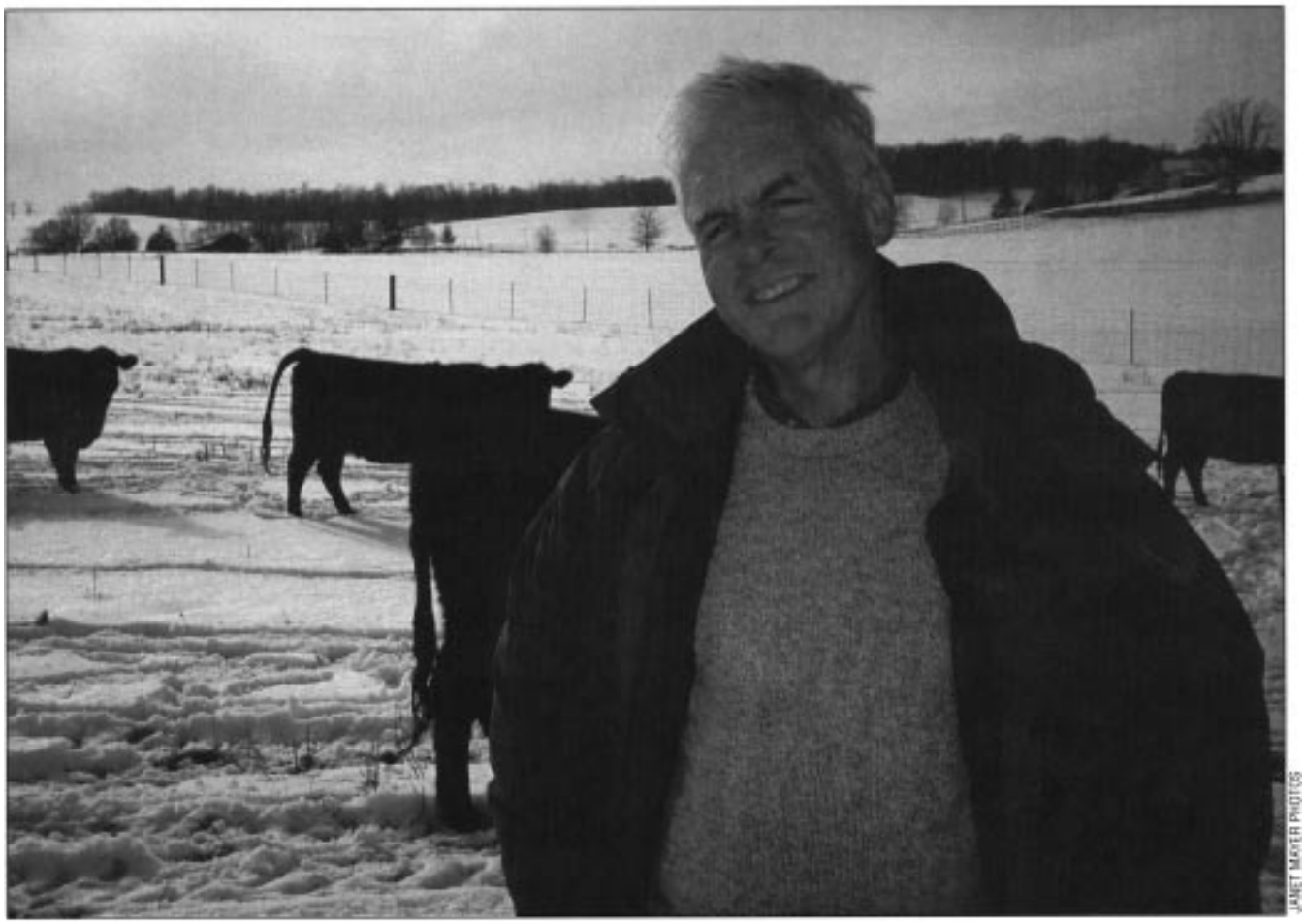

Dr. Bill Elkins has bred Angus cattle at Buck Run Farm in Pennsylvania since 1985.

THE BUCK STOPS HERE

Conservation-minded forage farming and quality-minded Angus breeding keep Buck Run Farm in the beef business and in harmony with nature.

BY JANET MAYER

If you were to ask Dr. Bill Elkins the main objective of his Angus breeding farm in Pennsylvania, he would no doubt say performance on grass. But he would be quick to add . . . achieved with conservation in mind.

At Buck Run Farm, owned by Elkins and his wife Helen, all management decisions for the forage-based operation are influenced by conservation of land and natural resources.

Located near Coatesville, just west of Philadelphia in the historic Brandywine Valley area, the farm is made up of 250 acres of rolling hills used primarily for grazing. About 80 acres are wooded, providing good wildlife habitat, with the remainder of land in pasture. The Angus herd at Buck Run Farm numbers 65 registered cows, 10 bred heifers and 25 yearling heifers.

The farm has an interesting history of its own (see sidebar story on page 31)

including the well-preserved old stone house where the couple lives. "Before we bought this proper& it was actually a small piece of many thousands of acres owned by the King Ranch in Texas," Elkins says. 'The house was built by a Scotsman about 1810. We have done a lot of work on the house since we moved here nine years ago, but a large part of it is original."

Year-round grazing is often achieved at Buck Run Farm. This cow foraged green grass after a mid-winter snow storm.

He demonstrates this by pointing to the original wide-board oak floor worn smooth by years of use. At closer inspection, you can see the cellar light shining through the wide cracks.

Elkins and his wife were part of a group who bought sections of the King Ranch holdings under a partnership set up by the Brandywine Conservancy With the purchase of Buck Run Farm came easements on the land to prevent further development of the parcel.This was done both to preserve the natural beauty, foliage, and wildlife habitats of the land, and to stop pollution of Buck and Doe Run Creeks, which run through the property into the Brandywine River, The river is the main source of drinking water for Wilmington Del.

Elkins, a doctor with a degree from Harvard Medical School, spent much of his career in medical research at the University of Pennsylvania. "I grew up on a dairy farm in Chester County, not far from this farm. After 30 years into my medical career, I felt it was time to come back to farming. About that time, I heard the Ring Ranch ground was for sale. I figured it was now or never," he recalls. "I knew what farm life was like, and if I hadn't had that background, it probably would not have occurred to me to get into the cattle business."

Perhaps as a result of his farm background, Elkins had for many years shown an interest in conservation. During his medical career he was an active board member of the Natural Land Trust in Philadelphia and of the World Wildlife Fund. These interests, combined with his knowledge of cattle, gave Elkins the confidence that he could manage a successful cattle breeding operation and work in cooperation with the Brandywine Conservancy.

Elkins, now 63 and farming full-time, makes a concerted effort to keep abreast of conservation issues. He is an active board member of the Pennsylvania Environmental Council the Stroud Foundation, which oversees the Stroud Water Research Lab of the Academy of Natural Sciences of Philadelphia; and Buck and Doe Associates, which oversees preservation of Buck and Doe watershed.

Included in the farm purchase were 50 head of King Ranch commercial cows. In 1985, however, Elkins made the decision to begin breeding registered Angus cattle.

"I chose the Angus breed for two reasons," he explains. "The first being, we have many fine breeders in the area and good Angus cattle were available to me.I bought cattle from and got a lot of help from Sam Wylie, Conrad Grove, Lawrason Sayre, Greg Krueger, Fred Frey and Frank Walton – all outstanding Angus breeders."

Elkins also liked Angus because of its breed improvement programs and use of expected progeny differences (EPDs) 'Having worked in medical science, I used a lot of genetics, even though I wasn't a geneticist, and EPDs interested me," he says. "I felt EPDs were the best clue one could have as to the genotype of any particular animal, and that appealed to me a lot. The Angus breed was, and still is, way out in front in that area."

Elkins determined early on that the farm was going to be grass and forage based out of necessity. The King Ranch had originally developed the pastures because of difficult tillage on the hilly terrain and because the thin topsoil couldn't support crops. The only crops grown on the farm are grass, hay and haylage.

Over the years Elkins has made improvment in some of the forages and grasses. He has utilized native grasses and introduced or improved on stands of tall fescue, orchardgrass, afalfa, clover, Mutua prairie grass, Puna chicory and switchgrass.

To prevent pastures from going dormant during hot dry summer, this producer added warm-season varieties such as the switchgrass and Puna chicory for his cattle to graze during the summer. 'The chicory does especially well for us, and the cattle like it," Elkins says. 'We pastured the cattle on it the first year, although it's recommended to wait until early the second year, before it goes into seed head. We failed miserably on that count and it went to seed. But I don't think it mattered. It has done well in spite of our mistakes."

Elkins has tried many of the grasses on an experimental basis. Some are from New Zealand and some from the Midwest. These grasses are seeded in relatively small plots; if they grow well, and are palatable to the cattle, the plot sizes are expanded.

Controlled grazing was one of the first conservation practices Elkins initiated. He found by doing this, he could increase the number of cattle carried on pasture. Because of the farm's hilly terrain, irregularly sized paddocks of 10 to 20 acres were laid out in contour strips. This is done to prevent the cattle from grazing exclusively along the creek bottoms and avoiding going to the hill tops.

Elkins says this system works well except in the spring. He found there is a conflict between this type of grazing program and the operation's artificial insemination (AI) program.

"Dale and Carolyn Stolfzfus, who live nearby, work with me in the Angus breeding operation. They both do AI, and we have a good conception rate, but we need to have the cows near the barn for heat detection he explains. "If, at the same time, we have a field of forage that needs to be grazed but is not nearby, we have learned to deal with the conflict by separating groups of animals, keeping those at the barn that need inseminated and putting the others out on pasture."

Other enviromnental projects Elkins initiated include fencing of stream banks along Buck Run Creek. This restricts the cattle to designated crossings and drinking areas.

Elkins says Angus cattle have proven to be aggressive foragers, as he believes all cattle – registered or commercial – should be. The cow herd is pastured on grass and fed hay and haylage during the winter months.

Each cow is expected to raise a 500- to 600-pound calf and still maintain good body condition. Calves are not given supplementery creep feed. Heifers are grown out on grass, and fed a ration of hay and haylage with about 2 pounds per head per day of rolled corn during the winter months.

"A good policy I've followed with heifers is one I read about in the *Angus Journal* some years ago," Elkins explains. "It said to treat all of your heifers exactly the same; don't choose the best by phenotype. The ones that do the best are the best. That made an impression on me and I try to follow it."

Elkins retains most of his heifers for the herd, although he occasionally markets a few to improve his cash flow. He prefers to sell them as cows, however, to see how they perform.

(Top)
A group of Angus replacement heifers are kept in a lot by Buck Run Farm's limestone barn.

(Left)
The Elkins' limestone house was built in 1810. They have made some renovations, but have kept its historical architecture and charm intact.

Bulls raised on Buck Run Farm are also expected to perform on forages. Since 1989, Elkins has been sending bulls to participate in Clemson University's Edisto Forage Bull Test Station in South Carolina. He uses the test to monitor what various bloodlines can do on a forage diet similar to the one at Buck Run Farm.

A few bulls are sent to the Pennsylvania Meat Evaluation Bull Test, but since it is not forage-based, it's used more as a means of marketing.

In 1993 Buck Run Tex 91H was the high-indexing Angus at the Edisto test. That same year, Buck Run Buck F2 was the senior bull champion at the National Western Sale Bull Show in Denver.

In 1995, as of this date, Buck Run Farm bulls are placing in the top group at the Edisto test. A bull sired by South Branch New Trend holds the fifth spot with an average daily gain (ADG) of 3.13 pounds a bull sired by RlN8 of 7T26 Rito 9M9 holds the sixth spot with a 3.04-pounds ADG.

Elkins is cautious about using the highest marbling sires for fear of getting too many 'hard doers," but he believes that marbling is the trait in which the Angus breed excels. Thus, he gives precedence to this trait in selection of AI sires.

Elkins continually strives to seed favorable carcass traits into his cow herd without giving up the ability to grow and raise quality calves on grass. He uses Al bulls which possess moderately positive EPDs for carcass traits on cows previously selected for easy keeping and good maternal function. He intends to continue to select heifer calves for fertility, efficiency and adequate maternal function, and monitor carcass traits in the bull calves that are steered.

"I doubt if our program will produce world champion carcass cattle," he says. "But it may ultimately yield breeding stock practical to maintain yet capable of producing a high percentage of Certified Angus Beef program qualifiers."