

Changing Dairy Herd Structure - Kentucky and US

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The decrease in the number of dairy operations is a trend in Kentucky and the U S as a whole. The National Agricultural Statistics Service of USDA collects data on dairy operations defined as having one or more dairy cows. Between 1997 and 2002 the number of dairy operations declined by 31% in Kentucky and 26% nationally (Table 1). While total herd numbers declined, the U S experienced an increase in the numbers of herds with 200 or more head. The number of Kentucky herds over 199 cows did not change. The loss of herds was proportionately greatest in herds under 49 cows. Kentucky herds declined 71% and the U S loss was 66%. The loss of herds under 200 head is primarily responsible for the change in total milking cow inventory from 1997 to 2002 (Table 2). Estimated number of milking cows in Kentucky dropped from 148,000 to 122,000 which is an 18% drop. Cow numbers in the U S only declined 1.2%.

Losing dairy herds and cows obviously means a loss of total milk production for Kentucky (Table 2). Total milk produced in Kentucky declined 11% between 1997 and 2002. Because cow numbers in the U S declined only slightly, total U S production has increased by 9%. Milk production per cow is responsible because it has increased 10% nationally. Kentucky milk production per cow has increased almost 100 pounds from 12,264 pounds per cow in 1997 to 13,230 in 2002. This represents an 8% increase.

The proportion of dairy herd operations of different sizes in Kentucky is changing, too (Table 3). The largest proportion of herds in Kentucky in 2002 had 50 to 99 head which represented 39% of the herds. Herds of 100 to 199 head represented 27% and herds of 200 to 499 accounted for 11%. Kentucky herds greater than 100 head make up 40.5% of herds in 2002 but made up only 35% in 1997.

Table 1. Number of operations and percent change, 1997 to 2002.

Year		Total	1-29 Head	30-49 Head	50-99 Head	100-199 Head	200-499 Head	500+ Head	500- 999 Head	1000- 1999 Head	2000+ Head
		Number	Number	Number	Number	Number	Number	Number	Number	Number	Number
1997	KY	3600	1600	700	940	300	55	5			
2002	KY	2500	1000	470	700	270	55	5			
% Change		-31%	-38%	-33%	-26%	-10%	0%	0%			
1997	US	123700	39070	27285	35850	14040	5119	2336			
2002	US	91990	25680	18525	27865	11860	5155	2905	1750	775	380
% Change		-26%	-34%	-32%	-22%	-16%	1%	24%			

Table 2. Annual milk production, milk cows, and milk per cow

Year	State	Production mill lbs	Milk Cows (Average) 1000 Head	Milk Produced per Cow pounds
1997	KY	1815	148	12264
2002	KY	1614	122	13230
% Change		-11%	-18%	8%
1997	US	156091	9252	16871
2002	US	169758	9141	18571
% Change		9%	-1%	10%

Table 3. Dairy herd percent inventory by size of operation

Year	Loca- tion	1-29 Head percent	30-49 Head percent	50-99 Head percent	100-199 Head percent	200-499 Head percent	500+ Head percent	500-999 Head percent	1000-1999 Head percent	2000+ Head percent
1997	KY	8	17	40	25	8	2			
2002	KY	6	14.5	39	27	11	2.5			
Change		-2	-2.5	-1	2	3	0.5	0	0	0
1997	US	3.5	11.5	26	20	14.6	24.4			
2002	US	2.3	7.5	20.1	16.7	16.1	37.3	12.5	11.5	13.3
Change		-1.2	-4	-5.9	-3.3	1.5	12.9			