

By CAROL HUNTER

# Alumnus' gift beefs up



As part of a new herd at Mizzou's South Farm, a Simmental cow, top, offers students an opportunity to study management of full-blooded beef cattle. Above, Dr. Jerry Lipsy observes two of Mizzou's Simmental steers.

12 MISSOURI ALUMNUS  
MARCH-APRIL 1987



# research

**THE BEEFTEST GIFT** in Mizou's history could mean more profits for Missouri cattle producers. In October, Clark "Ed" Creed, BS Ed '45, gave 50 pregnant Simmental cows and 50 steers to the Animal Science Department. The University's first full-blooded herd, the cattle are worth \$200,000. Creed of New Britain, Conn., gave an additional \$10,000 to support the herd for a year.

Originating in Europe, full-blooded Simmental herds are not common in the United States. Instead, most Simmentals in this country are purebreds. A cow is considered purebred if it is 7/8 Simmental; a purebred bull must be 15/16 Simmental. Full-bloods are 100 percent Simmental.

At the University's South Farm, the Simmentals are part of ongoing beef cattle programs in extension, research and teaching. "They are especially useful for helping us solve nutrition and genetic problems that are taking a heavy toll on beef producers' profits," says Dr. Jerry Lipsey, assistant professor of animal science.

Since agriculture is Missouri's largest industry, "Anything we can do will have an effect on the state because agriculture contributes so much to the economy," says Dr. Bobby Moser, program director of statewide extension. With 4.6 million head of cattle at the end of 1986, Missouri has more cattle per square mile than any other state. As of Dec. 31, Missouri ranked second nationally in number of purebred registered Simmentals, 26,470.

Missouri has 23 million acres of grass, so the state's cattle should have plenty to eat. But much of the state's fescue, a pasture grass, is infested with a fungus that makes cattle more sensitive to heat. This reduces their appetite, resulting in decreased weight gain.

**SINCE THE FUNGUS** is virtually indestructible, "We'd like to experiment with different cattle types and their ability to prosper under the fescue environment provided in Missouri," Lipsey says. The donated Simmentals are particularly valuable in research because they were not exposed to the fungus before arriving in Missouri.

Along with Drs. George Garner and Dale Vogt, professors of animal science, Lipsey is trying to identify Simmentals and their offspring that are either more or less sensitive to the fescue fungus. If such a trait is inherited, the researchers hope to breed more of the fungus-tolerant cows.

Also conducting research with the cattle is Dr. John Paterson, associate professor of animal science. Because of Creed's gift, he received two Missouri Research Assistance Act awards for nutrition studies using the Simmental calves. Under the RAA, researchers get \$1 in state money for every \$2 from private sources. Other donors supporting Paterson's research are Archer Daniels Midland Foundation, Missouri Cattlemen's Association, Missouri Corn Merchandising Council and Missouri Farm Bureau.

Paterson's projects focus on factors that stimulate food intake and digestion. In one

experiment, he supplements the calves' alfalfa rations with byproducts such as corn gluten. Clocks fastened to the calves' necks then monitor when the animals graze over a period of time. "I want to find out if the supplement affects grazing behavior," he says. His goal is to get the cattle to eat more grass and need only minimal supplements.

In another study, Paterson is trying to find out why adding legumes or clover to grass pastures stimulates grass intake and digestibility. "I want to understand grazing behavior to give animals a more desirable plant. If I can get an animal to eat 10 percent more a day, it may translate into 15 percent more productivity."

Indeed, "When correct management procedures are applied to Missouri's fescue pastures, cattle can do well," Moser says. "We're learning to manage around the fungus."

Besides those studies, Creed's cows and calves are used in animal production courses, livestock handling demonstrations and by Mizou's livestock judging team. Representatives from the U.S. and Missouri departments of agriculture visited the Campus for a livestock grading seminar that featured the Simmentals.

**THE SIMMENTALS ADD** to the diversity of the University's beef cattle. At South Farm the cows join a purebred Angus herd. University farms in other parts of the state have Polled Herefords. "The Simmentals bring a new biological type and offer the opportunity for students to study management of another kind of beef cattle," Lipsey says.

The Simmentals also fit into the University's long-term plan to produce an Angus-Simmental cross herd at South Farm. "The cross is a very desirable beef animal," Paterson says. The Simmentals contribute fast growth and leanness, while Angus are highly fertile and known for their high-quality beef.

According to Lipsey, "We're trying to do things that farmers could do and pass along the information to the state's producers. Part of our responsibility is getting people together to work for a common goal. When we can improve income in the agriculture sector it does huge things for the state."

The potential benefits to students and the state figured into Creed's decision to donate the herd. "The University has an excellent Agriculture College. They were very interested in the cattle, and they have a program which I feel will contribute something," says Creed, who grew up in Columbia. He owns a machine tool and parts manufacturing plant, in addition to his Ankeny Simmental Cattle Farm in Rineback, N.Y. "I'd like to give something back to the school. I owe a lot to the University."

Because proceeds from the sale of the Simmental offspring will go into an endowment for future projects, Creed's gift is continuous. "Mr. Creed can be commended for his foresight in wanting to put his cattle to this use, and for his contribution," Moser says. □



Above, Clark "Ed" Creed, left, signs over Simmental cattle to agriculture Dean Roger Mitchell. Dr. John Paterson, left, analyzes the cattle's diet and digestion.