

1997

# A 13-Year Summary of the ISU Beef Cow Business Record

Daryl R. Strohbahn  
*Iowa State University*

Follow this and additional works at: [http://lib.dr.iastate.edu/beefreports\\_1996](http://lib.dr.iastate.edu/beefreports_1996)



Part of the [Animal Sciences Commons](#)

Extension Number: ASL R1340

---

## Recommended Citation

Strohbahn, Daryl R., "A 13-Year Summary of the ISU Beef Cow Business Record" (1997). *Beef Research Report, 1996*. 18.  
[http://lib.dr.iastate.edu/beefreports\\_1996/18](http://lib.dr.iastate.edu/beefreports_1996/18)

This report is brought to you for free and open access by the Animal Science Research Reports at Iowa State University Digital Repository. It has been accepted for inclusion in Beef Research Report, 1996 by an authorized administrator of Iowa State University Digital Repository. For more information, please contact [digirep@iastate.edu](mailto:digirep@iastate.edu).

---

# A 13-Year Summary of the ISU Beef Cow Business Record

## **Abstract**

A 13-year summary of the Iowa State University Extension Service's Beef Cow Business Record (BCBR) was compiled to show the trends in cost, profit, and production for beef-cow enterprises in Iowa. During these 13 years, 966 yearly records were summarized on herds with an average size of 74.6 cows. Each year-end summary sorts the producers with profits in the top and the bottom thirds of the group so that differences can be analyzed. The average cost to maintain a beef cow from 1982 to 1994 was \$370.80. Cost components included in this average total were: feed and pasture, \$177.10; operating, \$45.40; depreciation, taxes, and insurance, \$19.70; labor, \$44.90; and capital, \$83.70. Producers sorted into the top one-third profit group had 13-year average total cow costs of \$309.80, but the bottom onethird profit group averaged \$437.10. Economic returns per cow for these same 13 years were: return to capital, labor, and management, \$139.50; return to labor and management, \$56.20; and net profit, \$20.20. Top-profit producers had an average net profit of \$126.20 per cow, whereas the least profitable group had an average loss of \$107.40. Of this \$233.60 difference, \$127.30 was due to production cost, and the remaining \$106.30 was caused by gross return differences. The average number of pounds of beef produced per cow from 1984 through 1994 was 567. This production was achieved with 2.5 acres of pasture, 3.9 acres of cornstalk grazing, and 4,675 pounds of stored feed per cow unit. Top-profit producers used 673 pounds of stored feed per hundredweight of production, but the least profitable producers used 1,015 pounds. Top-profit producers produced 74 pounds more per cow while using 1,313 pounds less stored feed.

## **Keywords**

ASL R1340

## **Disciplines**

Animal Sciences

# A 13-Year Summary of the ISU Beef Cow Business Record

## A.S. Leaflet R1340

Daryl R. Strohbehn, professor of animal science

### Summary

**A 13-year summary of the Iowa State University Extension Service's Beef Cow Business Record (BCBR) was compiled to show the trends in cost, profit, and production for beef-cow enterprises in Iowa. During these 13 years, 966 yearly records were summarized on herds with an average size of 74.6 cows. Each year-end summary sorts the producers with profits in the top and the bottom thirds of the group so that differences can be analyzed. The average cost to maintain a beef cow from 1982 to 1994 was \$370.80. Cost components included in this average total were: feed and pasture, \$177.10; operating, \$45.40; depreciation, taxes, and insurance, \$19.70; labor, \$44.90; and capital, \$83.70. Producers sorted into the top one-third profit group had 13-year average total cow costs of \$309.80, but the bottom one-third profit group averaged \$437.10. Economic returns per cow for these same 13 years were: return to capital, labor, and management, \$139.50; return to labor and management, \$56.20; and net profit, \$20.20. Top-profit producers had an average net profit of \$126.20 per cow, whereas the least profitable group had an average loss of \$107.40. Of this \$233.60 difference, \$127.30 was due to production cost, and the remaining \$106.30 was caused by gross return differences. The average number of pounds of beef produced per cow from 1984 through 1994 was 567. This production was achieved with 2.5 acres of pasture, 3.9 acres of cornstalk grazing, and 4,675 pounds of stored feed per cow unit. Top-profit producers used 673 pounds of stored feed per hundred-weight of production, but the least profitable producers used 1,015 pounds. Top-profit producers produced 74 pounds more per cow while using 1,313 pounds less stored feed.**

### Introduction

Managing resources to achieve high profits while maintaining or improving the environment is a goal that cow-calf producers should share. A production and financial record system is important for tracking the enterprise and interpreting management strengths and weaknesses. In Iowa, the Beef Cow Business Record (BCBR) system is made available through the ISU Extension Service to help producers analyze their production and economic efficiency so that they can make informed decisions for their herd's future.

### Materials and Methods

The BCBR is a simple record booklet that helps producers keep track of cattle, equipment, and feed inventories; operating needs and expenses; fixed and operating capital requirements; labor and land utilization; production; purchases; and sales. Finally, BCBR summarizes these input and output items in meaningful ways that aid the management decision-making processes.

After a computer compiles individual producer BCBR records, a summary is printed. Next, in strict confidence, input and summary data for each producer are saved for use in yearly state summaries. The year-end summary data for 1982 through 1993 are examined here.

### Results and Discussion

Profitability for Iowa cow-calf production slipped to a negative status in 1994, the first time after eight years of positive net profit. The average net profit in 1994 was -\$27.60 per cow, which is nearly \$48 below the 13-year average of \$20.20.

Variability in profit continues in Iowa cow-calf production. The top-profit one-third averaged \$83.70 net profit per cow, whereas the bottom-profit one-third lost \$176.40. During the last 13-year period, top-profit producers averaged \$219 more in return to labor per cow than bottom-profit producers. The average return to labor and management over the past 13 years was \$56.20 per cow (Table 1).

The total cost to maintain a cow in Iowa during 1994 decreased 4% compared to 1993 but still remained 7% higher than the 12-year prior average. Feed cost was 2.6% higher in 1994 and 14.5% higher than the previous 12 years. Operating cost was 8% higher than the previous 12-year average. Capital cost continued its decline from the peak in 1989.

Also shown in Table 2 are costs for the two profit groups. All producers are sorted on the basis of return to management per hundred pounds of beef produced. During the last 13 years, top-profit producers maintained cows for \$127.30 less than did the least profitable group of producers. As in past years, about 45% of this difference resulted from feed and pasture cost. Operating cost difference accounted for about 14%.

Through the years, as revisions were made to the BCBR system, the method of calculating herd productivity has varied. Therefore, it is difficult to compare most factors from year to year. Since 1984, however, the system has remained constant for the five factors shown in Table 3.

The "average" producer in the BCBR system has used these inputs to run a beef cow in the last 11 years : 2.5 acres

of pasture, 3.9 acres of cornstalk grazing, and 4,996 pounds of stored feed. With these feed resources, the production has been a 95.2% weaned calf crop, based on the average cow herd inventory for the year, and 567 pounds of beef produced per cow. This beef production total includes calves produced as well as inventory changes from sale or purchase of breeding stock.

Productivity averages for top- and bottom-profit producers are shown in Table 3. It is intriguing that the top producers have produced 74 pounds more per cow each year for 11 years and have used 1,313 pounds less feed. Put differently, they have used 673 pounds of stored feed per hundredweight of beef produced, while the least-profitable producers have used 1,313 pounds.

### **Implications**

**Record systems continue to serve producers well as decision-making aids. The Beef Cow Business Record's yearly summary gives Iowa producers benchmark data for comparison and helps them set goals.**

### **Acknowledgments**

The author wishes to express his gratitude to the many producers, field technicians, and extension staff who spent time assembling the records summarized in this report.

**Table 1. Thirteen-year returns per cow for BCBR participants.**

Year	No. cows in herd	RCLM <sup>a</sup>	RLM <sup>b</sup>	NPC <sup>c</sup>
<u>All producers</u>				
1982	83.0	\$ 51.60	\$ -50.40	\$ -93.40
1983	63.0	24.10	-67.90	-121.90
1984	70.5	29.10	-62.70	-98.80
1985	63.0	68.60	-8.90	-45.00
1986	63.3	162.90	90.30	58.40
1987	60.1	321.90	248.90	212.20
1988	63.8	225.10	144.00	111.30
1989	74.8	210.40	122.90	88.40
1990	90.6	208.80	121.10	91.10
1991	87.3	126.10	41.20	11.90
1992	86.0	170.20	92.70	59.10
1993	74.0	135.50	54.80	16.90
1994	<u>91.0</u>	<u>79.60</u>	<u>4.90</u>	<u>-27.60</u>
Average	74.6	139.50	56.20	20.20
<u>Top-profit one-third</u>				
1982	81.0	103.30	28.30	-9.70
1983	72.0	100.90	21.90	-11.10
1984	93.8	106.70	19.20	-13.40
1985	76.6	151.90	83.20	46.80
1986	51.8	262.90	201.10	169.50
1987	59.7	403.60	338.00	306.70
1988	71.3	329.70	253.90	230.50
1989	81.6	314.10	233.20	202.60
1990	92.9	309.40	233.20	202.80
1991	91.1	224.40	147.00	123.10
1992	82.0	293.40	220.90	186.90
1993	60.0	203.70	134.80	122.80
1994	<u>76.0</u>	<u>168.40</u>	<u>106.80</u>	<u>83.70</u>
Average	76.1	215.70	155.50	126.20
<u>Bottom-profit one-third</u>				
1982	87.0	-2.70	-145.70	-183.70
1983	59.0	-84.10	-182.10	-255.10
1984	61.3	-64.00	-159.20	-197.20
1985	43.5	-56.30	-146.20	-191.40
1986	57.0	68.60	-16.10	-55.90
1987	53.6	204.90	124.30	84.40
1988	50.8	90.20	-.60	-49.80
1989	64.8	100.30	5.70	-35.70
1990	101.0	108.50	7.80	-20.50
1991	79.6	2.00	-96.60	-121.00
1992	69.0	47.00	-38.60	-78.80
1993	55.0	10.50	-64.20	-115.10
1994	<u>57.0</u>	<u>-30.20</u>	<u>-114.20</u>	<u>-176.40</u>
Average	64.5	30.40	-63.50	-107.40

<sup>a</sup> Return to capital, labor, and management.

<sup>b</sup> Return to labor and management.

<sup>c</sup> Net profit.

**Table 2. Thirteen-year average for cow costs.**

Year	Feed and pasture	Operating	Depr., tax & insur.	Family & oper. labor	Capital	Total
<u>All producers</u>						
1982	\$167.00	\$28.40	\$16.60	\$43.00	\$102.00	\$357.00
1983	167.00	29.00	35.00	54.00	92.00	377.00
1984	201.90	31.30	16.50	44.30	96.00	390.00
1985	173.70	49.60	22.80	44.80	82.10	373.00
1986	135.90	48.50	20.60	40.90	71.30	317.20
1987	125.60	50.80	19.80	45.50	71.50	313.10
1988	175.60	37.60	19.50	43.00	82.80	358.50
1989	191.10	44.70	19.00	41.70	87.90	384.40
1990	180.50	42.80	16.90	42.50	86.90	369.60
1991	195.10	54.20	15.70	40.30	84.30	389.60
1992	192.80	48.20	18.50	46.70	78.80	385.00
1993	195.50	70.60	17.60	49.50	77.90	411.10
1994	<u>200.60</u>	<u>54.10</u>	<u>17.60</u>	<u>47.60</u>	<u>74.80</u>	<u>394.70</u>
Average	177.10	45.40	19.70	44.90	83.70	370.80
<u>Top-profit one-third</u>						
1982	174.00	20.90	9.10	38.00	75.00	317.00
1983	113.00	31.00	22.00	33.00	79.00	278.00
1984	166.60	21.80	11.70	33.20	83.40	316.70
1985	150.20	39.70	11.00	43.00	72.20	316.10
1986	117.90	43.30	17.70	37.20	63.10	279.20
1987	113.80	40.40	13.80	39.70	65.80	273.50
1988	139.70	31.60	14.10	32.30	70.50	288.20
1989	159.20	48.20	16.40	39.80	80.80	344.40
1990	150.80	37.30	12.80	40.00	75.80	316.70
1991	156.60	43.20	12.20	32.00	78.00	322.00
1992	164.40	46.30	14.50	42.90	69.50	337.60
1993	168.10	50.70	6.70	39.50	78.40	336.70
1994	<u>145.00</u>	<u>39.30</u>	<u>14.90</u>	<u>39.10</u>	<u>61.60</u>	<u>299.90</u>
Average	147.60	38.00	13.60	37.70	73.40	309.80
<u>Bottom-profit one-third</u>						
1982	154.00	41.90	27.10	38.00	143.00	404.00
1983	212.00	41.00	57.00	73.00	98.00	481.00
1984	219.60	29.40	21.00	48.80	104.00	422.80
1985	195.20	66.50	34.90	57.90	93.80	448.30
1986	153.20	52.30	25.10	48.00	83.10	361.70
1987	141.80	65.30	26.30	53.00	76.10	362.40
1988	218.80	47.80	30.00	59.90	96.70	453.20
1989	239.80	45.50	22.90	47.30	95.60	451.10
1990	208.40	48.50	23.70	49.20	98.00	427.80
1991	227.30	70.40	17.20	45.10	94.00	454.00
1992	204.80	46.30	19.40	55.70	86.80	413.00
1993	232.50	95.10	29.80	62.90	77.00	497.30
1994	<u>249.0</u>	<u>81.60</u>	<u>25.20</u>	<u>65.80</u>	<u>83.60</u>	<u>505.20</u>
Average	204.30	56.30	27.70	54.20	94.60	437.10

**Table 3. Eleven-year averages for herd production factors.**

Year	Pounds <sup>a</sup> produced per cow	Percentage <sup>b</sup> calf crop weaned	Feed <sup>c</sup> fed/cow (lb)	Pasture acres/cow	Cornstalk acres/cow
<u>All producers</u>					
1984	509	93.9	4,623	2.3	3.0
1985	603	98.6	4,715	2.4	3.2
1986	631	95.1	3,824	2.6	5.2
1987	672	96.3	3,904	2.7	4.3
1988	537	93.1	5,570	2.4	3.7
1989	556	94.3	4,443	2.6	4.0
1990	538	92.4	4,497	2.7	4.1
1991	544	94.1	4,903	2.5	4.1
1992	557	93.5	4,628	2.5	4.0
1993	564	97.7	5,318	2.2	4.3
1994	<u>531</u>	<u>97.9</u>	<u>4,996</u>	<u>2.4</u>	<u>3.2</u>
Average	567	95.2	4,675	2.5	3.9
<u>Top-profit one-third</u>					
1984	541	95.8	3,905	2.5	3.3
1985	754	100.3	4,215	2.5	3.2
1986	652	95.9	3,391	2.4	7.3
1987	659	97.0	3,299	3.0	5.6
1988	543	91.7	4,232	2.5	3.9
1989	608	96.2	3,815	2.9	4.1
1990	585	92.6	4,010	2.4	4.3
1991	573	96.8	4,194	2.5	4.5
1992	589	94.4	4,080	2.2	4.5
1993	578	95.6	5,050	2.0	2.9
1994	<u>555</u>	<u>98.6</u>	<u>4,429</u>	<u>2.2</u>	<u>3.3</u>
Average	603	95.4	4,056	2.5	4.3
<u>Bottom-profit one-third</u>					
1984	426	91.0	5,049	2.3	2.1
1985	471	96.7	5,462	2.1	3.1
1986	583	91.4	4,482	3.0	4.2
1987	643	95.3	4,378	2.3	3.2
1988	527	92.2	7,247	2.3	3.8
1989	518	94.0	5,292	2.6	3.7
1990	501	89.8	5,315	2.8	4.3
1991	498	91.2	5,535	2.5	3.6
1992	509	91.7	4,676	2.7	4.4
1993	594	97.8	5,791	1.8	5.1
1994	<u>547</u>	<u>98.6</u>	<u>5,835</u>	<u>2.2</u>	<u>2.6</u>
Average	529	93.6	5,369	2.4	3.7

<sup>a</sup> Includes inventory change and sales of cull breeding stock.

<sup>b</sup> As a percentage of the average cow herd size for the year.

<sup>c</sup> Includes feed fed to replacement female stock.