

## ANALYSIS OF TRENDS IN OKLAHOMA SWINE CARCASS CONTESTS

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### Story in Brief

Data from 946 market hogs - 277 Durocs, 321 Hampshires and 348 Crossbreds - entered by producers in the State Fair of Oklahoma "Golden Pork Chop Contest" (a swine carcass contest) from 1968 to 1984 were analyzed. Backfat thickness was greater for pigs slaughtered in 1983 and 1984 than in all previous years. Carcass length tended to increase from 1968 to 1981 and then decrease from 1982 to 1984. The animals decreased in loin eye area in a linear manner over time from 1973 to 1984 with the loin eye area in 1983 and 1984 being smaller than all previous years. Pigs slaughtered in 1983 and 1984 had lower percentage carcass lean than animals slaughtered in all previous years.

Data from 536 market hogs - 76 Durocs, 101 Hampshires and 359 Crossbreds entered by producers in the Oklahoma National Barrow Show Performance Contest from 1975 to 1983 were also analyzed to determine performance trends. Pigs increased in average daily gain over time. Backfat thickness tended to decrease from 1975 to 1979 and increase in all subsequent years. Carcass length increased over time with the pigs in the first year being shorter than the pigs in all subsequent years. Loin eye area tended to decrease over time with the loin eye area in 1983 being smaller than all previous years. Percent carcass lean was significantly lower for the pigs slaughtered in 1983 than all previous years except 1980. Average pounds of lean pork produced per day on test was greater for pigs slaughtered in 1979 and 1980 than all subsequent years.

(Key Words: Swine, Carcass Trends, Backfat, Length, Loin Eye Area)

### Introduction

There has been considerable concern recently that less emphasis is being placed on carcass merit by many swine breeders. It appears that some swine carcass traits such as loin eye area and backfat thickness may be actually becoming inferior as reported by the popular press. Data from pigs slaughtered in the Golden Pork Chop Contest, an Oklahoma State Fair Swine Carcass Contest, from 1968 to 1984 and the Oklahoma National Barrow Show Performance Contest from 1975 to 1983 were analyzed to determine if changes had occurred in various carcass measurements.

### Materials and Methods

The Golden Pork Chop Contest and the Oklahoma National Barrow Show Performance Contest are open to any pork producer in the world; however,

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the vast majority of entries have been from Oklahoma. In the Golden Pork Chop Contest, all animals from 1968 to 1984 were slaughtered at Cornett Packing Company, Oklahoma City, and processed at Schwab Meats, Oklahoma City. In the Oklahoma National Barrow Show Performance Contest, the animals were slaughtered and processed at Wilson's Foods, Oklahoma City from 1975 to 1980. From 1981 to 1983 the Oklahoma National Barrow Show animals were slaughtered at Cornett Packing Company, Oklahoma City and processed at Schwab Meats, Oklahoma City.

Slaughter weight, carcass length, backfat thickness and loin eye area were obtained in both contests each year except loin eye area was not measured for the Golden Pork Chop Contest from 1968 to 1972. Data for percent carcass lean was obtained for the Oklahoma National Barrow Show starting in 1979 and the Golden Pork Chop Contest starting in 1980.

Adjusted slaughter weight was determined by using carcass weights and a standard dressing percentage of 71.7, 72.0, 72.4 and 72.7% for cold carcasses weighing 143 lb and below, 144-168, 169-175, and 176 lb and up, respectively. Carcass length, backfat thickness and loin eye area were adjusted to a 220 lb equivalent each year using adjustments recommended by the National Association of Swine Records. The percent lean pork of carcass was determined using the formula recommended by the National Pork Producers Council. Premium winners in both contests were required to have acceptable pork quality and meet certification standards adopted by the National Association of Swine Records.

#### Golden Pork Chop Contest

All animals entered in the Golden Pork Chop Contest were farrowed after March 1 of each year and were exhibited and slaughtered in September of the same year. Only barrows were exhibited from 1968 to 1977 with both barrows and gilts being exhibited in 1978 through 1984. Winners in the contest were determined by the percent lean cuts of adjusted live weight from 1968 to 1972, ham-loin index from 1973 to 1979 and percent lean pork of carcass weight from 1980 to 1984. No attempt was made to determine average daily gain or to consider any growth data in the contest.

The average adjusted slaughter weights were 207.7, 213.9, 214.2, 222.7, 221.5, 217.3, 232.7, 232.2, 238.7, 240.1, 237.0, 225.6, 219.8, 233.8, 225.9, 227.4 and 223.5 lb for each year from 1968 through 1984, respectively. Increase in maximum weight allowed in the contest from 240 to 250 lb accounts for the large increase in slaughter weight in 1974.

#### Oklahoma National Barrow Show Performance Contest

All animals entered in the Oklahoma National Barrow Show Performance Contest were farrowed after February 1 and weighed and identified with an ear tattoo at one of approximately 14 weigh stations in Oklahoma in early April. The animals were then exhibited, weighed and slaughtered in Oklahoma City in August. Both barrows and gilts were accepted in the contest.

Winners from 1975 to 1978 were determined by considering carcass merit, average daily gain and soundness using the following formula:  $\text{Daily Gain} \times 75 + \text{Ham-Loin Index} + \text{Soundness Score}$ . Soundness scores were determined by a committee of three using a range of scores from 1 to 20 with 20 being ideal.



Winners from 1979 to 1983 were determined by pounds of muscle produced per day on test adjusted for soundness score and on-test weight as outlined by Stevermer et al., (1979). The show was discontinued at the end of 1983.

Average starting weights were 31.7, 47.6, 41.2, 42.2, 42.5, 42.6, 48.8, 39.8 and 43.7 lb for the years 1975 through 1983, respectively. Average adjusted slaughter weights were 231.5, 240.4, 241.0, 259.9, 265.8, 261.9, 251.1, 241.0 and 248.4 lb for the years 1975 through 1983, respectively.

## Results and Discussion

### Golden Pork Chop Contest

The number of pigs of each breed slaughtered each year from 1968 to 1984 in the Golden Pork Chop Contest is shown in table 1. Statistical analysis was conducted only on the Duroc, Hampshire and Crossbreds because the number of pigs representing the other breeds was small. These three breeds represented 946 of the 1129 total animals slaughtered.

The average adjusted backfat thickness for each year is shown in table 2. There was generally a decrease in backfat thickness over time until 1980. From 1981 to 1984 backfat tended to increase with backfat thickness for the pigs in 1983 and 1984 being greater ( $P < .05$ ) than all previous years. This reflects the emphasis swine breeders placed on a decreasing percent fat and increasing percent lean until recent years when it appeared that breeders were placing less emphasis on carcass traits. No significant differences were noted in backfat thickness among breeds but the Hampshires tended to be trimmer than the Durocs and Crossbreds.

The average adjusted carcass length for each year is shown in table 3. There was generally an increase in carcass length from 1968 to 1981 with the animals slaughtered in 1980 and 1981 being longer ( $P < .05$ ) than all other years. The animals slaughtered in 1982 through 1984 were shorter ( $P < .05$ ) than those slaughtered in 1980 and 1981. The general increase in carcass length from 1968 to 1981 reflected the emphasis by purebred breeders, commercial producers, live show judges and others to produce a longer hog. The decrease in length for 1981 to 1984 probably illustrates the tendency of some live show judges and breeders to emphasize a shorter, deeper set and thicker hog. The crossbreds tended to be longer than the other two breeds and were significantly longer ( $P < .05$ ) than the Hampshires.

The average adjusted loin eye area for each year is shown in table 4. The animals tended to decrease in loin eye area in a linear manner ( $P < .01$ ) over time with the pigs slaughtered in 1983 and 1984 having a smaller loin eye area ( $P < .05$ ) than pigs slaughtered in all previous years. The Hampshires had the largest average loin eye area (5.88 sq. in) which was significantly larger ( $P < .05$ ) than the Durocs (5.29 sq. in).

The average 10th rib fat depth which is used in estimating the percent lean pork of the carcass is shown in Table 5. The 10th rib fat depth was greater in 1983 and 1984 than all previous years, except 1980. No significant differences were noted among breeds but the Hampshires tended to have less 10th rib fat depth than the other two breeds.

The average percent lean pork of the carcass for each year is shown in table 6. Pigs tended to decrease in percent lean over time. The

Table 1. Number of pigs of each breed for each year at the Golden Pork Chop Contest.

Breed	Year of Show																Total	
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983		1984
Berkshire	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	2	2	7
Chester	4	2	3	1	9	3	3	8	2	1	5	0	3	2	4	9	12	71
Duroc	11	16	12	23	19	19	19	18	12	6	17	13	8	29	14	22	21	277
Hampshire	34	42	30	52	14	13	22	14	19	20	9	6	2	14	5	11	14	321
Poland	6	6	6	6	4	3	6	2	2	1	0	1	0	1	1	4	4	53
Spot	0	0	0	0	1	0	4	0	2	1	3	6	2	0	2	2	4	27
Yorkshire	3	2	4	0	0	0	4	4	1	0	4	2	0	0	1	4	0	25
Crossbred	17	13	20	17	24	20	33	18	24	9	9	15	18	23	18	25	40	348
Total	75	81	75	99	71	58	87	64	62	38	48	41	33	71	45	79	102	1129

Table 2. Average adjusted backfat thickness for each year in the Golden Pork Chop Contest (in.).

Breed	Year of Contest																Overall Avg. <sup>1</sup>	
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983		1984
Duroc	1.21	1.25	1.23	1.15	1.19	1.17	1.13	1.11	1.13	1.22	1.03	1.10	1.11	1.14	1.20	1.26	1.22	1.17 <sup>a</sup>
Hampshire	1.12	1.12	1.14	1.14	1.07	1.06	1.04	0.97	1.08	1.11	0.98	1.04	1.07	1.09	1.19	1.17	1.25	1.11 <sup>a</sup>
Crossbred	1.16	1.18	1.18	1.13	1.10	1.12	1.07	1.13	1.13	1.07	1.18	0.99	1.07	1.09	1.17	1.22	1.25	1.14 <sup>a</sup>

Overall Avg.<sup>1</sup> 1.16<sup>bc</sup> 1.18<sup>bc</sup> 1.18<sup>bc</sup> 1.14<sup>cd</sup> 1.12<sup>cde</sup> 1.12<sup>cde</sup> 1.08<sup>def</sup> 1.07<sup>ef</sup> 1.11<sup>cde</sup> 1.13<sup>cde</sup> 1.05<sup>f</sup> 1.04<sup>f</sup> 1.08<sup>def</sup> 1.11<sup>cde</sup> 1.18<sup>ab</sup> 1.21<sup>a</sup> 1.23<sup>a</sup>

<sup>1</sup> Any two means without a common superscript differ significantly (P < .05).

Table 3. Average adjusted carcass length for each year in the Golden Pork Chop Contest (in.).

Breed	Year of Contest																Overall Avg. <sup>1</sup>	
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983		1984
Duroc	30.25	30.56	30.01	30.66	30.22	31.33	31.35	31.30	31.33	31.96	32.46	32.38	32.66	32.88	32.57	32.38	31.63	31.55 <sup>ab</sup>
Hampshire	30.31	30.76	30.40	30.82	30.50	31.31	31.42	31.52	31.77	31.46	32.06	32.63	32.79	32.95	32.41	32.73	32.57	31.23 <sup>b</sup>
Crossbred	31.01	30.92	30.70	30.84	30.79	31.25	31.10	31.51	31.35	32.16	32.26	32.61	33.16	33.27	32.75	32.59	31.77	31.73 <sup>ab</sup>

Overall Avg.<sup>1</sup> 30.52<sup>f</sup> 30.74<sup>f</sup> 30.37<sup>f</sup> 30.77<sup>f</sup> 30.51<sup>f</sup> 31.30<sup>e</sup> 31.29<sup>e</sup> 31.45<sup>de</sup> 31.48<sup>de</sup> 31.66<sup>cd</sup> 32.26<sup>b</sup> 32.54<sup>b</sup> 32.99<sup>a</sup> 33.03<sup>a</sup> 32.64<sup>b</sup> 32.61<sup>b</sup> 31.88<sup>c</sup>

<sup>1</sup> Any two means without a common superscript differ significantly (P < .05).



Table 4. Average adjusted loin eye area for each year in the Golden Pork Chop Contest (sq. in.).

Breed	Year of Show												Overall Avg. <sup>1</sup>
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	
Duroc	5.14	6.23	5.93	5.62	5.52	5.81	5.78	5.41	4.90	4.95	4.32	4.21	5.29 <sup>d</sup>
Hampshire	5.58	6.50	6.41	6.14	6.26	6.02	6.07	5.53	5.08	5.80	4.67	4.46	5.88 <sup>b</sup>
Crossbred	5.34	6.28	6.12	6.21	5.42	5.61	5.94	5.23	4.99	4.94	4.89	4.52	5.44 <sup>ab</sup>
Overall Avg. <sup>1</sup>	5.35 <sup>d</sup>	6.34 <sup>a</sup>	6.15 <sup>ab</sup>	5.99 <sup>ab</sup>	5.73 <sup>bc</sup>	5.81 <sup>c</sup>	5.93 <sup>bc</sup>	5.30 <sup>d</sup>	4.97 <sup>e</sup>	5.06 <sup>e</sup>	4.71 <sup>f</sup>	4.42 <sup>f</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

Table 5. 10th rib fat depth for each year in the golden pork chop contest (in.)

Breed	Year of Show					Overall Avg. <sup>1</sup>
	1980	1981	1982	1983	1984	
Duroc	0.88	0.73	0.78	1.10	.94	.89 <sup>a</sup>
Hampshire	0.75	0.77	0.74	0.98	.89	.85 <sup>a</sup>
Crossbred	0.97	0.86	0.82	1.04	.98	.95 <sup>a</sup>
Overall avg. <sup>1</sup>	0.93 <sup>b,c</sup>	0.78 <sup>d</sup>	0.79 <sup>c,d</sup>	1.03 <sup>a</sup>	.95 <sup>a,b</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

**Table 6. Percent lean of carcasses for each year in the Golden Pork Chop Contest.**

Breed	Year of Show					Overall Avg. <sup>1</sup>
	1980	1981	1982	1983	1984	
Duroc	57.40	56.54	56.43	52.35	53.25	54.88 <sup>a</sup>
Hampshire	58.70	56.88	59.41	54.02	53.96	55.66 <sup>a</sup>
Crossbred	56.17	56.00	56.06	54.51	53.68	54.93 <sup>a</sup>
Overall avg. <sup>1</sup>	56.70 <sup>a</sup>	56.42 <sup>a</sup>	56.65 <sup>a</sup>	53.97 <sup>b</sup>	53.61 <sup>b</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

animals slaughtered in 1983 and 1984 had a lower (P<.05) percent carcass lean than the animals slaughtered in all previous years. Again this trend probably reflects the lack of emphasis being placed on carcass traits by many leaders of the swine industry. No significant differences were noted among breeds but the Hampshire breed tended to have higher percent carcass lean than the other two breeds.

#### National Barrow Show Performance Contest

The number of pigs of each breed evaluated annually from 1975 to 1983 in the Oklahoma National Barrow Show Performance Contest is shown in table 7. Statistical analysis was conducted on the Duroc, Hampshire and Crossbred pigs which represented 536 head of the 595 total evaluated.

The average daily gain of pigs for each year is shown in table 8. The pigs tended to increase in average daily gain over time with the pigs from 1975 to 1977 having lower average daily gain (P<.05) than the pigs in all subsequent years. The crossbreds tended to gain faster than the Durocs or Hampshires.

The average adjusted backfat thickness for each year is shown in table 9. Backfat thickness tended to decrease each year from 1975 to 1979 and increase in subsequent years. The trend reflects the lack of emphasis being placed in recent years on reducing backfat thickness. The animals slaughtered in 1978 and 1979 had less backfat (P<.05) than animals slaughtered in all subsequent years. No significant differences were noted among breeds but the Hampshires tended to have less backfat thickness than the other two breeds.

The average adjusted carcass length for each year is shown in table 10. The adjusted carcass length tended to increase over time with the pigs in the first year (1975) being shorter (P<.05) than the pigs in all subsequent years. Little difference was noted for carcass length among the three breeds analyzed.

The average adjusted loin eye area for each year is shown in table 11. Loin eye area tended to decrease over time (P<.01) with the loin eye area in 1983 being smaller (P<.05) than all previous years. No significant differences were noted among breeds but Hampshires tended to have larger loin eyes than the other two breeds.



Table 7. Number of pigs for each year at the Oklahoma National Barrow Show Performance Contest

Breed	Year of Show									Total
	1975	1976	1977	1978	1979	1980	1981	1982	1983	
Berkshire	0	2	0	0	1	2	0	0	0	5
Chester White	2	5	1	2	2	3	0	0	3	18
Duroc	10	15	12	7	4	7	3	11	7	76
Hampshire	18	25	15	14	9	2	5	3	10	101
Polland	0	0	0	1	0	0	0	0	0	1
Spot	1	6	7	5	0	4	1	0	0	24
Yorkshire	0	0	9	0	0	1	0	0	1	11
Crossbred	17	46	55	47	44	39	49	38	24	359
Total	48	99	99	76	60	58	58	52	45	595

Table 8. Average daily gain for each year at the Oklahoma National Barrow Show Performance Contest <sup>1,2</sup>

Breed	Year of Show									Overall <sup>1,3</sup> Avg.
	1975	1976	1977	1978	1979	1980	1981	1982	1983	
Duroc	1.59	1.51	1.58	1.58	1.66	1.42	1.59	1.53	1.73	1.57 <sup>a</sup>
Hampshire	1.56	1.46	1.56	1.66	1.62	1.48	1.63	1.83	1.60	1.57 <sup>a</sup>
Crossbred	1.57	1.57	1.61	1.64	1.71	1.74	1.69	1.72	1.78	1.67 <sup>a</sup>
Overall Avg. <sup>1</sup>	1.58 <sup>de</sup>	1.51 <sup>e</sup>	1.58 <sup>de</sup>	1.63 <sup>bcd</sup>	1.69 <sup>ab</sup>	1.68 <sup>ab</sup>	1.68 <sup>ab</sup>	1.69 <sup>ab</sup>	1.73 <sup>a</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

Table 9. Average adjusted backfat thickness for each year at the Oklahoma National Barrow Show Performance Contest (in.)

Breed	Year of Show									Overall <sup>1</sup> Avg.
	1975	1976	1977	1978	1979	1980	1981	1982	1983	
Duroc	1.19	1.24	1.13	1.08	1.10	1.31	1.17	1.24	1.21	1.19 <sup>a</sup>
Hampshire	1.11	1.17	1.06	1.00	1.01	1.41	1.16	1.31	1.12	1.11 <sup>a</sup>
Crossbred	1.23	1.15	1.12	1.11	1.08	1.25	1.22	1.28	1.22	1.17 <sup>a</sup>
Overall Avg. <sup>1</sup>	1.18 <sup>cd</sup>	1.19 <sup>cd</sup>	1.10 <sup>de</sup>	1.06 <sup>e</sup>	1.07 <sup>e</sup>	1.27 <sup>ab</sup>	1.21 <sup>bc</sup>	1.27 <sup>ab</sup>	1.19 <sup>cd</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

Table 10. Average adjusted carcass length for each year at the Oklahoma National Barrow Show Performance Contest (in.)

Breed	Year of Show									Overall <sup>1</sup> Avg.
	1975	1976	1977	1978	1979	1980	1981	1982	1983	
Duroc	31.1	30.7	31.6	32.3	31.3	32.2	33.1	31.9	33.2	31.7 <sup>a</sup>
Hampshire	31.2	31.6	31.6	32.1	32.2	31.6	32.5	31.9	32.0	31.8 <sup>a</sup>
Crossbred	30.9	31.7	31.6	32.3	32.0	32.1	33.0	32.2	32.5	32.1 <sup>a</sup>
Overall Avg. <sup>1</sup>	31.1 <sup>f</sup>	31.3 <sup>e</sup>	31.6 <sup>de</sup>	32.2 <sup>bc</sup>	32.0 <sup>cd</sup>	32.1 <sup>bc</sup>	33.0 <sup>a</sup>	32.2 <sup>bc</sup>	32.5 <sup>b</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P .05).

Table 11. Average adjusted loin eye area for each year at the Oklahoma National Barrow Show Performance Contest (sq. in.)

Breed	Year of Show									Overall Avg.
	1975	1976	1977	1978	1979	1980	1981	1982	1983	
Duroc	5.69	5.13	4.61	4.41	5.23	4.71	5.13	4.44	4.18	4.83 <sup>a</sup>
Hampshire	6.13	5.42	4.87	4.93	5.39	5.16	5.12	4.69	4.33	5.24 <sup>a</sup>
Crossbred	6.22	5.48	4.71	5.07	5.31	4.93	4.93	4.95	4.20	5.05 <sup>a</sup>
Overall Avg.	6.01 <sup>a</sup>	5.34 <sup>b</sup>	4.73 <sup>c</sup>	4.81 <sup>c</sup>	5.32 <sup>b</sup>	4.91 <sup>c</sup>	4.96 <sup>c</sup>	4.83 <sup>c</sup>	4.23 <sup>d</sup>	

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

The percent lean pork of carcass and average pounds of lean pork produced per day on test for each year is shown in tables 12 and 13, respectively. The percent carcass lean was significantly lower (P<.05) for the pigs slaughtered in 1983 than all previous years except 1980. The average pounds of lean pork produced per day on test was greater (P<.05) for pigs slaughtered in 1979 and 1980 than subsequent years. Hampshires tended to have more percent lean of carcass than the Durocs or Crossbreds. Crossbreds produced more pounds of lean pork per day on test (P<.05) than the other two breeds.

The comparison of barrows vs gilts is shown in table 14. Barrows had greater (P<.05) average daily gain, backfat thickness and carcass length than gilts. Gilts had greater (P<.05) loin eye area and percent lean of carcass than barrows. Little difference existed between barrows and gilts for pounds of lean pork produced per day on test.

Data from the Oklahoma National Barrow Show and the Golden Pork Chop Contest reveal a trend in recent years of fatter pigs with decreased loin eye area and estimated percent carcass lean. This trend probably reflects the lack of emphasis being placed by many leaders of the swine industry on carcass traits.

Table 12. Percent lean of carcass for each year at the Oklahoma National Barrow Show Performance Contest.

Breed	Year of Show					Overall Avg. <sup>1</sup>
	1979	1980	1981	1982	1983	
Duroc	55.02	52.53	57.41	54.08	53.55	54.06 <sup>a</sup>
Hampshire	56.24	55.40	59.14	54.85	53.86	55.72 <sup>a</sup>
Crossbred	54.51	53.07	56.31	55.73	52.64	54.69 <sup>a</sup>

Overall avg.<sup>1</sup> 54.82<sup>b</sup> 53.09<sup>c</sup> 56.62<sup>a</sup> 55.33<sup>a,b</sup> 53.09<sup>c</sup>

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).



Table 13. Average pounds of lean per day on test for each year at the Oklahoma National Barrow Show Performance Contest.(lb.)

Breed	Year of Show					Overall Avg. <sup>1</sup>
	1979	1980	1981	1982	1983	
Duroc	.688	.590	.602	.564	.639	.605 <sup>a</sup>
Hampshire	.673	.650	.614	.659	.578	.627 <sup>a</sup>
Crossbred	.712	.738	.649	.656	.669	.685 <sup>b</sup>

Overall avg.<sup>1</sup> .704<sup>a</sup> .713<sup>a</sup> .643<sup>b</sup> .637<sup>b</sup> .642<sup>b</sup>

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

Table 14. Barrows vs gilts at the Oklahoma National Barrow Show Performance Contest<sup>1,2</sup>

	Barrows	Gilts
Avg. daily gain, lb.	1.65 <sup>a</sup>	1.59 <sup>b</sup>
Adj. backfat, in.	1.24 <sup>a</sup>	1.13 <sup>b</sup>
Adj. carcass length, in.	32.12 <sup>a</sup>	31.72 <sup>b</sup>
Adj. loin eye area, sq. in.	4.70 <sup>a</sup>	5.26 <sup>b</sup>
% lean of carcass	53.07 <sup>a</sup>	55.75 <sup>b</sup>
Lb./lean per day on test	0.65 <sup>a</sup>	0.67 <sup>a</sup>

<sup>1</sup> Any two means without a common superscript differ significantly (P<.05).

<sup>2</sup> There were 256 barrows and 339 gilts exhibited.

#### Literature Cited

Stevermer, E. J., et al. 1979. NPPC Pork Carcass Evaluation Programmable Calculator Series AS-445 (200)-II. Iowa State University, Ames.