we will have a whale of a breed of cows."

In the near future Moss plans to add more replacement heifers. And he will continue to grow row crops. Thanks to well-planned and well-executed management the crops and the cattle need attention at different times. They don't compete, they compliment one another.

It's quite a program.

