Economic Importance of Iowa's Beef Industry

EXECUTIVE SUMMARY

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In 2017, Iowa State University was commissioned by the Iowa Beef Industry Council to conduct an economic contribution study of the Iowa beef industry. The study was funded by the Iowa State Beef Checkoff in cooperation with Iowa State University, the Iowa Cattlemen's Association, Iowa Corn, Iowa Farm Bureau, and the Iowa Area Development Group. A study of this magnitude is important to the state's beef industry to further understand the economic importance and value added opportunities that exist. The objectives of this study include four main components:

- Describe the current state of the beef industry in Iowa as it relates to production and marketing trends and economic activity generated through each sector of the industry.
- Provide estimates of the total economic contribution of beef cattle production in Iowa.
- Provide estimates of the total economic contribution of the cattle slaughter and beef processing sector in Iowa.
- Identify opportunities for beef industry growth in Iowa.

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While Iowa has more feedlots than any other state in the U.S., only 25 percent of Iowa's fed cattle are harvested within the state. A lack of slaughter capacity within the state represents a lost opportunity for Iowa's economy.

The following conclusions were drawn from the study:

Size and Demographics—There are more than 28,000 cattle operations in Iowa, including more than 19,000 farms with beef cows and more than 6,000 feedlots. On January 1, 2017, Iowa was home to 3.90 million cattle and calves. This includes 965,000 beef cows and 1.16 million cattle on feed. In 2016, Iowa marketed 1.76 million fed cattle. More than 395,000 fed cattle were estimated to be slaughtered and processed in the state.

Production and Income—1.36 million cattle and calves entered the state, and cattle and calf marketings totaled 2.37 million head in 2016. The $3.86 billion in cash receipts for cattle and calves represented 15 percent of all Iowa agricultural cash receipts and 32 percent of all Iowa animal and animal product cash receipts. Cattle and calves were fourth to corn, hogs and pigs, and soybeans in total agricultural cash receipts and had higher cash receipts than poultry and eggs, milk and dairy products, and all other commodities combined.

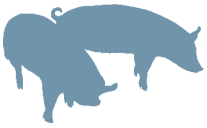
Inputs and Expenses—Most cattle production inputs are produced or purchased locally. The largest single category of expenditure, excluding cattle purchases, is feed costs which were valued at $962.71 million in 2016. More than 9 percent of the Iowa corn acreage contributes to feed for Iowa cattle, and does not include the contribution of cornstalks for feed uses. In terms of forage usage, 65 percent of Iowa's hay production is fed to cattle, with cow-calf and backgrounding operations utilizing 84 percent of pasture acres in Iowa. Construction of new cattle facilities requires several purchases and once construction is complete, additional inputs and services are required to produce cattle for sale including feed, labor, veterinary services and supplies, machinery and equipment, and marketing services.

Contribution to the Economy—In 2016, Iowa's beef industry generated an estimated $6.30 billion of economic activity in the state, of which $4.09 billion was the result of direct spending by the industry. Of this direct effect, cattle production accounted for $3.86 billion, and cattle slaughtering and beef processing accounted for $230.56 million. An estimated $2.21 billion in economic activity comes from indirect and induced effects.

Contribution to Iowa's Employment—Iowa's beef industry supported an estimated 32,317 jobs in 2016. Of this, the industry directly employed 19,528 people. Additionally, the industry supported 12,789 indirect and induced jobs. Jobholders earned $1.36 billion in labor income.

Fiscal Contribution—Labor incomes generated by cattle production, cattle slaughter, and beef processing activities in Iowa are used to pay a wide range of state and local taxes. Based on the average incidence of state and local government tax collections to the state's total personal income, the state of Iowa received $90.78 million in tax collections and all local governments received $56.01 million from the $1.36 billion in labor income generated in 2016.

Beef cow operations are the most common livestock enterprise in the state. Iowa has approximately 28,000 cattle operations.



27,363 CATTLE | **6,616** SWINE | **2,268** SHEEP | **643** EGG

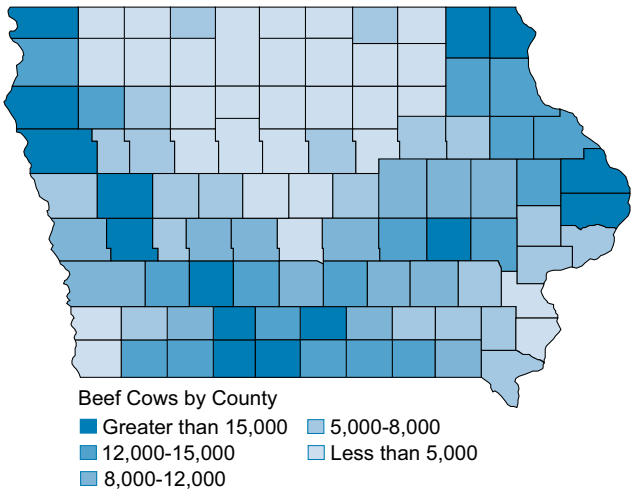
Source: United States Department of Agriculture Census of Agriculture.

Opportunities for Growth—Iowa's beef industry has ample feed availability, as well as land availability for nutrient application for continued growth and enhanced market share. However, a lack of processing capacity in the state limits the economic contribution of the beef industry to Iowa. Currently, pasture availability is a limiting factor for expanding Iowa's cow-calf industry, and thus, expansion will require shifts in land use or improved production efficiency.

Land and Water Stewardship

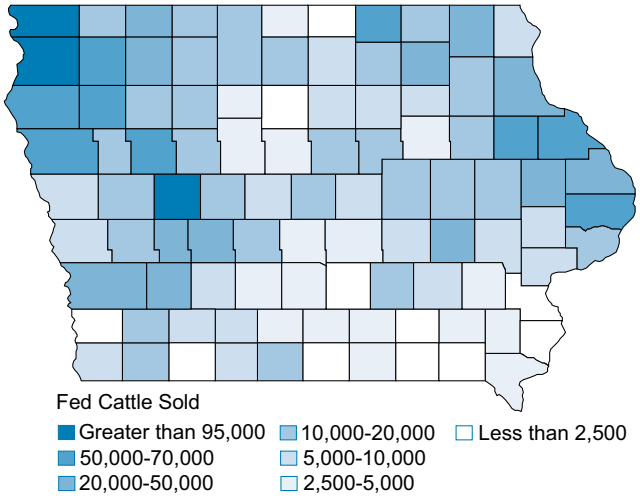
Iowa cattle producers are leading the way in the adoption of practices, such as cover crops, that improve water quality. Beef cattle utilize 84 percent of the pasture acres in Iowa, which is known to reduce nitrogen and phosphorus leaching by over 80 percent.

Iowa Beef Cow Inventory by County, 2012



Source: United States Department of Agriculture Census of Agriculture.

Iowa Fed Cattle Marketings by County, 2012



Source: United States Department of Agriculture Census of Agriculture.

Biorenewable Resources and Crop Residues

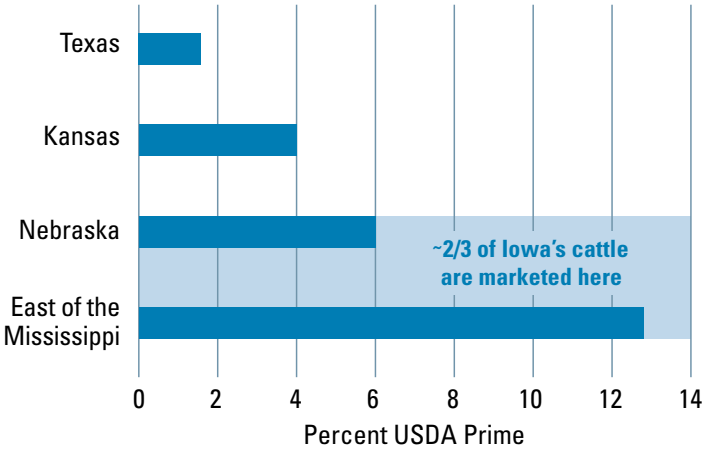
Corn coproducts from the ethanol industry provide an economical feed resource, and Iowa produces 25 percent of the national supply of ethanol and ethanol coproducts. Cornstalks represent an almost unlimited and greatly underutilized roughage source. These feeds coupled with growing availability of cover crops suggest abundant feed resources are available to grow Iowa's beef cattle industry.

Iowa is a net exporter of calves and a net importer of yearling cattle. Combined with corn crop residues and cover crops, potential exists for growth in stocker and backgrounding production in Iowa.

High Quality Beef Production

Based on annual marketings and estimated percent of USDA Prime carcasses (twice the national average) produced in the state, Iowa is a volume supplier of high quality beef which makes Iowa a competitive supplier of premium beef.

Beef Quality Grade by State/Region of Slaughter, 2016



Source: United States Department of Agriculture Market News Service.

Value Added Opportunities

The proximity of a large beef cow inventory to cattle feeding facilities improves the potential for information sharing and traceability across sectors of the industry. This should allow systems that verify source and production practices to be more easily implemented.

Infrastructure Advantages

The proximity of a large cow-calf inventory to cattle feeding facilitates information exchange for potential value added opportunities. Abundant feed resources, industry infrastructure and support programs for young producers all favor opportunities for growth of Iowa's beef industry.

Farm Succession and Entry into the Industry

Future growth of Iowa's beef industry will require programs that foster transition to a well-trained, new generation and continued adaption of sustainable efforts to improve land stewardship.

Courtesy of the Beef Checkoff

In Iowa, each 100 head of beef cattle marketed resulted in

- **$252,312 in output and**
- **$91,454 in value added, of which**
- **$55,180 was labor income to**
- **1.32 jobholders.**

Collectively, this represented $6.3 billion in beef cattle production output in 2016.

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Photo credits: Dan Loy, Iowa Beef Center, director; and Erika Lundy, extension specialist at Iowa State University.