

SCIENCE & EDUCATION Impact

Benefits from USDA/Land-Grant Partnership

Beef Boosters

Research and extension tackle beef industry issues.

Whether it's basic research on enhancing carcass quality, field studies to make the most of feed and forages or education and marketing efforts to help producers improve their profits, Land-Grant university and the U. S. Department of Agriculture (USDA) research and education programs have improved beef quality, competitiveness and profitability.

Payoff

- **Making the most of feed and forage.** Texas A&M integrated years of nutrition research into its NUTBAL computer program, which producers and advisors can use to estimate the nutritional balance and performance of grazing cattle and identify the most economical nutrient management options. This technology could save \$3 to \$9 per cow in feed costs, improve calf crops and boost weaning weights. Missouri's management intensive grazing program shows producers how to stockpile grass for winter grazing. Research showed that removing animals from a pasture in late summer allows new fall growth. Rotationally grazing stockpiled fescue in December and January instead of haying reduces feed costs 30 percent to 50 percent compared with haying or buying feed. Oregon State helps producers cut winter feed costs—their largest single expense—by about \$15 per head through educational programs, a forage database and ration formulation software.
- **Byproduct feeds.** Turning agricultural processing byproducts into feed saves money for cattle producers and agriculture industries. North Dakota State research and extension are demonstrating how best to use byproducts from sugar beets, wheat, potatoes and other crops in cattle rations. One feedlot reduced feed costs by \$20,000 last year by using sugar beet pulp in rations. Nebraska research proved the feasibility and benefits of feeding byproducts from the state's ethanol industry wet instead of drying them and shipping to dry feed markets. An economic assessment found that feeding byproducts wet provided a cumulative net economic benefit of \$215 million in Nebraska from 1992 through 1999.
- **Better bottom lines.** A Mississippi State alternative marketing project showed beef producers how to improve profits by grouping calves in uniform lots and selling them jointly for an extra \$85 per head compared with conventional market-

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ing efforts. Participants in **Purdue** Extension's programs to help beef producers manage more efficiently have gained at least \$50 per head by changing how they manage their herds. An **Arkansas** program that follows steers from the feedlot through slaughter shows producers how their steers perform at each stage. This information could help producers improve profits by about \$77 a head.

- **Information when and how you need it.** **Wyoming** Extension helps producers keep up on beef nutrition, economics, reproduction and other production issues without leaving home. Participants say courses helped them reduce costs by about \$14 per head. More than 4,500 producers in 40 states and three foreign countries have taken **Nebraska** Extension's beef home-study courses since 1993. Participants say they save an average of \$15 per head thanks to the courses, for an overall benefit exceeding \$6 million since 1993. In **Nevada**, subscriptions to a free e-mail question and answer service for western livestock producers doubled in 1999. Producers can catch the latest information from **Oklahoma State** research and extension by watching Cow-Calf Corner, a weekly TV program, or viewing segments anytime on the World Wide Web.
- **Good-looking meat.** Vitamin E keeps meat looking fresher longer. **Wisconsin** research found that meat from cattle fed supplemental vitamin E looks fresh up to three days longer at the supermarket than meat from non-supplemented cattle. This extended period of fresh color is worth about \$20 to \$30 per animal. Similar studies at **Oklahoma State** found the vitamin E supplementation increased shelf life by up to a day.
- **Productive reproduction.** A bull leasing cooperative for small beef operations, organized by **Kentucky** Extension, gives members access to better genetics. Calf weaning weights in member herds increased by 79 pounds per head in the program's first four years. **Tennessee** researchers are testing an on-farm semen handling procedure that may increase the number of female embryos in cattle and swine. Developing this technology could improve the efficiency of producing replacement heifers. **Missouri's** Show-Me Select Heifer Development Program is improving the quality of that state's replacement heifers. The program has developed more than 14,000 high quality beef heifers

in its first three years. Heifers from this program are in demand, with participating producers reporting \$200 per head premiums. Organizers estimate this program's economic impact on the beef industry exceeded \$4 million in its first three years.

- **Assuring Quality.** Across the nation, land-grant universities team with the National Cattlemen's Beef Association and state beef groups on beef quality assurance (BQA) programs that help producers improve the quality and value of their cattle. This extension-industry partnership is paying off. For example, as of fall 1999, more than 1,900 **Arkansas** beef producers had signed up for BQA, representing a possible savings of more than \$1.3 million to the state's cattle industry. Cattle sold through **Virginia Tech's** BQA program garner a \$20 per head premium. West Virginia's Quality Assurance feeder cattle program has boosted participants' income by \$1,200 per farm. Similar programs are available in **Alabama, Montana, Nebraska, North Carolina, Ohio, Wyoming** and several other states.



**Cooperative State Research, Education,
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