

Livestock County Estimates

Background

Historically, livestock county estimates were established through a survey process. Field offices of the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) were responsible for ensuring that an adequate number of reports were collected, edited, summarized and published. Over the past few years, county estimates have been examined more closely, the cost of collecting the data has increased and the response burden placed on farmers and ranchers has increased. These factors made it evident that a new approach was needed for establishing livestock county estimates.

Methodology

The new approach for setting livestock county estimates, termed raking, utilizes county level livestock information from the census of agriculture, administrative data and current year state-level Agricultural Statistics Board (ASB) inventory and production estimates.

Raking is the practice of adjusting data so the marginal totals match known control totals. In this context, administrative data can be used to monitor year-to-year change and raking ensures the counties sum to a previously published state total. The most current census of agriculture is used as the base period until another census is conducted. For the census year, county-level numbers from the census are raked to the NASS state-level ASB livestock inventory estimates. NASS rounding rules are applied and the estimates are considered official.

For the intercensal years, the years between the censuses, current year, state-level inventory numbers are established through the normal survey and ASB process. County-level ASB numbers from the previous year are raked to the current year state-level ASB number. Administrative data may be used to make minimal adjustments when a particular event is noted within a specific commodity. Counties with disclosure issues are included in the raking process but are not published. Census disclosure rules are utilized for livestock county estimates. However, minimum publication levels exist for each livestock commodity. These levels are shown in the table below. Note that some states may use higher minimum publication levels at their discretion.

This approach allows for published livestock county estimates for those commodities found in the census of agriculture. Therefore, a state may publish up to 17 livestock items for livestock county estimates. The actual number of livestock county estimates items published will vary by state. Each field office publishes livestock county estimates based on funding or cooperative agreements they may have with a local State Department of Agriculture, university, or other institution. The only federal required county-level estimates are all cattle inventory, beef cow inventory and milk cow inventory. However, not all states are included in the federal program. The 17 livestock items included in the census of agriculture are listed in the table below.

To provide the data user with a consistent data series NASS has established county estimates using the raking approach for commodities beginning with data from the 2007 Census. The implementation year of the new approach is listed next to each commodity. These new data items are available in both Quick Stats 1.0 and Quick Stats 2.0 databases. Previously established

estimates for these years have been removed from all versions of Quick Stats. District level estimates will no longer be published for livestock county estimates. This is consistent with the census of agriculture.

The implementation of this approach ensures that every NASS field office is using the same standardized methodology and that no additional survey work to collect county-level livestock information is needed. This approach also eliminates respondent burden and survey costs. This change in methodology only impacts livestock county estimates. Crop and cash rent county estimate programs remain survey based.

Livestock County Estimates		
Item	Implementation Year	Minimum Publication Value
All cattle inventory	2008	100 head
Beef cow inventory	2008	100 head
Milk cow inventory	2008	100 head
Cattle on Feed inventory	2008	500 head
All hog & pig inventory	2007	100 head
Breeding hog inventory	2007	100 head
All sheep and lamb inventory	2008	100 head
Ewes 1+ inventory	2008	100 head
Wool production	2007	500 pounds
Angora goat inventory	2008	100 head
Milk goat inventory	2008	100 head
Meat & other goat inventory	2008	100 head
Mohair production	2007	500 pounds
Total layer inventory	2007	1,000 birds
Total pullet inventory	2007	1,000 birds
Broilers annual production	2007	1,000 birds
Turkeys annual number raised	2007	1,000 birds