

AG'S NEW STEAK FARM

We Americans are eating more steak than ever before, and beef is easily the No. 1 meat on U.S. tables.

In 1970 Missouri producers turned out a calf crop so big that the state ranked No. 2 in the nation for beef calf numbers. That crop exceeded \$250 million in value at weaning age, making it an important part of the total livestock income for Missouri.

In fact, income from cow-calf operations now is so large that even slight changes in percent of return can make big differences to our economy. Consider that a 5 percent change in that \$250 million would mean the addition or loss of \$12.5 million in the state's farm income. Even as little as a 1 percent change would boost or cut Missouri's farm income by \$2.5 million.

Recognizing the importance of beef calves in Missouri's economy, College of Agriculture scientists have set up a new research facility, Cornett Farm.

The research program at Cornett Farm (near Linneus in north-central Missouri) will be a complete cow-calf operation on a full-farm scale. More than 390 acres will be assigned as experimental pastures. And the research will continue year-round for an estimated 10 years.

Few such projects in the past have continued without interruption for as much as one year. "We want to learn the results of sustained operation," explains agronomist A. G. Matches who helped to write the research plan. "In this project we will face the same problems the farmers do."

The Cornett Farm project is special in another important way. It is not a demonstration farm with a single farm operation. Instead, the cow-calf project is so planned that it includes replications to rule out chance results. The conclusions from this study will be valid scientific information.

There will be two groups of cows, one bred for fall calving and one for spring calving. These, and their calves, will be assigned to pastures which have received varying amounts of nitrogen fertilization. Some of the calves will receive supplemental feed.

"When this work is completed, we want to be able to tell the Missouri cow-calf man whether it will pay him more to put his money into nitrogen or into supplemental

feeding or some proportion of each," Matches explained.

Results from this study will be applicable over the entire cow-calf producing area of Missouri.

Many departments in the College of Agriculture will have a part in this effort. It is being administered under the inter-departmental Forage Breeding, Management, and Utilization Program with C. J. Nelson as coordinator.

Others involved include G. B. Thompson, animal husbandry; Vic Jacobs, agricultural economics; Howell Wheaton, extension forage specialist; Fred Martz, dairy; David Currence, agricultural engineering; and Homer L'Hote, assistant director of ag experiment station. Other departments may be included later as the needs develop.

Tall fescue has been established on the Cornett Farm pastures and part of the project will amount to an evaluation of this up and coming forage crop. Though not new here, its popularity has soared in Missouri in recent years.

From a fourth to a third of the state's pasture land now is planted to tall fescue or includes tall fescue in a mixture. Tall fescue is by far the most predominant forage species in the southern half of the state, Wheaton points out. This is one of the reasons why it is important to learn as much as possible about the use of tall fescue in a cow-calf operation.

Currence has some ideas on hay handling that he wants to try. Really large hay bales have been proposed by researchers in some states. Some of them would weigh more than 1,000 pounds. And, there's still a lot to learn about handling conventional and round bales in standard sizes.

Missouri residents will be getting the benefits of this research at a bargain price, partly out of the generosity of Miss Winifred Cornett who has made the farm available at an extremely low lease price. And it will be a bargain because new tester animal techniques developed by Dr. Matches will make the testing procedures up to four times as efficient as in the past.

And it's a bargain because the benefits will accrue to all phases of our economy from cow-calf man through various types of agri-business and marketing until they finally appear on your table as more and better, juicy, sizzling steaks. □

