

# BEEF CATTLE IMPROVEMENT PROGRAM

TEXAS A&M UNIVERSITY
TEXAS AGRICULTURAL EXTENSION SERVICE
J. E. Hutchison, Director, College Station, Texas

Hybrid vigor and production records are two of the most effective tools used to increase efficiency of production in beef breeding herds. These questions and answers will help producers develop more productive breeding and management programs.

## Q What is the BET Beef Cattle Improvement Program?

The BET Beef Cattle Improvement Program is an organized effort to get a large percentage of beef cattle producers to use present technology to increase the efficiency of their production.

### 2. Who should be involved?

The BET Beef Cattle Improvement involves commercial producers, registered breeders, feed manufacturers and dealers, auction markets, packing plants and bankers and other lending agencies.

# Why is there an increased emphasis on a BET Beef Cattle Improvement Program?

East Texas farmers have shifted from a row crop economy to one of grass and beef cattle. In 1966 beef cattle produced 31.8 percent of the agricultural income in the 40 counties included in the BET program.

# What new technology could make the Q greatest improvement in the East Texas beef cattle business?

Cattlemen could improve production by: (1) Using hybrid vigor to increase productivity and efficiency of production in breeding herds.

(2) Using sufficient records to measure efficiency at all levels of production and as a guide in the selection of breed-

ing animals.

# Beef Cattle Improvement Prog

L. A. MADDOX, JR.

Extension Animal Husbandman Texas A&M University

- 5. Q What is hybrid vigor in cattle?
  - A Hybrid vigor is the increase in performance of the offspring resulting from crossing animals with differences in their genetic background.
- 6. Q Can we have hybrid vigor by crosses within a breed?
  - A Yes. Crosses of inbred lines within a breed can result in a small increase in productivity.
- 7. Q How much increase in productivity is expected when British breeds are crossed?
  - A Researchers report increases of 4 to 7 percent in the number of calves weaned and 3 to 6 percent in weaning weights of these crossed calves.
- 8. Q How much increase in productivity is expected when British breeds are crossed with Brahman?
  - A No increase in percentage of calves weaned resulted at the McGregor Station, but there was a substantial increase on the Gulf Coast. One hundred and eighty day weights were increased 10 to 15 percent.
- 9. Q What are the advantages of crossing British-Brahman first-cross cows with British bulls?
  - A Results show a 12 percent increase in percent calves weaned and an increase of nearly 20 percent in 180-day calf weight on purebred animals.
- 10. Q Will other breeds or crosses of sires improve productivity of Brahman-British first-cross cows?

- A Yes, slightly. Of eight different breeds or crosses of sires, calves sired by Charolais, Charbray and Red Poll were 3 percent above the average calf weight at 180 days.
- 11. Q What effect do crossbred sires have on productivity?
  - A Crossbred sires usually reduce weaning weights on crossbred cows but increase weaning weights on purebred cows.
- 12. Q What are some of the problems in maintaining a crossbred cow herd?
  - A The greatest problem is producing or obtaining replacement heifers. Marketing crossbred calves may require more skill than marketing purebred calves to get the true value.
- 13. Q What effect do crossbreeding beef breeds have on carcass cutout and quality?
  - A Difference in cutout and/or quality is not significant.
- 14. Q Are production records primarily for use by registered breeders?
  - A No. This program is designed for more efficient production in commercial herds. It is easy for purebred breeders to keep performance and production records. Commercial cattlemen should expect registered breeders to show production records on cattle offered for sale as breeding cattle.
- 15. Q Are production records needed in a crossbreeding program?
  - A Yes. The identification of each calf, its dam, birth date, weaning weight and

selling price or grade is fundamental in a sound crossbreeding program.

- 16. Q Will production records be as effective for farmers and ranchmen producing slaughter calves as for those who sell stocker and feeder calves?
  - A Yes. Production records for a slaughter calf program are no different. Calves for slaughter should be graded as slaughter calves, and stocker and feeder calves should be graded as such.
- 17. Q What production records will I need to keep on F-1 (first cross) herds?
  - A Each cow will need permanent identification. As calves are dropped they should be numbered, and their birth date and dam's number recorded. When sold or weaned, they should be weighed, and their adjusted weaning weight should be credited to the mother. County Extension agents have suitable forms and will help cattlemen get started on keeping production records, on request.

Cooperative Extension Work in Agriculture and Home Economics, Texas A&M University and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914.