United States Department of Agriculture
National Agricultural Statistics Service

Delta Region Quarterly Bee Colony Loss

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This report contains the results from the **Quarterly Colony Loss Survey**. The data are also posted on our Web site at *http://www.nass.usda.gov*. Thanks to all who responded to the questionnaires and interviews for this survey.

Special Note

Data collection for July 2019 quarterly honey bee colonies has been suspended. Before deciding to suspend data collection, NASS reviewed its estimate programs against mission- and user-based criteria as well as the amount of time remaining in the fiscal year to meet its budget and program requirements while maintaining the strongest data in service to U.S. agriculture. Information about all NASS survey and report is available online at www.nass.usda.gov

January 1, 2019 Inventory Up 13 Percent for Operations with Five or More Colonies

Honey bee colonies for operations with five or more colonies, in the Delta Region as of January 1, 2019 totaled 103,000 colonies. This is 13 percent above the 91,000 colonies on January 1, 2018.

Honey bee colonies lost for operations with five or more colonies during the quarter of January through March 2019, was 12,400 colonies or 12 percent lost in the Delta Region. The quarter of January through March 2018 had a loss of 11,600 colonies or 13 percent.

Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – Delta Region and United States: January 1, 2019 and January-March 2019

State	January 1 number of colonies	January-March					
		Maximum colonies [1]	Lost colonies	Percent lost [2]	Added Colonies	Renovated colonies [3]	Percent renovated [4]
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Arkansas	28,000	28,000	6,500	23	20	20	(Z)
Louisiana	49,000	51,000	3,500	7	9,000	16,000	31
Mississippi	26,000	29,000	2,400	8	3,800	1,700	6
United States	2,671,470	(X)	407,700	15	247,710	179,500	7

Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – Delta Region and United States: October 1, 2018 and October-December 2018

State	October 1 number of colonies	October-December					
		Maximum colonies [1]	Lost colonies	Percent lost [2]	Added Colonies	Renovated colonies [3]	Percent renovated [4]
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Arkansas	30,000	31,000	6,000	19	110	230	1
Louisiana	50,000	52,000	2,600	5	130	200	(Z)
Mississippi	14,500	25,000	2,000	8	330	50	(Z)
United States	2,868,970	(X)	444,730	16	219,640	154,560	5

(X) Not applicable.
(Z) Less than half of the unit shown.
[1] Maximum colonies equal number of colonies on the first day of the quarter plus all colonies moved into that state during the quarter.
[2] Percent lost is the number of lost colonies divided by maximum colonies except for the United States, where percent lost is the number of lost colonies divided by the number of colonies on the first day of the quarter.
[3] Defined as any surviving colony that was requeened or received new honey bees through nuc or package.
[4] Percent renovated is the number of renovated colonies divided by maximum colonies except for the United States, where percent renovated is the number of renovated colonies divided by the number of colonies on the first day of the quarter.

Varroa Mites and Pesticides Top Colony Stressors in 2019

In Arkansas, the quarter of October through December 2018 had the highest percentage of colonies reported to be affected by varroa mites at 82.8 percent. Louisiana had the highest percentage of colonies reported to be affected by varroa mites January through March 2019 with 57.8 percent. Mississippi had the highest percentage of colonies reported to be affected by varroa mites April through June 2018 at 44.6 percent. Reported pesticide affects in Arkansas was 55.3 percent during the January-March 2019 quarter. Mississippi pesticide affects increased to 48.4 percent during the January-March 2019 quarter from 0.5 percent during the October-December 2018 quarter.

Colony Health Stressors with Five or More Colonies – Delta Region: January-March 2019

State	Varroa mites	Other pests and parasites [1]	Diseases [2]	Pesticides	Other [3]	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	19.5	1.5	3.3	55.3	0.7	2.9
Louisiana	57.8	1.3	0.1	0.3	1.0	0.7
Mississippi	14.6	71.0	64.8	48.4	1.9	5.5

Colony Health Stressors with Five or More Colonies – Delta Region: October-December 2018

State	Varroa mites	Other pests and parasites [1]	Diseases [2]	Pesticides	Other [3]	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	82.8	7.1	-	73.5	5.3	2.2
Louisiana	16.6	6.7	0.3	5.9	1.0	1.7
Mississippi	26.5	6.7	0.2	0.5	3.0	4.5

Colony Health Stressors with Five or More Colonies – Delta Region: July-September 2018

State	Varroa mites	Other pests and parasites [1]	Diseases [2]	Pesticides	Other [3]	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	29.9	7.8	0.1	17.6	0.5	0.6
Louisiana	31.3	29.9	0.2	1.7	1.0	1.6
Mississippi	25.2	8.6	(Z)	0.5	7.5	7.2

Colony Health Stressors with Five or More Colonies – Delta Region: April-June 2018

State	Varroa mites	Other pests and parasites [1]	Diseases [2]	Pesticides	Other [3]	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	30.9	12.8	0.7	2.2	17.0	13.2
Louisiana	8.1	5.9	0.2	0.8	1.2	1.3
Mississippi	44.6	26.2	-	0.2	3.5	2.2

Colony Health Stressors with Five or More Colonies – Delta Region: January-March 2018

State	Varroa mites	Other pests and parasites [1]	Diseases [2]	Pesticides	Other [3]	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Arkansas	21.1	9.6	1.0	23.0	4.6	13.9
Louisiana	4.9	0.7	0.2	0.7	4.5	1.6
Mississippi	7.0	4.8	(Z)	0.6	2.4	34.4

- Represents zero.
(Z) Less than half of the unit shown.
[1] Tracheal mites, nosema, hive beetle, wax moths, etc.
[2] Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.
[3] Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.