



Sheep and Goats Methodology and Quality Measures

ISSN: 2167-1338

Released January 31, 2014, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

Sheep and Goats Survey Methodology

Scope and Purpose: The January Sheep and Goats Survey is conducted annually and targets sheep and goat producers in the United States, excluding Alaska. The survey collects data for total sheep and goat inventories and components of that total, including breeding animals, market inventory, market lambs by weight group, goat inventory by type, lamb and kid crops, and wool and mohair production and value. In addition, data are collected for death loss from previous year, on-farm slaughter, and breeding and market animal values. Every five years a Sheep and Lamb Predator and Non-Predator Loss Survey is conducted nationally and incorporated as part of the January Sheep and Goats Survey; in other years, a similar survey is conducted by Colorado (every other year), Idaho, Montana, Utah, and Wyoming. Sheep estimates are published for 32 states and New England and goat estimates are published for 42 states and New England.

Survey Timeline: The reference date for the January Sheep and Goats Survey is January 1, with a data collection period of approximately 15 calendar days. Regional Field Offices may begin data collection one day prior to the reference date. Data collection continues until a scheduled ending date and Regional Field Offices have about 4 or 5 business days to complete editing and analysis, execute the summary, and interpret survey results. The Agricultural Statistics Board must perform the national review, reconcile state estimates to the national estimates, and prepare official estimates for release in 5 or 6 business days. The estimates are released to the public on the last Friday in January.

Sampling: The target population for the Sheep and Goats Survey is all agricultural establishments with one or more sheep or goats owned by the operation. NASS uses a dual frame approach, consisting of list frame and area frame components, to provide complete coverage of this target population. The Sheep and Goats Survey is conducted in every state except Alaska.

The list frame includes all known agricultural establishments. A profile, known as control data, of each establishment is maintained on the list frame to allow NASS to define list frame sampling populations for specific surveys and to employ efficient sampling designs. Only list frame records with positive sheep or goat control data are included in the list frame population. The list frame sheep and goat population includes approximately 240,900 farms and ranches and covers approximately 86 percent of sheep inventory and 68 percent of goat inventory in the United States.

The area frame contains all land in the state and, as such, is complete. The land is stratified according to intensity of agriculture using satellite imagery. The land in each stratum is divided into segments of roughly one square mile. Segments are optimally allocated and sampled to effectively measure crops and livestock. The sampled segments are fully enumerated in June. All farms and ranches found operating tracts in these segments are checked to see if they are included in the list frame sheep and goat population. The farms and ranches that are not included in the list frame sheep and goat population, called nonoverlap tracts, are sampled for the January Sheep and Goats Survey so that the target population is completely represented. The area frame component of the January Sheep and Goats Survey covers approximately 14 percent of the sheep inventory and 32 percent of the goat inventory in the United States.

The Sheep and Goats Survey list frame sample is selected using a hierarchical stratified sampling design with strata defined by total sheep and goats. The sample is designed to achieve a National standard error of 2 percent of the point estimate for total sheep and 4 percent for total goats and kids. The National list frame sample size for the Sheep and Goats Survey in recent years is approximately 21,500. The Sheep and Goats Survey nonoverlap sample uses a stratified sample design based on data collected in the June Area Frame Survey. The area frame sample size is approximately 1,300. Each list frame and area frame sampling unit is assigned a sampling weight which is used to create the survey estimates.

Data Collection and Editing: For consistency across modes, the paper version is considered the master questionnaire and the web and Computer Assisted Telephone Interview (CATI) instruments are built to model the paper instrument. Questionnaire content and format are evaluated annually through a specifications process where requests for changes are evaluated and approved or disapproved. Input may vary from question wording or formatting to a program change involving the deletion or modification of current questions or addition of new ones. If there are significant changes to either the content or format proposed, a NASS survey methodologist will pre-test the changes for usability. Prior to the start of data collection, all modes of instruments are reviewed and web and CATI instruments are thoroughly tested. All federal data collections require approval by the Office of Management and Budget (OMB). NASS must document the public need for the data, show the design applies sound statistical practice, ensure the data do not already exist elsewhere, and that the public is not excessively burdened. The sheep and goats questionnaire must display an active OMB number that gives NASS the authority to conduct the survey, a statement of the purpose of the survey and the use of the data being collected, a response burden statement that gives an estimate of the time required to complete the form, a confidentiality statement that the respondent's information will only be used for statistical purposes in combination with other producers, and a statement saying that response to the survey is voluntary and not required by law.

In addition to asking the specific sheep and goat items, all instruments collect information to verify the sampled unit, determine any changes in the name or address, identify any partners to detect possible duplication, verify the farm still qualifies for the target population, and identify any additional operations operated by the sampled operator.

Sampled farms and ranches receive a pre-survey letter explaining the survey and that they will be contacted for survey purposes only. The letter provides the questions to be asked to allow respondents to prepare in advance and also provides a pass code they can use to complete the survey on the internet. All modes of data collection are utilized for sheep and goat surveys. Regional Field Offices are given the option of conducting a mail out/mail back phase. While mail is the least costly mode of collection, the short data collection period and the uncertainty of postal delivery times limit its effectiveness. Most of the data are collected by computer-assisted telephone interviews (CATI) by individual Regional Field Offices and Data Collection Centers. Limited personal interviewing is done, generally for large operations or those with special handling arrangements. A program is run to determine if any sampled farms are in multiple on-going surveys, so data collection can be coordinated.

Survey Edit: As survey data are collected and captured, they are edited for consistency and reasonableness using automated systems. Reported data are typically first edited as a "batch" of data when first captured. The edit logic ensures the coding of administrative data follows the methodological rules associated with the survey design. Relationships between data items on the current survey are verified and, in certain situations, those items may be compared to data from earlier surveys to ensure relationships are logical. The edit will determine the status of each record to be either "dirty" or "clean." Dirty records must be updated and reedited or certified by an analyst to be clean. If updates are needed, they are reedited interactively. Only clean records are eligible for analysis and summary.

Analysis Tools: Edited sheep and goat data are processed through an interactive analysis tool which displays data for all reports by item. The tool provides scatter plots, tables, charts, and special tabulations that allow the analyst to compare an individual record to other similar records within their state. Outliers and unusual data relationships become evident and Regional Field Office staff will review them to determine if they are correct. The tool also allows comparison to a farm's previously reported data to detect large changes in the operation. Suspect data found to be in error are corrected, while data found to be correct are kept.

Nonsampling Errors: Nonsampling errors are present in any survey process. These errors include reporting, recording, editing, and imputation errors. Steps are taken to minimize the impact of these errors, such as questionnaire testing, comprehensive interviewer training, validation and verification of processing systems, detailed computer edits, and the analysis tool.

Estimators: Each farm and ranch in the sample has an initial sampling weight. This is the inverse of the sampling fraction. For example, if a stratum has 1,000 farms in the population and 200 are sampled for this survey, each sampled farm has a weight of 5. In other words, each sampled farm represents 5 farms. The nonoverlap tracts sampled to measure

the sheep and goats not accounted for by the list have a weight determined by adjusting their original area frame weight by any second stage sampling weight.

Response to the January Sheep and Goats Survey is voluntary. Some producers refuse to participate in the survey. Others cannot be located during the data collection period and some submit incomplete reports. These nonrespondents must be accounted for if accurate estimates of sheep and goats are to be made. For the Sheep and Goats Survey, nonrespondents are accounted for by adjusting the weights of the respondents. The adjustment occurs by stratum as the bounded strata represent homogeneous groupings of similar sized farms. The largest stratum is unbounded and consists of large and, often unique, farms. Nonrespondents in this stratum and the nonoverlap tracts must be manually imputed by Regional Field Office statisticians and their weights are not adjusted. The adjustment is performed by individual item on the questionnaire (total sheep, total goats, sheep death loss) so adjustments for item nonresponse (partial reports) and unit nonresponse (refusals and inaccessibles) are done in a single calculation. Using the previous example, if 180 of the original 200 respond, the weights of the 180 will be adjusted to 1,000 divided by 180, or 5.56.

Two estimators are used to compute direct measures of the sheep and goat items. The “reweighted” estimator and the “adjusted” estimator are computationally identical except in how the nonresponse adjustments are made. The reweighted estimator uses a global weight adjustment across all usable reports. The nonresponse weight adjustment for the adjusted estimator uses an additional piece of information. When a sampled farm refuses to cooperate, interviewers will probe to determine the presence of sheep and/or goats even though the number is not known. This presence/absence indicator is used in the weight adjustment.

Point estimates, called direct expansions, for both estimators are calculated by multiplying the reported value by the nonresponse adjusted weight and summing to a stratum total. A variance estimate is also computed at the stratum level. The nonoverlap tracts are treated as an additional stratum. Totals and variances are additive across strata to form a state estimate and states are additive to a national estimate.

Ratio estimates are also computed for many items. For example, market lambs can be estimated as a percent of total market sheep and lamb inventory. Ratio estimates use the reweighted estimator described above for the numerator and denominator. Both the numerator and denominator must be reported in order for that record to be used in the ratio estimator.

Estimation: When all samples are accounted for, all responses fully edited, and the analysis material is reviewed, each Regional Field Office executes the summary for their state. When all Regional Field Offices have run summaries, Headquarters executes the national summary. Since all states conduct identical surveys, the samples can be pooled and national survey results computed. The summary results provide multiple point estimates and their standard errors for each data series being estimated. It also provides information used to assess the performance of the current survey and evaluate the quality of the survey estimates, such as strata level expansions, response rates, and percent of the expansion from usable reports.

Regional Field Offices are responsible for performing a detailed review of their survey results. Any irregularities revealed by the summary must be investigated and, if necessary, resolved. Using the historical relationship of the survey estimates to the official estimate, Regional Field Offices must interpret the survey results and submit a recommended estimate to Headquarters. The data are viewed in tabular and graphical form and a consensus estimate is established. Regional Field Offices see their survey results only and do not have access to other states’ results. For some data series, information from other sources is also utilized in the process of establishing estimates.

For the national estimates, NASS assembles a panel of statisticians to serve as the Agricultural Statistics Board which reviews the national results and establishes the national estimates. Since larger sample sizes yield more precise results, NASS employs the “top-down” approach by determining the national estimates first and reconciling the state estimates to the national number for sheep and goat inventories, lamb and kid crops, and wool and mohair production. The “Board” also enjoys an advantage in being able to examine results across states, compare the state recommendations, and utilize administrative data available only at the national level. The same estimators used in the state summaries are produced by the national summary. The Board follows the same approach the states do in determining the national estimate. The historical relationship of the survey estimates to the official estimate is evaluated over time to determine accuracy and bias

using tables and graphs. Every 5 years NASS conducts the Census of Agriculture, which is an exhaustive data collection effort for all known farm operations across the United States. The information gathered from the Census of Agriculture is used to establish “bench mark” levels by which the survey estimators can be compared and bias determined. Survey based estimators can also be impacted by “outliers” – individual reports that have “excessive influence” on the results due to either improper classification or extremely unusual data for a given operation (i.e. operation is not representative of other operations). NASS thoroughly reviews the survey data to identify these situations and consider their impact on the survey results when establishing the official estimates.

External information (administrative data) is also utilized in the process of setting estimates. In order to be considered, these data must be deemed to be reliable and come from unbiased sources. The most common administrative data is commercial slaughter. NASS employs a balance sheet approach whenever possible to ensure that estimates are as accurate as possible. This approach typically is limited to National-level estimates. A balance sheet and its components are reviewed when the inventory numbers are established. Commercial slaughter is an important element of the balance sheet at the national level since its high degree of reliability is based on a near-actual count of animals slaughtered. National-level live animal imports from other countries and exports to other countries are also considered.

Subtracting the disposition components of the balance sheet from supply components should, theoretically, give the current inventory. However, each component of the balance sheet has varying degrees of possible estimation error. To be most useful as an indication of inventory, therefore, each component should be estimated on the basis of all available information. The supply components of the National balance sheet are the beginning inventory, births, and imports (inshipments for State balance sheets). From this supply, the disposition components – commercial slaughter (marketings at State level), farm slaughter, deaths, and exports – are subtracted. The result is the indicated number on hand at the end of the period or year.

Quality Metrics for Sheep and Goats

Purpose and Definitions: Under the guidance of the Statistical Policy Office of the Office of Management and Budget, the United States Department of Agriculture’s National Agricultural Statistics Service provides data users with quality metrics for its published data series. The metrics tables below describe the performance data for all surveys contributing to the publication. The accuracy of data products may be evaluated through sampling and non-sampling error. The measurement of error due to sampling in the current period is evaluated by the coefficient of variation for each estimated item. Nonsampling error is evaluated by response rates and the percent of the estimate from reported data.

Sample size is the number of observations selected from the population to represent a characteristic of the population.

Response rate is the proportion of the sample that responded to the survey.

Percent of expansion from usable reports is a ratio of survey data expanded by the original sampling weight compared to survey data expanded by the nonresponse adjusted weight.

Coefficient of variation provides a measure of the size for the standard error relative to the point estimate and is used to measure the precision of the results of a survey estimator.

Sheep and Goats Survey Sample Size and Response Rates: To assist in evaluating the performance of the estimates in the sheep and goats report, the sample size and response rates are displayed. The slight increase in sample size for sheep and goat operations in 2014 from 2013 can be attributed to regular fluctuations in sample sizes from year-to-year. Response rates overall for 2013 and 2014 are displayed.

Sheep and Goats Survey Sample Size and Response Rate – United States: 2013 and 2014

	Sample size		Response rate	
	2013	2014	2013	2014
	(number)	(number)	(percent)	(percent)
United States	22,974	22,981	75.3	77.7

Sheep and Goats Survey Quality Metrics – United States: 2013 and 2014

	Percent of expansion from usable reports		Coefficient of variation	
	2013	2014	2013	2014
	(percent)	(percent)	(percent)	(percent)
All sheep and lambs	82.7	83.7	1.97	2.29
Breeding sheep and lambs	81.1	82.4	2.19	2.46
Market sheep and lambs	87.4	87.7	2.54	3.96
Lamb crop	80.1	81.3	2.05	2.03
Wool production	81.1	81.6	1.89	2.99
All goats and kids	84.6	86.3	3.68	3.85
Angora goats and kids	77.3	82.7	13.33	13.86
Meat and other goats and kids	84.8	86.6	3.62	4.30
Milk goats and kids	86.2	85.8	11.11	9.40
Kid crop	83.3	85.5	4.28	4.95
Mohair Production	71.1	75.9	10.71	13.41

Sheep and Goats Survey Sample Size and Response Rates – States and United States: 2013 and 2014

	Sample size		Response rate	
	2013 (number)	2014 (number)	2013 (percent)	2014 (percent)
Alabama	392	394	66.8	89.6
Arizona	195	173	69.7	89.0
Arkansas	334	328	74.0	70.7
California	987	983	76.9	75.5
Colorado	634	828	72.7	72.8
Florida	344	351	59.3	85.5
Georgia	439	455	67.4	85.5
Hawaii	135	137	87.4	81.0
Idaho	412	383	77.9	73.4
Illinois	460	442	82.8	82.6
Indiana	470	462	88.1	75.8
Iowa	917	904	73.7	77.4
Kansas	478	491	77.2	78.4
Kentucky	498	504	66.9	77.2
Louisiana	274	268	80.7	78.7
Maryland	260	271	71.2	72.0
Michigan	502	507	73.5	73.8
Minnesota	655	656	70.1	77.7
Mississippi	295	298	70.2	74.8
Missouri	559	560	70.1	77.3
Montana	685	683	79.3	82.3
Nebraska	432	427	84.0	76.8
Nevada	114	122	67.5	81.1
New England ¹	569	572	78.6	83.0
New Jersey	180	172	70.0	76.2
New Mexico	402	371	77.4	72.8
New York	420	427	70.0	64.9
North Carolina	497	486	75.9	81.3
North Dakota	274	276	75.5	72.8
Ohio	781	796	72.7	66.8
Oklahoma	642	641	83.8	83.2
Oregon	685	698	70.2	76.5
Pennsylvania	604	583	78.1	78.2
South Carolina	327	316	63.0	80.4
South Dakota	819	813	69.0	72.7
Tennessee	600	602	86.0	81.4
Texas	2,210	2,162	80.0	81.6
Utah	651	674	72.8	73.9
Virginia	557	532	77.9	82.9
Washington	347	352	73.2	75.0
West Virginia	381	366	70.3	83.3
Wisconsin	603	593	74.6	80.3
Wyoming	901	877	77.7	73.8
Other States ²	53	45	77.4	77.8
United States	22,974	22,981	75.3	77.7

¹ New England includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

² Individual state estimates not available for states not shown, but are included in Other States.

Quality Metrics for All Sheep and Lambs – United States: 2013 and 2014

	Percent of expansion from usable reports		Coefficient of variation	
	2013	2014	2013	2014
	(percent)	(percent)	(percent)	(percent)
Arizona	88.7	96.3	21.40	33.55
California	85.0	79.9	3.90	4.92
Colorado	84.9	87.1	6.65	2.50
Idaho	90.9	87.3	6.51	8.86
Illinois	87.5	89.6	13.21	16.06
Indiana	88.6	85.1	28.27	20.70
Iowa	76.3	82.7	5.08	5.35
Kansas	80.8	85.3	5.97	25.71
Kentucky	83.6	88.5	49.51	27.96
Michigan	84.4	84.9	17.99	21.49
Minnesota	76.3	82.1	8.49	12.73
Missouri	78.4	86.0	7.99	21.64
Montana	76.0	78.9	3.19	3.21
Nebraska	93.3	86.7	29.70	22.81
Nevada	98.5	99.0	0.94	16.11
New England ¹	81.2	89.4	12.40	22.54
New Mexico	86.6	79.1	13.18	18.23
New York	79.7	83.0	16.20	19.97
North Carolina	82.3	83.7	11.15	13.57
North Dakota	77.5	77.8	8.52	7.37
Ohio	80.8	70.9	19.63	9.79
Oklahoma	85.4	86.7	12.82	16.05
Oregon	86.0	87.5	3.62	2.91
Pennsylvania	84.6	83.8	10.50	10.70
South Dakota	77.6	78.9	10.46	13.03
Tennessee	94.1	85.4	22.72	20.56
Texas	81.0	83.2	5.76	6.24
Utah	82.8	89.8	3.15	13.94
Virginia	81.1	82.3	15.07	7.12
Washington	88.0	84.8	16.87	19.13
West Virginia	83.8	87.8	22.38	12.67
Wisconsin	79.9	83.5	17.13	11.38
Wyoming	74.9	72.6	4.02	3.66
Other States ²	84.6	89.9	10.88	13.15
United States	82.7	83.7	1.97	2.29

¹ New England includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

² Individual state estimates not available for states not shown, but are included in Other States.

Quality Metrics for Angora Goats – States and United States: 2013 and 2014

	Percent of expansion from usable reports		Coefficient of variation	
	2013	2014	2013	2014
	(percent)	(percent)	(percent)	(percent)
Arizona	70.6	93.4	39.81	52.41
California	82.3	78.9	29.80	52.85
Minnesota	81.4	76.7	39.32	43.13
Missouri	100.0	98.1	0.03	86.78
New England ¹	83.1	(D)	32.44	(D)
New Mexico	86.4	79.6	38.35	41.16
Oregon	71.2	78.1	41.42	40.69
Texas	74.3	76.6	12.91	11.37
Wisconsin	69.3	79.9	68.64	58.45
Other States ²	87.8	93.5	32.02	47.86
United States	77.3	82.7	13.33	13.86

(D) Withheld to avoid disclosing data for individual operations.

¹ New England includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

² Individual state estimates not available for states not shown, but are included in Other States.

Quality Metrics for Milk Goats – States and United States: 2013 and 2014

	Percent of expansion from usable reports		Coefficient of variation	
	2013	2014	2013	2014
	(percent)	(percent)	(percent)	(percent)
Alabama	77.8	89.5	38.01	37.85
Arizona	60.3	78.6	56.13	53.69
Arkansas	72.7	69.6	36.89	28.22
California	86.6	86.9	7.40	24.66
Colorado	78.4	90.6	57.43	24.09
Florida	91.9	84.9	59.85	29.03
Georgia	71.5	91.4	37.16	39.95
Idaho	97.9	68.2	55.86	36.27
Illinois	86.1	95.4	25.82	79.89
Indiana	91.1	88.4	27.54	29.42
Iowa	80.0	72.1	22.28	14.12
Kansas	86.5	79.1	32.74	31.04
Kentucky	73.5	78.6	29.07	34.18
Louisiana	93.8	84.7	73.35	47.46
Maryland	77.4	79.0	18.59	29.47
Michigan	73.7	78.4	21.61	35.48
Minnesota	82.3	93.1	32.15	30.15
Mississippi	65.5	70.2	37.46	42.96
Missouri	78.2	89.9	33.34	32.70
Montana	93.6	94.6	67.94	50.97
Nebraska	88.4	86.9	37.66	40.01
New England ¹	90.4	91.9	23.46	23.78
New Jersey	98.4	99.4	96.21	96.88
New Mexico	71.8	67.7	38.87	45.29
New York	80.0	75.0	18.80	19.86
North Carolina	89.5	84.7	30.04	20.18
North Dakota	79.1	(D)	30.11	(D)
Ohio	70.1	68.2	27.34	26.37
Oklahoma	83.9	86.7	23.08	32.95
Oregon	85.6	86.3	35.85	37.29
Pennsylvania	83.3	81.8	18.56	25.75
South Carolina	81.8	85.4	50.64	33.53
South Dakota	67.8	77.0	18.95	27.95
Tennessee	91.9	83.9	39.07	25.00
Texas	88.3	83.4	30.63	25.09
Utah	85.6	84.4	42.54	40.14
Virginia	98.2	83.2	86.44	27.12
Washington	88.8	87.7	43.02	55.07
West Virginia	72.5	85.0	38.61	37.99
Wisconsin	79.1	82.2	12.54	24.33
Wyoming	77.9	75.7	9.58	19.75
Other States ²	94.6	93.3	6.26	7.14
United States	86.2	85.8	11.11	9.36

(D) Withheld to avoid disclosing data for individual operations.

¹ New England includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

² Individual state estimates not available for states not shown, but are included in Other States.

Quality Metrics for Meat and Other Goats – States and United States: 2013 and 2014

	Percent of expansion from usable reports		Coefficient of variation	
	2013 (percent)	2014 (percent)	2013 (percent)	2014 (percent)
Alabama	78.4	92.7	17.99	17.00
Arizona	78.1	87.2	31.66	26.61
Arkansas	83.7	93.0	21.41	43.02
California	85.4	84.7	11.60	9.83
Colorado	83.8	85.7	21.66	14.09
Florida	76.1	89.5	20.92	19.79
Georgia	75.7	87.8	19.52	12.79
Hawaii	95.7	87.1	6.96	9.04
Idaho	88.6	90.5	20.96	13.70
Illinois	89.4	87.6	17.64	18.36
Indiana	83.6	80.6	13.82	15.82
Iowa	80.5	76.4	13.25	14.65
Kansas	88.3	83.7	20.51	14.67
Kentucky	71.2	82.8	16.89	29.84
Louisiana	93.7	90.1	42.89	32.98
Maryland	89.2	95.9	37.44	58.64
Michigan	93.4	91.9	33.43	31.99
Minnesota	84.6	85.2	23.97	18.67
Mississippi	86.8	80.3	25.41	17.18
Missouri	84.6	90.3	19.99	19.66
Montana	93.9	89.0	37.63	22.65
Nebraska	89.1	86.9	17.07	15.95
Nevada	70.7	92.8	18.35	10.05
New England ¹	92.1	94.4	20.10	29.42
New Jersey	71.6	78.1	21.76	18.49
New Mexico	76.6	75.8	26.59	21.43
New York	85.5	85.3	32.05	28.48
North Carolina	85.0	88.7	15.60	20.28
North Dakota	84.9	87.5	20.67	36.13
Ohio	86.1	77.6	31.70	16.70
Oklahoma	91.9	91.9	21.30	25.68
Oregon	82.1	86.3	14.65	13.27
Pennsylvania	89.5	93.1	17.37	51.00
South Carolina	87.1	85.3	28.56	22.86
South Dakota	73.7	83.3	15.45	23.68
Tennessee	91.9	90.2	20.35	20.32
Texas	82.9	84.6	6.46	7.75
Utah	70.0	70.0	22.69	15.03
Virginia	92.1	92.1	25.10	23.29
Washington	82.8	84.5	25.47	22.51
West Virginia	78.5	83.9	20.18	13.07
Wisconsin	90.4	91.4	25.88	23.47
Wyoming	74.6	86.5	21.23	7.45
Other States ²	79.6	92.8	38.86	57.81
United States	84.8	86.6	3.62	4.34

¹ New England includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.

² Individual state estimates not available for states not shown, but are included in Other States.

Information Contacts

Process	Unit	Telephone	Email
Estimation	Livestock Branch	(202) 720-3570	HQ_SD_LB@nass.usda.gov
Data Collection	Survey Administration Branch	(202) 720-3895	HQ_CSD_SAB@nass.usda.gov
Questionnaires	Data Collection Branch	(202) 720-6201	HQ_CSD_DCB@nass.usda.gov
Sampling and Editing	Sampling Editing and Imputation Methodology Branch	(202) 720-8671	HQ_CSD_SB@nass.usda.gov
Summary and Estimators	Summary Estimation and Disclosure Methodology Branch	(202) 720-4008	HQ_SD_SMB@nass.usda.gov
Dissemination	Data Dissemination Office	(202) 720-3869	HQSDOD@nass.usda.gov
Media Contact and Webmaster .	Public Affairs Office	(202) 720-2639	HQOAPAO@nass.usda.gov

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