



# Honey Bee Colonies

ISSN: 2470-993X

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Released August 1, 2019, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

## Special Note

Data collection for July 2019 quarterly honey bee colonies has been suspended. Before deciding to suspend data collection, NASS reviewed its estimating 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 surveys and reports is available online at [www.nass.usda.gov](http://www.nass.usda.gov).

## January 1 Honey Bee Colonies Up 1 Percent for Operations with Five or More Colonies

**Honey bee colonies for operations with five or more colonies** in the United States on January 1, 2019 totaled 2.67 million colonies, up 1 percent from January 1, 2018. During 2018, honey bee colonies on January 1, April 1, July 1, and October 1 were 2.64 million, 2.67 million, 2.96 million, and 2.87 million colonies, respectively.

**Honey bee colonies lost for operations with five or more colonies** from January through March 2019, was 408 thousand colonies, or 15 percent. During the quarter of October through December 2018, colonies lost totaled 445 thousand colonies, or 16 percent, the highest number lost of any quarter in 2018. The quarter in 2018 with the lowest number of colonies lost was April through June, with 355 thousand colonies lost, or 13 percent.

**Honey bee colonies added for operations with five or more colonies** from January through March 2019 was 248 thousand colonies. During the quarter of April through June 2018, 676 thousand colonies were added, the highest number of honey bee colonies added for any quarter of 2018. The quarter of October through December 2018 added 220 thousand colonies, the least number of honey bee colonies added for any quarter of 2018.

**Honey bee colonies renovated for operations with five or more colonies** from January through March 2019 was 180 thousand colonies, or 7 percent. The quarter in 2018 with the highest number of colonies renovated was April through June with 740 thousand colonies renovated, or 28 percent. The quarter in 2018 with the lowest number of colonies renovated was October through December 2018, with 155 thousand, or 5 percent. Renovated colonies are those that were requeened or received new honey bees through a nuc or package.

## Varroa Mites Top Colony Stressor for Operations with Five or More Colonies

**Varroa mites were the number one stressor for operations with five or more colonies** during all quarters of 2018. The quarter of April through June 2018 had the highest percentage of colonies reported to be affected by varroa mites at 56.4 percent. The percent of colonies reported to be affected by varroa mites during January through March 2019 were 45.6 percent.

## Colonies Lost with Colony Collapse Disorder Symptoms Down 26 Percent for Operations with Five or More Colonies

**Honey bee colonies lost with Colony Collapse Disorder symptoms on operations with five or more colonies** was 59.9 thousand colonies from January through March 2019. This is a 26 percent decrease from the same quarter of 2018.

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**Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: January 1, 2018 and January-March 2018**

State	January 1 colonies	January-March					
		Maximum colonies <sup>1</sup>	Lost colonies	Percent lost <sup>2</sup>	Added colonies	Renovated colonies <sup>3</sup>	Percent renovated <sup>4</sup>
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama .....	7,500	7,500	820	11	1,200	1,500	20
Arizona .....	25,000	26,000	6,000	23	810	230	1
Arkansas .....	22,000	22,000	7,500	34	540	810	4
California .....	1,150,000	1,540,000	215,000	14	205,000	133,000	9
Colorado .....	13,000	21,000	4,900	23	1,400	190	1
Connecticut .....	2,900	2,900	140	5	220	330	11
Florida .....	245,000	255,000	39,000	15	57,000	38,000	15
Georgia .....	134,000	139,000	25,000	18	29,000	39,000	28
Hawaii .....	17,000	17,000	1,600	9	1,200	5,000	29
Idaho .....	164,000	168,000	22,000	13	2,500	2,600	2
Illinois .....	10,500	10,500	2,400	23	1,000	630	6
Indiana .....	7,000	8,000	1,000	13	300	30	(Z)
Iowa .....	41,000	44,000	2,100	5	270	110	(Z)
Kansas .....	3,700	3,700	950	26	370	410	11
Kentucky .....	5,500	5,500	1,200	22	760	20	(Z)
Louisiana .....	50,000	52,000	3,600	7	4,100	320	1
Maine .....	1,900	1,900	410	22	20	30	2
Maryland .....	8,000	8,000	1,600	20	400	190	2
Massachusetts .....	3,700	3,700	1,000	27	240	290	8
Michigan .....	16,500	37,000	7,000	19	4,000	3,900	11
Minnesota .....	39,000	62,000	3,900	6	8,000	2,900	5
Mississippi .....	19,000	32,000	2,000	6	28,000	5,500	17
Missouri .....	8,000	8,000	1,400	18	1,400	50	(Z)
Montana .....	35,000	60,000	140	(Z)	840	-	-
Nebraska .....	6,500	14,000	430	3	-	-	-
New Jersey .....	6,500	6,500	730	11	180	190	3
New Mexico .....	7,500	7,500	3,900	52	180	-	-
New York .....	26,000	26,000	3,700	14	400	170	1
North Carolina .....	18,500	18,500	4,200	23	2,400	260	1
North Dakota .....	66,000	101,000	3,200	3	2,600	10	(Z)
Ohio .....	12,000	14,000	4,500	32	300	580	4
Oklahoma .....	17,000	18,000	3,700	21	890	240	1
Oregon .....	81,000	89,000	4,800	5	16,500	3,900	4
Pennsylvania .....	14,500	15,000	3,300	22	1,200	670	4
South Carolina .....	13,500	14,500	1,800	12	1,900	2,800	19
South Dakota .....	23,000	29,000	390	1	250	90	(Z)
Tennessee .....	10,000	10,000	3,400	34	540	470	5
Texas .....	205,000	290,000	32,000	11	124,000	42,000	14
Utah .....	7,500	17,000	620	4	490	50	(Z)
Vermont .....	5,500	5,500	810	15	20	-	-
Virginia .....	7,000	7,000	2,100	30	540	160	2
Washington .....	44,000	90,000	4,600	5	7,000	870	1
West Virginia .....	4,700	8,500	2,500	29	330	60	1
Wisconsin .....	21,000	29,000	4,600	16	2,800	1,600	6
Wyoming .....	5,500	9,000	220	2	70	-	-
Other States <sup>5</sup> .....	3,820	7,020	1,870	27	160	40	1
United States .....	2,635,220	(X)	438,030	17	511,320	289,200	11

- Represents zero.

(X) Not applicable.

(Z) Less than half of the unit shown.

<sup>1</sup> January 1 colonies plus all colonies moved into that state during the quarter.

<sup>2</sup> 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 January 1 colonies.

<sup>3</sup> Defined as any surviving colony that was requeened or received new honey bees through nuc or package.

<sup>4</sup> 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 January 1 colonies.

<sup>5</sup> Includes data for States not published in this table.

**Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: April 1, 2018 and April-June 2018**

State	April 1 colonies	April-June					
		Maximum colonies <sup>1</sup>	Lost colonies	Percent lost <sup>2</sup>	Added colonies	Renovated colonies <sup>3</sup>	Percent renovated <sup>4</sup>
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama .....	7,000	8,500	650	8	1,700	710	8
Arizona .....	19,000	19,500	2,600	13	14,000	2,100	11
Arkansas .....	14,500	16,000	2,000	13	13,000	1,900	12
California .....	1,130,000	1,200,000	110,000	9	172,000	255,000	21
Colorado .....	16,500	27,000	3,000	11	12,500	4,700	17
Connecticut .....	3,600	3,600	120	3	340	170	5
Florida .....	250,000	275,000	56,000	20	49,000	68,000	25
Georgia .....	131,000	137,000	18,000	13	35,000	16,000	12
Hawaii .....	16,500	16,500	380	2	330	3,100	19
Idaho .....	59,000	94,000	6,500	7	14,500	29,000	31
Illinois .....	10,000	10,500	2,300	22	5,000	2,900	28
Indiana .....	8,000	9,500	1,800	19	4,000	730	8
Iowa .....	45,000	47,000	4,300	9	15,500	4,800	10
Kansas .....	3,900	3,900	300	8	3,500	2,100	54
Kentucky .....	5,500	6,000	910	15	1,500	560	9
Louisiana .....	48,000	48,000	1,400	3	4,900	4,000	8
Maine .....	2,200	23,000	3,100	13	430	790	3
Maryland .....	7,000	8,000	370	5	2,400	1,200	15
Massachusetts .....	3,500	8,000	260	3	910	350	4
Michigan .....	37,000	70,000	7,500	11	23,000	8,500	12
Minnesota .....	69,000	116,000	8,500	7	42,000	25,000	22
Mississippi .....	50,000	50,000	3,400	7	4,000	7,000	14
Missouri .....	7,000	7,000	390	6	2,100	800	11
Montana .....	50,000	176,000	5,500	3	17,000	22,000	13
Nebraska .....	10,500	46,000	2,100	5	4,000	900	2
New Jersey .....	4,400	15,000	270	2	1,300	170	1
New Mexico .....	1,900	4,300	50	1	1,700	450	10
New York .....	20,000	42,000	2,700	6	11,000	2,400	6
North Carolina .....	16,000	17,500	2,500	14	4,100	800	5
North Dakota .....	74,000	460,000	23,000	5	23,000	64,000	14
Ohio .....	11,000	13,000	1,500	12	9,000	2,100	16
Oklahoma .....	15,500	15,500	1,700	11	10,500	6,500	42
Oregon .....	41,000	107,000	3,400	3	17,500	24,000	22
Pennsylvania .....	15,500	19,500	1,100	6	6,000	1,600	8
South Carolina .....	14,000	14,000	1,300	9	2,600	4,000	29
South Dakota .....	10,000	169,000	17,000	10	12,500	65,000	38
Tennessee .....	8,000	8,000	1,200	15	3,800	1,300	16
Texas .....	305,000	315,000	38,000	12	79,000	71,000	23
Utah .....	14,500	26,000	1,900	7	9,500	4,100	16
Vermont .....	5,500	6,500	520	8	2,600	140	2
Virginia .....	5,000	6,000	500	8	2,600	700	12
Washington .....	55,000	122,000	7,500	6	15,500	19,000	16
West Virginia .....	7,000	7,000	570	8	2,300	550	8
Wisconsin .....	26,000	56,000	6,500	12	12,000	7,000	13
Wyoming .....	8,500	28,000	2,300	8	5,500	2,200	8
Other States <sup>5</sup> .....	4,380	8,670	380	4	1,750	1,030	12
United States .....	2,665,880	(X)	355,270	13	676,360	740,350	28

(X) Not applicable.

<sup>1</sup> April 1 colonies plus all colonies moved into that state during the quarter.

<sup>2</sup> 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 April 1 colonies.

<sup>3</sup> Defined as any surviving colony that was requeened or received new honey bees through nuc or package.

<sup>4</sup> 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 April 1 colonies.

<sup>5</sup> Includes data for States not published in this table.

**Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: July 1, 2018 and July-September 2018**

State	July 1 colonies	July-September					
		Maximum colonies <sup>1</sup>	Lost colonies	Percent lost <sup>2</sup>	Added colonies	Renovated colonies <sup>3</sup>	Percent Renovated <sup>4</sup>
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama .....	8,500	8,500	1,700	20	1,600	1,300	15
Arizona .....	31,000	31,000	8,000	26	3,200	3,100	10
Arkansas .....	29,000	29,000	2,300	8	2,600	840	3
California .....	590,000	700,000	73,000	10	63,000	141,000	20
Colorado .....	34,000	35,000	5,000	14	1,500	5,000	14
Connecticut .....	3,200	3,200	130	4	80	310	10
Florida .....	197,000	220,000	30,000	14	53,000	40,000	18
Georgia .....	134,000	138,000	17,000	12	27,000	33,000	24
Hawaii .....	16,500	16,500	1,800	11	1,700	3,000	18
Idaho .....	82,000	101,000	14,000	14	15,000	21,000	21
Illinois .....	11,000	11,000	660	6	700	420	4
Indiana .....	11,500	11,500	990	9	520	1,200	10
Iowa .....	56,000	57,000	3,600	6	1,200	990	2
Kansas .....	6,000	6,000	950	16	300	180	3
Kentucky .....	6,500	7,000	840	12	300	660	9
Louisiana .....	53,000	53,000	1,900	4	1,600	2,300	4
Maine .....	12,500	12,500	890	7	60	170	1
Maryland .....	7,500	7,500	360	5	580	680	9
Massachusetts .....	8,000	10,000	2,200	22	850	730	7
Michigan .....	88,000	88,000	8,000	9	3,000	22,000	25
Minnesota .....	121,000	127,000	29,000	23	1,600	6,500	5
Mississippi .....	16,500	16,500	2,900	18	110	650	4
Missouri .....	10,000	10,000	540	5	260	410	4
Montana .....	145,000	153,000	18,500	12	3,100	22,000	14
Nebraska .....	52,000	54,000	6,500	12	8,500	5,000	9
New Jersey .....	14,000	14,000	320	2	250	220	2
New Mexico .....	6,000	7,000	1,200	17	3,800	1,000	14
New York .....	55,000	56,000	3,900	7	3,600	3,700	7
North Carolina .....	18,000	18,000	2,200	12	2,600	2,000	11
North Dakota .....	455,000	490,000	59,000	12	23,000	14,500	3
Ohio .....	16,000	16,000	1,300	8	1,300	2,100	13
Oklahoma .....	2,100	2,100	370	18	20	10	(Z)
Oregon .....	116,000	117,000	13,000	11	3,000	49,000	42
Pennsylvania .....	20,000	21,000	860	4	2,900	2,300	11
South Carolina .....	9,500	11,500	1,400	12	670	1,100	10
South Dakota .....	168,000	197,000	22,000	11	8,000	6,500	3
Tennessee .....	9,000	9,000	900	10	540	1,000	11
Texas .....	112,000	124,000	7,500	6	7,500	9,500	8
Utah .....	30,000	30,000	4,400	15	970	1,400	5
Vermont .....	7,000	7,000	90	1	1,200	80	1
Virginia .....	7,500	7,500	610	8	1,000	990	13
Washington .....	76,000	84,000	12,000	14	7,000	3,600	4
West Virginia .....	7,500	8,000	520	7	170	1,200	15
Wisconsin .....	61,000	69,000	10,000	14	2,400	3,800	6
Wyoming .....	33,000	34,000	3,900	11	1,800	3,900	11
Other States <sup>5</sup> .....	6,490	9,990	890	9	480	440	4
United States .....	2,958,790	(X)	377,120	13	263,560	420,780	14

(X) Not applicable.

(Z) Less than half of the unit shown.

<sup>1</sup> July 1 colonies plus all colonies moved into that state during the quarter.

<sup>2</sup> 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 July 1 colonies.

<sup>3</sup> Defined as any surviving colony that was requeened or received new honey bees through nuc or package.

<sup>4</sup> 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 July 1 colonies.

<sup>5</sup> Includes data for States not published in this table.

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

State	October 1 colonies	October-December					
		Maximum colonies <sup>1</sup>	Lost colonies	Percent lost <sup>2</sup>	Added colonies	Renovated colonies <sup>3</sup>	Percent renovated <sup>4</sup>
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama .....	6,500	6,500	830	13	210	1,300	20
Arizona .....	26,000	27,000	5,000	19	2,200	330	1
Arkansas .....	30,000	31,000	6,000	19	110	230	1
California .....	680,000	1,200,000	170,000	14	86,000	46,000	4
Colorado .....	30,000	30,000	3,500	12	370	10	(Z)
Connecticut .....	3,500	3,500	220	6	-	60	2
Florida .....	240,000	290,000	43,000	15	53,000	20,000	7
Georgia .....	148,000	164,000	19,500	12	6,500	49,000	30
Hawaii .....	16,000	16,000	940	6	1,700	6,000	38
Idaho .....	99,000	159,000	15,000	9	9,000	910	1
Illinois .....	12,000	12,000	1,400	12	600	350	3
Indiana .....	9,000	9,000	3,300	37	40	1,200	13
Iowa .....	21,000	21,000	4,200	20	630	80	(Z)
Kansas .....	5,500	5,500	1,000	18	420	10	(Z)
Kentucky .....	7,000	7,000	2,000	29	60	430	6
Louisiana .....	50,000	52,000	2,600	5	130	200	(Z)
Maine .....	12,000	12,000	1,400	12	210	880	7
Maryland .....	7,000	9,000	690	8	60	90	1
Massachusetts .....	4,900	4,900	650	13	110	320	7
Michigan .....	77,000	77,000	6,000	8	3,900	1,800	2
Minnesota .....	84,000	86,000	11,500	13	2,500	590	1
Mississippi .....	14,500	25,000	2,000	8	330	50	(Z)
Missouri .....	10,000	10,000	880	9	170	150	2
Montana .....	98,000	102,000	5,500	5	3,100	500	(Z)
Nebraska .....	45,000	45,000	5,000	11	7,000	840	2
New Jersey .....	15,500	15,500	1,300	8	30	80	1
New Mexico .....	8,000	8,000	3,000	38	50	-	-
New York .....	53,000	53,000	4,400	8	1,000	1,500	3
North Carolina .....	16,000	16,000	2,700	17	250	300	2
North Dakota .....	430,000	435,000	29,000	7	7,500	1,500	(Z)
Ohio .....	15,500	15,500	2,100	14	170	450	3
Oklahoma .....	2,200	57,000	2,500	4	60	20	(Z)
Oregon .....	89,000	101,000	13,000	13	10,500	12,000	12
Pennsylvania .....	21,000	21,000	4,000	19	270	1,500	7
South Carolina .....	10,000	12,500	1,500	12	770	790	6
South Dakota .....	140,000	140,000	21,000	15	2,000	430	(Z)
Tennessee .....	8,000	8,500	1,900	22	30	370	4
Texas .....	116,000	260,000	17,000	7	11,000	70	(Z)
Utah .....	27,000	27,000	3,400	13	180	400	1
Vermont .....	6,500	6,500	170	3	10	20	(Z)
Virginia .....	7,000	7,000	1,100	16	80	1,300	19
Washington .....	75,000	81,000	11,000	14	5,500	1,400	2
West Virginia .....	7,000	7,000	1,200	17	50	70	1
Wisconsin .....	48,000	48,000	8,500	18	1,600	530	1
Wyoming .....	30,000	32,000	2,700	8	220	-	-
Other States <sup>5</sup> .....	8,370	8,670	1,150	13	20	500	6
United States .....	2,868,970	(X)	444,730	16	219,640	154,560	5

- Represents zero.

(X) Not applicable.

(Z) Less than half of the unit shown.

<sup>1</sup> October 1 colonies plus all colonies moved into that state during the quarter.

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<sup>3</sup> Defined as any surviving colony that was requeened or received new honey bees through nuc or package.

<sup>4</sup> 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 October 1 colonies.

<sup>5</sup> Includes data for States not published in this table.

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

State	January 1 colonies	January-March					
		Maximum colonies <sup>1</sup>	Lost colonies	Percent lost <sup>2</sup>	Added colonies	Renovated colonies <sup>3</sup>	Percent renovated <sup>4</sup>
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama .....	5,500	5,500	650	12	800	200	4
Arizona .....	22,000	22,000	2,500	11	430	90	(Z)
Arkansas .....	28,000	28,000	6,500	23	20	20	(Z)
California .....	1,140,000	1,580,000	235,000	15	83,000	86,000	5
Colorado .....	5,000	7,500	320	4	-	-	-
Connecticut .....	3,100	3,100	270	9	170	10	(Z)
Florida .....	300,000	315,000	46,000	15	41,000	16,500	5
Georgia .....	120,000	129,000	14,500	11	19,500	8,000	6
Hawaii .....	16,500	16,500	390	2	660	3,700	22
Idaho .....	132,000	145,000	12,500	9	4,600	1,100	1
Illinois .....	9,000	9,000	2,300	26	210	80	1
Indiana .....	6,000	6,000	710	12	440	280	5
Iowa .....	7,500	11,500	1,600	14	170	140	1
Kansas .....	4,500	4,500	1,500	33	370	110	2
Kentucky .....	3,700	4,400	890	20	60	30	1
Louisiana .....	49,000	51,000	3,500	7	9,000	16,000	31
Maine .....	7,000	7,000	470	7	10	30	(Z)
Maryland .....	8,000	8,000	2,300	29	30	10	(Z)
Massachusetts .....	3,800	3,800	680	18	60	20	1
Michigan .....	24,000	33,000	6,500	20	-	-	-
Minnesota .....	17,000	43,000	2,200	5	80	470	1
Mississippi .....	26,000	29,000	2,400	8	3,800	1,700	6
Missouri .....	8,500	8,500	1,100	13	80	60	1
Montana .....	37,000	68,000	3,500	5	1,700	1,900	3
Nebraska .....	13,500	16,500	2,500	15	-	-	-
New Jersey .....	6,000	6,000	310	5	130	60	1
New Mexico .....	4,800	4,800	170	4	-	-	-
New York .....	24,000	24,000	3,400	14	110	80	(Z)
North Carolina .....	10,500	14,500	1,700	12	750	890	6
North Dakota .....	92,000	102,000	1,100	1	-	1,300	1
Ohio .....	10,500	12,500	3,500	28	1,700	440	4
Oklahoma .....	21,000	55,000	50	(Z)	20	-	-
Oregon .....	89,000	95,000	7,500	8	8,000	1,800	2
Pennsylvania .....	15,000	15,000	2,900	19	370	320	2
South Carolina .....	12,000	13,000	690	5	2,000	340	3
South Dakota .....	18,500	18,500	1,100	6	-	-	-
Tennessee .....	6,000	7,000	1,500	21	240	320	5
Texas .....	260,000	330,000	17,000	5	61,000	35,000	11
Utah .....	8,500	11,000	1,800	16	900	-	-
Vermont .....	6,500	6,500	260	4	50	-	-
Virginia .....	5,500	5,500	1,100	20	80	110	2
Washington .....	51,000	75,000	7,000	9	5,500	2,200	3
West Virginia .....	5,000	7,000	1,300	19	20	60	1
Wisconsin .....	16,500	17,000	3,700	22	580	100	1
Wyoming .....	6,500	9,500	250	3	-	-	-
Other States <sup>5</sup> .....	6,070	6,070	590	10	70	30	(Z)
United States .....	2,671,470	(X)	407,700	15	247,710	179,500	7

- Represents zero.

(X) Not applicable.

(Z) Less than half of the unit shown.

<sup>1</sup> January 1 colonies plus all colonies moved into that state during the quarter.

<sup>2</sup> 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 January 1 colonies.

<sup>3</sup> Defined as any surviving colony that was requeened or received new honey bees through nuc or package.

<sup>4</sup> 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 January 1 colonies.

<sup>5</sup> Includes data for States not published in this table.

## Colony Health Stressors with Five or More Colonies – States and United States: January-March 2018

[Percent of colonies affected by stressors anytime during the quarter. A colony may be affected by multiple stressors during the quarter]

State	Varroa mites	Other pests and parasites <sup>1</sup>	Diseases <sup>2</sup>	Pesticides	Other <sup>3</sup>	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama .....	29.2	30.2	1.9	14.9	8.6	4.5
Arizona .....	36.3	4.3	4.6	15.3	7.9	4.2
Arkansas .....	21.1	9.6	1.0	23.0	4.6	13.9
California .....	41.3	11.3	4.8	11.5	8.0	4.9
Colorado .....	31.7	0.8	3.8	0.5	13.7	2.4
Connecticut .....	14.5	0.7	-	0.8	7.7	3.5
Florida .....	31.7	15.3	4.5	9.2	5.5	16.0
Georgia .....	39.6	18.7	0.9	14.8	27.1	2.1
Hawaii .....	83.0	84.5	0.1	-	0.1	(Z)
Idaho .....	28.3	5.7	0.8	3.4	3.4	0.4
Illinois .....	25.7	11.2	3.6	3.5	10.4	10.9
Indiana .....	33.4	8.3	3.0	0.5	9.9	3.7
Iowa .....	5.3	1.1	0.3	0.6	0.6	1.4
Kansas .....	63.0	20.3	1.0	4.3	27.9	9.1
Kentucky .....	43.0	29.6	0.9	11.0	8.0	5.9
Louisiana .....	4.9	0.7	0.2	0.7	4.5	1.6
Maine .....	23.6	0.6	0.2	-	5.2	7.4
Maryland .....	18.2	5.6	4.4	1.5	14.3	3.1
Massachusetts .....	19.6	1.1	0.8	0.8	9.6	7.4
Michigan .....	21.4	3.5	0.7	7.4	12.0	5.9
Minnesota .....	2.0	0.7	1.9	0.6	1.1	1.6
Mississippi .....	7.0	4.8	(Z)	0.6	2.4	34.4
Missouri .....	86.0	77.8	0.3	3.5	26.5	23.9
Montana .....	28.9	(Z)	(Z)	26.1	0.1	0.1
Nebraska .....	4.5	1.6	-	2.8	1.7	0.9
New Jersey .....	14.9	1.9	-	0.4	3.8	0.8
New Mexico .....	42.8	0.5	-	1.3	9.4	0.5
New York .....	25.3	11.9	1.4	1.9	8.0	6.0
North Carolina .....	29.7	10.2	0.3	0.3	13.4	8.0
North Dakota .....	1.4	0.1	1.1	-	0.8	-
Ohio .....	39.6	10.0	6.5	3.2	15.8	11.6
Oklahoma .....	24.1	8.5	3.2	0.1	3.1	2.0
Oregon .....	36.0	0.7	1.2	6.7	3.7	1.0
Pennsylvania .....	34.4	5.6	3.3	9.3	5.9	9.9
South Carolina .....	29.3	15.5	0.7	2.6	13.5	3.0
South Dakota .....	4.4	0.1	(Z)	(Z)	0.5	0.1
Tennessee .....	29.2	20.4	2.3	3.0	13.2	19.7
Texas .....	21.5	10.1	4.8	0.2	1.7	10.3
Utah .....	18.7	-	0.1	-	0.1	0.5
Vermont .....	17.0	1.2	0.3	0.6	2.0	0.8
Virginia .....	26.0	11.3	0.3	3.9	7.7	16.3
Washington .....	8.5	0.9	1.0	1.9	0.4	0.4
West Virginia .....	15.0	8.0	2.0	3.4	20.8	4.9
Wisconsin .....	14.1	3.7	1.2	1.5	3.6	3.7
Wyoming .....	0.8	0.3	0.1	-	1.9	0.9
Other States <sup>4</sup> .....	20.7	0.4	0.1	-	1.9	1.1
United States .....	40.7	12.7	4.3	10.3	8.7	7.1

- Represents zero.

(Z) Less than half of the unit shown.

<sup>1</sup> Tracheal mites, nosema, hive beetle, wax moths, etc.

<sup>2</sup> Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.

<sup>3</sup> Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.

<sup>4</sup> Includes data for States not published in this table.

## Colony Health Stressors with Five or More Colonies – States and United States: April-June 2018

[Percent of colonies affected by stressors anytime during the quarter. A colony may be affected by multiple stressors during the quarter]

State	Varroa mites	Other pests and parasites <sup>1</sup>	Diseases <sup>2</sup>	Pesticides	Other <sup>3</sup>	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama .....	25.2	27.3	1.3	14.4	9.4	2.1
Arizona .....	73.8	7.2	32.8	0.8	14.3	4.1
Arkansas .....	30.9	12.8	0.7	2.2	17.0	13.2
California .....	41.5	10.2	11.1	13.7	9.0	5.0
Colorado .....	41.7	(Z)	12.7	3.6	4.2	0.5
Connecticut .....	11.1	0.9	0.4	0.8	0.8	0.4
Florida .....	45.3	27.5	9.6	15.5	10.1	21.1
Georgia .....	53.0	25.9	13.8	14.8	31.4	10.1
Hawaii .....	88.3	91.9	0.4	-	0.8	0.2
Idaho .....	51.6	3.7	3.0	18.5	4.1	4.4
Illinois .....	13.7	7.8	6.7	6.6	9.9	2.4
Indiana .....	78.0	3.5	0.4	4.5	1.3	1.1
Iowa .....	12.7	9.3	0.9	7.9	8.4	0.3
Kansas .....	42.8	31.6	1.3	24.9	2.1	1.6
Kentucky .....	40.9	20.2	0.6	1.0	4.1	5.9
Louisiana .....	8.1	5.9	0.2	0.8	1.2	1.3
Maine .....	1.4	0.8	0.2	1.3	0.5	(Z)
Maryland .....	11.8	3.4	0.8	0.3	4.4	0.4
Massachusetts .....	6.3	1.1	1.0	1.4	2.0	2.1
Michigan .....	75.4	18.6	10.8	11.7	12.7	9.8
Minnesota .....	12.9	9.3	7.2	6.0	8.0	20.7
Mississippi .....	44.6	26.2	-	0.2	3.5	2.2
Missouri .....	11.8	13.2	0.8	1.5	8.3	2.6
Montana .....	42.9	4.7	3.3	1.7	0.9	1.2
Nebraska .....	5.0	1.4	1.4	4.2	9.0	5.5
New Jersey .....	16.5	3.3	(Z)	0.1	3.4	0.1
New Mexico .....	0.3	0.1	0.3	-	0.2	1.0
New York .....	39.6	20.0	15.0	6.6	16.7	3.7
North Carolina .....	9.7	2.6	0.5	2.4	14.6	0.8
North Dakota .....	34.8	7.9	4.9	4.7	4.9	4.3
Ohio .....	38.8	30.7	1.7	2.7	21.6	1.5
Oklahoma .....	60.2	10.9	9.6	26.7	12.4	0.1
Oregon .....	46.1	3.5	8.1	6.6	15.6	0.2
Pennsylvania .....	31.3	16.0	2.2	2.0	1.6	1.9
South Carolina .....	14.2	3.5	0.7	1.6	10.0	3.0
South Dakota .....	55.1	40.4	7.3	3.8	37.5	(Z)
Tennessee .....	30.0	22.9	3.0	3.4	6.2	2.5
Texas .....	26.5	17.7	8.1	4.5	8.5	14.6
Utah .....	43.5	3.7	2.0	1.7	1.4	1.9
Vermont .....	21.8	1.5	0.7	16.7	1.8	0.1
Virginia .....	22.7	18.8	3.2	1.3	23.1	1.5
Washington .....	55.9	9.4	7.6	7.6	7.1	0.6
West Virginia .....	13.8	7.5	0.9	2.9	13.6	7.9
Wisconsin .....	32.1	16.9	18.3	27.1	29.5	0.8
Wyoming .....	9.6	0.1	2.1	2.1	2.7	3.7
Other States <sup>4</sup> .....	19.8	0.9	0.9	(Z)	3.5	0.2
United States .....	56.4	19.4	11.6	13.3	14.7	9.3

- Represents zero.

(Z) Less than half of the unit shown.

<sup>1</sup> Tracheal mites, nosema, hive beetle, wax moths, etc.

<sup>2</sup> Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.

<sup>3</sup> Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.

<sup>4</sup> Includes data for States not published in this table.

## Colony Health Stressors with Five or More Colonies – States and United States: July-September 2018

[Percent of colonies affected by stressors anytime during the quarter. A colony may be affected by multiple stressors during the quarter]

State	Varroa mites	Other pests and parasites <sup>1</sup>	Diseases <sup>2</sup>	Pesticides	Other <sup>3</sup>	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama .....	77.5	69.4	0.7	14.6	7.8	6.8
Arizona .....	52.5	2.3	4.5	3.8	15.0	27.6
Arkansas .....	29.9	7.8	0.1	17.6	0.5	0.6
California .....	57.3	6.6	4.5	17.8	12.0	3.6
Colorado .....	72.6	16.6	5.6	2.9	8.5	4.5
Connecticut .....	13.0	-	-	1.4	2.5	1.2
Florida .....	35.0	20.5	4.2	7.6	14.3	9.8
Georgia .....	49.8	20.4	2.4	27.7	6.0	7.2
Hawaii .....	88.3	89.4	0.1	0.1	0.1	-
Idaho .....	83.6	5.4	14.6	26.5	13.8	5.7
Illinois .....	21.2	10.6	2.1	5.1	1.5	7.0
Indiana .....	29.5	12.2	1.4	20.6	5.0	0.5
Iowa .....	29.9	9.8	8.5	0.4	1.9	0.4
Kansas .....	76.8	51.1	6.6	8.0	23.7	7.9
Kentucky .....	47.1	26.5	1.6	1.5	4.5	7.6
Louisiana .....	31.3	29.9	0.2	1.7	1.0	1.6
Maine .....	37.0	1.0	1.1	-	3.5	0.5
Maryland .....	11.7	6.0	0.3	0.6	1.1	3.8
Massachusetts .....	75.9	11.2	10.7	10.1	1.1	10.3
Michigan .....	92.4	13.8	1.1	23.8	19.5	18.6
Minnesota .....	44.5	12.4	6.0	28.4	9.3	8.1
Mississippi .....	25.2	8.6	(Z)	0.5	7.5	7.2
Missouri .....	18.2	16.9	1.2	1.2	7.5	1.1
Montana .....	43.8	18.5	18.0	6.8	21.8	2.7
Nebraska .....	24.1	3.2	5.9	6.5	4.3	4.0
New Jersey .....	12.3	5.1	0.2	0.1	1.0	0.4
New Mexico .....	-	-	-	12.3	0.4	0.2
New York .....	40.7	20.6	18.6	24.4	22.9	10.2
North Carolina .....	66.0	17.9	11.4	8.4	11.4	3.1
North Dakota .....	52.6	11.5	9.6	10.4	10.9	1.2
Ohio .....	58.9	40.9	2.6	1.3	11.9	1.2
Oklahoma .....	59.6	51.1	0.1	23.5	17.2	23.4
Oregon .....	57.2	2.8	7.0	45.1	10.7	0.8
Pennsylvania .....	23.5	8.1	1.9	1.6	1.7	2.6
South Carolina .....	76.8	53.4	0.7	32.4	7.6	0.9
South Dakota .....	54.7	32.9	3.3	8.5	45.0	1.6
Tennessee .....	70.6	53.2	0.7	13.2	5.6	2.1
Texas .....	18.8	4.4	0.4	6.2	2.8	0.9
Utah .....	34.0	15.5	0.1	0.2	1.0	0.7
Vermont .....	29.3	4.9	4.3	24.1	0.3	-
Virginia .....	39.0	28.5	2.6	7.7	11.6	1.7
Washington .....	7.1	0.6	0.6	2.7	9.9	2.8
West Virginia .....	57.0	52.6	0.3	0.3	6.8	2.1
Wisconsin .....	54.4	32.7	2.6	19.5	6.1	4.3
Wyoming .....	35.4	2.8	2.2	9.0	3.3	4.0
Other States <sup>4</sup> .....	22.8	2.4	1.3	2.9	4.9	0.7
United States .....	53.8	15.2	6.4	15.7	13.9	4.7

- Represents zero.

(Z) Less than half of the unit shown.

<sup>1</sup> Tracheal mites, nosema, hive beetle, wax moths, etc.

<sup>2</sup> Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.

<sup>3</sup> Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.

<sup>4</sup> Includes data for States not published in this table.

## Colony Health Stressors with Five or More Colonies – States and United States: October-December 2018

[Percent of colonies affected by stressors anytime during the quarter. A colony may be affected by multiple stressors during the quarter]

State	Varroa mites	Other pests and parasites <sup>1</sup>	Diseases <sup>2</sup>	Pesticides	Other <sup>3</sup>	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama .....	20.6	20.5	1.3	1.5	3.4	7.5
Arizona .....	20.6	8.3	3.1	(Z)	7.1	3.0
Arkansas .....	82.8	7.1	-	73.5	5.3	2.2
California .....	44.1	16.6	9.8	11.6	9.3	7.1
Colorado .....	73.2	5.9	1.0	(Z)	6.1	1.2
Connecticut .....	12.5	3.6	2.3	0.9	4.2	2.3
Florida .....	46.7	22.4	9.0	14.1	8.0	6.7
Georgia .....	41.4	17.4	9.2	6.9	5.6	7.8
Hawaii .....	70.5	83.3	(Z)	-	0.1	-
Idaho .....	64.9	47.4	9.6	15.9	7.0	4.5
Illinois .....	27.2	13.1	2.4	2.8	6.9	5.7
Indiana .....	51.3	21.3	23.8	64.6	35.4	2.3
Iowa .....	55.1	27.2	8.9	31.6	29.4	5.6
Kansas .....	62.0	31.3	26.0	43.7	1.6	26.4
Kentucky .....	57.1	41.9	1.2	6.8	5.5	4.3
Louisiana .....	16.6	6.7	0.3	5.9	1.0	1.7
Maine .....	9.3	5.1	(Z)	-	1.2	0.1
Maryland .....	16.6	5.3	0.3	1.2	4.9	1.7
Massachusetts .....	33.2	9.2	8.1	9.4	3.4	5.3
Michigan .....	52.0	31.2	15.6	15.1	2.4	6.6
Minnesota .....	28.4	5.2	4.2	7.9	3.8	2.4
Mississippi .....	26.5	6.7	0.2	0.5	3.0	4.5
Missouri .....	37.0	10.0	1.1	2.3	1.9	4.1
Montana .....	40.7	13.0	5.6	17.5	2.9	(Z)
Nebraska .....	3.0	0.7	0.7	0.3	2.9	1.0
New Jersey .....	14.0	3.2	0.1	-	5.4	0.3
New Mexico .....	81.3	0.8	3.7	0.1	8.0	1.2
New York .....	26.0	4.5	7.8	2.4	7.8	0.7
North Carolina .....	53.0	10.4	3.8	2.0	11.1	5.2
North Dakota .....	29.5	9.4	8.1	10.6	4.3	4.6
Ohio .....	29.3	5.8	0.1	8.1	2.4	9.9
Oklahoma .....	13.1	0.4	(Z)	-	(Z)	0.3
Oregon .....	44.1	4.6	16.0	14.8	0.9	0.2
Pennsylvania .....	26.9	10.7	6.7	13.0	7.8	5.4
South Carolina .....	32.2	16.1	0.3	1.4	1.3	5.5
South Dakota .....	12.8	1.3	7.0	1.6	2.1	2.5
Tennessee .....	49.8	20.8	1.9	11.4	9.1	5.1
Texas .....	18.6	18.5	5.5	3.0	6.2	3.7
Utah .....	48.0	9.8	5.5	8.0	6.5	4.9
Vermont .....	6.2	1.3	-	-	0.8	0.7
Virginia .....	57.1	38.4	12.1	13.1	5.8	2.8
Washington .....	34.5	0.5	11.7	4.9	3.3	1.3
West Virginia .....	29.5	15.2	0.6	7.2	4.2	6.8
Wisconsin .....	29.9	28.3	1.5	24.5	7.6	5.2
Wyoming .....	43.9	7.9	2.6	6.8	1.0	1.4
Other States <sup>4</sup> .....	12.7	0.2	0.2	5.4	1.5	5.4
United States .....	50.5	20.3	10.4	13.8	8.4	6.5

- Represents zero.

(Z) Less than half of the unit shown.

<sup>1</sup> Tracheal mites, nosema, hive beetle, wax moths, etc.

<sup>2</sup> Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.

<sup>3</sup> Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.

<sup>4</sup> Includes data for States not published in this table.

## Colony Health Stressors with Five or More Colonies – States and United States: January-March 2019

[Percent of colonies affected by stressors anytime during the quarter. A colony may be affected by multiple stressors during the quarter]

State	Varroa mites	Other pests and parasites <sup>1</sup>	Diseases <sup>2</sup>	Pesticides	Other <sup>3</sup>	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama .....	27.2	22.7	1.8	0.3	3.1	9.0
Arizona .....	25.8	7.9	6.5	16.2	8.4	0.2
Arkansas .....	19.5	1.5	3.3	55.3	0.7	2.9
California .....	43.5	13.4	6.4	12.3	8.7	5.6
Colorado .....	11.2	0.3	-	-	2.5	0.6
Connecticut .....	10.1	1.3	-	-	3.6	1.7
Florida .....	46.9	24.8	5.5	22.9	7.4	5.5
Georgia .....	69.6	17.8	7.4	9.6	10.6	4.9
Hawaii .....	72.1	64.9	0.1	0.7	2.9	-
Idaho .....	24.5	8.0	8.0	9.2	8.6	(Z)
Illinois .....	33.3	14.7	3.1	0.7	15.5	10.1
Indiana .....	15.6	8.8	2.6	5.5	7.1	1.7
Iowa .....	34.8	1.7	0.6	0.3	7.7	3.5
Kansas .....	102.0	7.8	2.5	12.2	21.6	4.0
Kentucky .....	21.6	12.9	0.1	5.3	10.7	4.6
Louisiana .....	57.8	1.3	0.1	0.3	1.0	0.7
Maine .....	2.3	0.1	-	-	1.4	0.8
Maryland .....	12.6	5.1	0.2	(Z)	10.1	2.4
Massachusetts .....	10.3	-	-	4.3	6.3	0.9
Michigan .....	18.2	5.8	1.5	0.2	12.2	0.7
Minnesota .....	1.3	0.2	1.9	-	2.0	0.8
Mississippi .....	14.6	71.0	64.8	48.4	1.9	5.5
Missouri .....	5.4	2.3	1.9	0.5	5.4	3.2
Montana .....	15.1	(Z)	-	0.8	0.8	1.1
Nebraska .....	32.3	1.3	32.0	0.8	2.2	0.1
New Jersey .....	15.3	4.4	-	-	3.5	0.6
New Mexico .....	3.5	1.1	0.6	-	1.4	0.3
New York .....	10.6	2.5	1.7	1.7	7.7	9.0
North Carolina .....	16.4	2.0	0.2	0.7	2.2	3.4
North Dakota .....	6.9	-	-	6.5	0.4	1.3
Ohio .....	49.3	9.9	11.1	1.1	6.7	3.1
Oklahoma .....	7.7	0.3	-	-	(Z)	(Z)
Oregon .....	18.0	0.1	0.2	0.2	2.7	0.5
Pennsylvania .....	15.3	4.6	3.7	4.0	7.5	9.5
South Carolina .....	18.5	14.5	(Z)	1.7	12.4	1.0
South Dakota .....	0.8	(Z)	-	2.5	0.8	2.2
Tennessee .....	62.8	23.6	5.1	0.9	7.7	7.1
Texas .....	26.1	6.5	5.3	8.3	6.9	3.0
Utah .....	22.9	-	0.1	-	0.3	8.8
Vermont .....	6.2	0.1	2.4	-	0.2	1.2
Virginia .....	16.6	12.8	0.8	0.3	3.9	9.3
Washington .....	22.3	0.8	0.6	0.3	0.8	0.2
West Virginia .....	10.3	3.2	1.1	0.2	5.0	1.3
Wisconsin .....	15.9	3.2	0.7	1.1	13.8	5.0
Wyoming .....	0.7	-	0.1	-	0.5	2.3
Other States <sup>4</sup> .....	6.9	1.8	0.3	-	2.1	1.6
United States .....	45.6	14.8	7.1	13.6	9.0	5.2

- Represents zero.

(Z) Less than half of the unit shown.

<sup>1</sup> Tracheal mites, nosema, hive beetle, wax moths, etc.

<sup>2</sup> Includes American and European foulbrood, chalkbrood, stonebrood, paralysis (acute and chronic), kashmir, deformed wing, sacbrood, IAPV, Lake Sinai II, etc.

<sup>3</sup> Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.

<sup>4</sup> Includes data for States not published in this table.

**Colonies Lost with Colony Collapse Disorder Symptoms with Five or More Colonies – United States:  
Quarterly January-December 2018 and 2019**

[Loss reported that met all of the following criteria: 1) Little to no build-up of dead bees in the hive or at the hive entrance 2) Rapid loss of adult honey bee population despite the presence of queen, capped brood, and food reserves 3) Absence or delayed robbing of the food reserves 4) Loss not attributable to varroa or nosema loads. Blank cells indicate estimation period has not yet begun]

Year	January- March	April- June	July- September	October- December
	(number)	(number)	(number)	(number)
2018 .....	81,140	49,030	78,270	122,240
2019 .....	59,940			

## Statistical Methodology

**Survey Procedures:** Data for operations with honey bee colonies are collected quarterly from a stratified sample of operations that responded as having five or more honey bee colonies on the *Bee and Honey Inquiry* and from the NASS list frame. NASS Regional Field Offices maintain a list of all known operations with honey bees and use known sources of producers to update their lists. All operations are mailed a questionnaire and given adequate time to respond by mail or electronic data reporting (EDR). Those that do not respond by mail or EDR are telephoned or possibly enumerated in person.

**Estimation Procedures:** Estimates were prepared by the Agricultural Statistics Board after reviewing recommendations and analysis submitted by each Regional Field Office. All data were analyzed for unusual values. Data from each operation were compared to their own past operating profile and to trends from similar operations. Data for missing operations were estimated based on similar operations or historical data. National and State survey data were reviewed for reasonableness with each other and estimates from the previous quarters using a balance sheet.

**Revision Policy:** The previous year's estimates are subject to revision when current year's estimates are made. Revisions are the result of late reports or corrected data.

**Reliability:** Since all operations with honey bees are not included in the sample, survey estimates are subject to sampling variability. Survey results are also subject to non-sampling errors such as omissions, duplication, and mistakes in reporting, recording, and processing the data. While these errors cannot be measured directly, they are minimized through strict quality controls in the data collection process and a careful review of all reported data for consistency and reasonableness.

## Terms and Definitions of Honey Bee Colony Estimates

**Added colonies:** A new or replacement, surviving colony that was either created or purchased whole by an operation.

**Colony:** A hive containing a queen honey bee and attendant worker bees and/or drone bees.

**Colony Collapse Disorder (CCD) criteria:** Colonies reported as being lost due to CCD must have fully met four criteria: 1) Little to no build-up of dead bees in the hive or at the hive entrance 2) Rapid loss of adult honey bee population despite the presence of queen, capped brood, and food reserves 3) Absence or delayed robbing of the food reserves 4) Loss not attributable to varroa or noseema loads. Colonies lost due to CCD were collected on a quarterly basis for operations with five or more colonies. Colonies lost due to CCD on operations with less than five colonies were collected annually and for the year as a whole.

**Lost colony:** A completely failed colony, loss of most workers, and possibly the queen. Colony is no longer viable. Sometimes referred to as a dead out.

**Maximum colonies:** Refers to the sum of colonies in a state on the first of the quarter plus all those moved into the state during that period. Maximum colonies is considered the base number from which a data user can do further analysis. It does not include the colonies that were added, lost, or renovated in the state. Colonies are counted in every state they were in during the quarter; therefore, a national level maximum number of colonies cannot be calculated due to duplication.

**Nuc:** A smaller sized hive box with reduced numbers of bees and brood, usually containing a queen; used for expansion of the apiary operation or renovating an existing colony.

**Package:** A shipping container with several pounds of honey bees that may or may not include a queen; used for expansion of the apiary operation or renovating an existing colony.

**Percent lost:** The state-level percentage of colonies lost is the number of colonies lost in that state divided by the maximum colonies for that state. The national level percentage of colonies lost is the total number of all colonies lost in the United States divided by the number of colonies on the first of the quarter.

**Percent renovated:** The state-level percentage of colonies renovated is the number of colonies renovated in that state divided by the maximum colonies for that state. The national level percentage of colonies renovated is the total number of all colonies renovated in the United States divided by the number of colonies on the first of the quarter.

**Renovated colony:** An existing colony that was requeened or received a nuc or package.

**Stressors:** State level colony health stressors for operations with five or more colonies are the percent of the maximum colonies reported to be affected, by quarter. The national level colony stressors is the summed number for the United States divided by the number of colonies on the first of the quarter.

## Information Contacts

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to [nass@nass.usda.gov](mailto:nass@nass.usda.gov)

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Tony Dorn, Head, Poultry and Specialty Commodities Section .....	(202) 690-3223
Holly Brenize – Poultry Slaughter.....	(202) 720-0585
Alissa Cowell-Mytar – Cold Storage, Capacity of Refrigerated Warehouses .....	(202) 720-4751
Liana Cuffman – Catfish and Trout, Egg Products, Mink, Census of Aquaculture .....	(202) 720-8784
Adam Peters – Broiler Hatchery, Chicken Hatchery .....	(202) 690-3237
Kim Linonis – Layers, Eggs .....	(202) 690-3676
Fatema Haque – Turkey Hatchery, Turkeys Raised .....	(202) 720-3244
Vacant – Cost of Pollination, Honey, Honey Bee Colonies .....	(202) 720-6147

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- All reports are available electronically, at no cost, on the NASS web site: [www.nass.usda.gov](http://www.nass.usda.gov)
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- Cornell’s Mann Library has launched a new website housing NASS’s and other agency’s archived reports. The new website, <https://usda.library.cornell.edu>. All email subscriptions containing reports will be sent from the new website, <https://usda.library.cornell.edu>. To continue receiving the reports via e-mail, you will have to go to the new website, create a new account and re-subscribe to the reports. If you need instructions to set up an account or subscribe, they are located at: <https://usda.library.cornell.edu/help>. You should whitelist [notifications@usda-esmis.library.cornell.edu](mailto:notifications@usda-esmis.library.cornell.edu) in your email client to avoid the emails going into spam/junk folders.

For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: [nass@usda.gov](mailto:nass@usda.gov).

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