

---

**K****S****U**

## Incidence of Pregnancy in Feedlot Heifers at Slaughter

Scott B. Laudert<sup>1</sup>

---

### Summary

Nearly 83,000 heifers were observed at slaughter during 1986 and 1987 to determine their reproductive status. Slightly less than 4 percent were found to be pregnant. Highest incidences of pregnancy were found during the winter months of November through March. Lowest incidences were found during August, September, and October.

### Introduction

The incidence of pregnant heifers entering feedyards has been fairly well documented in recent years. Dr. A.J. Edwards, Kansas State University College of Veterinary Medicine, reported that 15 percent of 20,526 feedlot heifers examined in 1982 and 9 percent of 19,924 feedlot heifers examined in 1985 were pregnant. Drs. B.W. Bennett and G.P. Rupp of Colorado State University College of Veterinary Medicine reported in 1983 that a survey of Colorado cattle feeders indicated a 16.5 percent pregnancy rate for incoming feedlot heifers. More recently, K-State's Dr. Edwards found 6 percent of 40,000 heifers entering one particular feedyard pregnant in 1986, whereas 4.4 percent of 58,000 heifers entering the same feedyard were pregnant in 1987.

The incidence of pregnancy in feedlot heifers at slaughter has not been as thoroughly documented. The Colorado survey conducted by Bennett and Rupp in 1983 also included slaughter plants. They reported a 17.0 percent pregnancy rate in slaughtered heifers. The following data were collected to establish the reproductive status of Kansas feedlot heifers at slaughter.

### Experimental Procedures

Random lots of heifers originating from Kansas feedyards were observed during slaughter at five Kansas slaughter plants. The number of fetuses appearing at the evisceration table within each lot was recorded.

### Results and Discussion

Annual observations for 1986 and 1987 are reported in Table 31.1 and the combined 2-year data in Table 31.2. Highest rates of pregnancy were found during the winter months of November through March, ranging from 5.17 to 7.90 percent. Lowest pregnancy rates were observed during August, September, and October.

---

<sup>1</sup>Extension Specialist, Animal Sciences and Industry, Southwest.

The 2-year average annual pregnancy rate of 3.93 percent is considerably lower than the 17.0 percent reported by Bennett and Rupp in their 1983 Colorado packer survey. Pregnancy rate on 188 pens totaling 24,658 heifers originating from Colorado feedyards and slaughtered at Kansas packing plants during 1986 and 1987 was 4.1 percent. This apparent substantial reduction in pregnancy rate of slaughtered heifers is likely due to intensified efforts of feedlots to abort pregnant heifers upon arrival at the feedyard and attempts of stocker operators to keep heifers from being bred. The survey work of Edwards would suggest that fewer pregnant heifers are entering feedyards.

The distribution of pregnancy rates is presented in Table 31.3. Nearly one-third of all pens of heifers observed had no pregnancies. Only 4.1 percent of all pens, which represented 2.9 percent of all heifers, had over 20 percent pregnancies. Feedyards with aggressive management programs for pregnancy and abortion should continually remind their packer buyers of this fact and strive to narrow their price spread between comparable quality steers and heifers.

Table 31.1. Incidence of Pregnancy at Slaughter in Feedlot Heifers Originating from Kansas Feedyards

Month Slaughtered	No. Pens	Head Slaughtered	Number Pregnant	Percent Pregnant
-----1986-----				
January	1	215	13	6.05
February	0	0	0	-----
March	30	4710	245	5.20
April	22	3529	139	3.94
May	60	11077	423	3.82
June	50	8976	167	1.86
July	34	6286	140	2.23
August	23	3937	41	1.04
September	1	140	0	0.00
October	11	1698	0	0.00
November	4	1001	0	0.00
December	27	4310	259	6.01
Total	263	45879	1427	3.11
-----1987-----				
January	49	7335	454	6.19
February	25	3027	239	7.90
March	12	1875	144	7.68
April	16	2700	122	4.52
May	10	1916	36	1.88
June	17	3061	182	5.95
July	23	3250	71	2.18
August	6	979	4	0.41
September	15	2858	21	0.74
October	7	675	2	0.30
November	15	2849	199	6.98
December	32	6329	354	5.59
Total	227	36854	1828	4.96

Table 31.2. Incidence of Pregnancy at Slaughter in Feedlot Heifers Originating From Kansas Feedyards, Two Year Average

Month Slaughtered	No. Pens	Head Slaughtered	Number Pregnant	Percent Pregnant
January	50	7550	467	6.19
February	25	3027	239	7.90
March	42	6585	389	5.91
April	38	6229	261	4.19
May	70	12993	459	3.53
June	67	12037	349	2.90
July	57	9536	211	2.21
August	29	4916	45	0.92
September	16	2998	21	0.70
October	18	2373	2	0.08
November	19	3850	199	5.17
December	59	10639	613	5.76
Total	490	82733	3255	3.93

Table 31.3. Distribution of Pregnancy Rates at Slaughter in Feedlot Heifers

Pregnancy Rate, %	No. Pens	Percent Pens	No. Head	Percent Head	No. Slunks
-----1986-----					
0.0	92	35.0	14130	30.8	0
0.1 to 5.0	114	43.4	22048	48.4	466
5.1 to 10.0	34	12.9	6525	14.2	486
10.1 to 20.0	20	7.6	2587	5.6	324
over 20.0	3	1.1	589	1.3	151
-----1987-----					
0.0	65	28.6	8950	24.3	0
0.1 to 5.0	78	34.4	15921	42.4	351
5.1 to 10.0	38	16.7	6395	17.4	459
10.1 to 20.0	29	12.8	3793	10.3	551
over 20.0	17	7.5	1795	4.9	467
-----Combined Data-----					
0.0	157	32.0	23080	27.9	0
0.1 to 5.0	192	39.2	37969	45.9	817
5.1 to 10.0	72	14.5	12920	15.6	945
10.1 to 20.0	49	10.0	6380	7.7	875
over 20.0	20	4.1	2384	2.9	618