



Honey Bee Colonies

ISSN: 2470-993X

Released May 12, 2016, by the National Agricultural Statistics Service (NASS), Agricultural Statistics Board, United States Department of Agriculture (USDA).

January 1 Honey Bee Colonies Down 8 Percent for Operations with Five or More Colonies

Honey bee colonies for operations with five or more colonies in the United States as of January 1, 2016 totaled 2.59 million. This is 8 percent below the 2.82 million colonies on January 1, 2015. During 2015, honey bee colonies on April 1, July 1, and October 1 were 2.85 million, 3.13 million, and 2.87 million, respectively.

Honey bee colonies lost for operations with five or more colonies during the quarter of January-March 2016, was 429 thousand colonies or 17 percent lost. The quarter of January-March 2015 had a loss of 500 thousand colonies or 18 percent, the highest honey bee colonies loss of the five quarters. The quarter of April-June 2015, at 353 thousand or 12 percent, showed the least amount of lost honey bee colonies.

Honey bee colonies added for operations with five or more colonies during the quarter of January-March 2016 was 378 thousand colonies. The quarter of April-June 2015, added 662 thousand colonies, the highest number of honey bee colonies added of the five quarters. The quarter of October-December 2015, at 117 thousand, showed the least amount of honey bee colonies added.

Honey bee colonies renovated for operations with five or more colonies during the quarter of January-March 2016 was 158 thousand colonies or 6 percent. This is the lowest number of colonies renovated during the five quarters. The number of colonies renovated during the quarter of January-March 2015 was 271 thousand or 10 percent. The highest number of honey bee colonies renovated for any quarter, at 693 thousand, occurred during April-June 2015. Renovated colonies are those that were requeened or received new honey bees through 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 each of the quarters surveyed. The quarter of January-March 2016 showed varroa mites at 34.3 percent. The quarter of April-June 2015 showed the highest percentage of varroa mites at 43.4 percent affected.

Colonies Lost with Colony Collapse Disorder Symptoms for Operations with Five or More Colonies

Colonies with 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, peaked at 114 thousand colonies lost during January-March 2016. That same quarter a year ago showed 92.3 thousand colonies lost.

Honey Bee Operations with Less than Five Colonies

Honey bee colonies for operations with less than five colonies in the United States on January 1, 2015 were 50.0 thousand. Honey bee colonies on April 1, July 1, and October 1, 2015; 43.0 thousand, 52.0 thousand, and 49.0 thousand, respectively.

Honey bee colonies lost for operations with less than five colonies during the quarter of January-March 2015, was 15.5 thousand colonies, the highest honey bee colonies loss during 2015. The quarter of April-June 2015, at 5.50 thousand, showed the least amount of lost honey bee colonies during the year.

Honey bee colonies added for operations with less than five colonies during the quarter of April-June 2015, was 15.0 thousand colonies, the highest honey bee colonies added during the year. The quarter of October-December 2015, at 860, showed the least amount of added honey bee colonies.

Honey bee colonies renovated for operations with less than five colonies varied by quarter. The highest number of honey bee colonies renovated for any quarter, at 3.80 thousand, occurred during April-June 2015. The quarter of October-December 2015, with 470, was the lowest number of honey bee colonies renovated for any quarter.

Colony Stressor for Operations with Less than Five Colonies

Unknown colony health stressors, at 20.8 percent, was the highest for operations with less than five colonies during 2015. Varroa mites was the next ranked stressor at 19.8 percent.

Colonies Lost with Colony Collapse Disorder Symptoms for Operations with Less than Five Colonies

Colonies with loss reported that meet 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, totaled 7.00 thousand colonies during 2015.

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Number of Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: January 1, 2015 and January-March 2015

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)
Alabama	7,000	7,000	1,800	26	2,800	250	4
Arizona	35,000	35,000	4,600	13	3,400	2,100	6
Arkansas	13,000	14,000	1,500	11	1,200	90	1
California	1,440,000	1,690,000	255,000	15	250,000	124,000	7
Colorado	3,500	12,500	1,500	12	200	140	1
Connecticut	3,900	3,900	870	22	290	-	-
Florida	305,000	315,000	42,000	13	54,000	25,000	8
Georgia	104,000	105,000	14,500	14	47,000	9,500	9
Hawaii	10,500	10,500	380	4	3,400	760	7
Idaho	81,000	88,000	3,700	4	2,600	8,000	9
Illinois	6,000	10,500	4,200	40	2,300	390	4
Indiana	9,000	9,500	2,100	22	490	120	1
Iowa	12,500	17,500	3,100	18	1,700	270	2
Kansas	4,600	7,000	1,600	23	450	70	1
Kentucky	7,500	10,500	4,100	39	250	-	-
Louisiana	51,000	51,000	8,000	16	3,100	6,500	13
Maine	3,100	6,500	380	6	20	-	-
Maryland	7,500	10,000	4,100	41	1,600	870	9
Massachusetts	2,900	4,600	1,000	22	260	120	3
Michigan	16,500	60,000	11,500	19	7,500	2,400	4
Minnesota	28,000	74,000	3,700	5	690	530	1
Mississippi	34,000	76,000	8,500	11	22,000	7,500	10
Missouri	12,000	13,000	2,000	15	220	910	7
Montana	8,500	36,000	2,200	6	1,400	1,100	3
Nebraska	10,000	31,000	2,600	8	120	310	1
New Jersey	6,000	9,000	1,100	12	570	1,600	18
New Mexico	7,000	7,000	690	10	190	600	9
New York	27,000	30,000	6,500	22	430	950	3
North Carolina	24,000	26,000	7,000	27	6,000	690	3
North Dakota	57,000	120,000	620	1	1,800	530	(Z)
Ohio	18,000	22,000	10,500	48	5,000	3,300	15
Oklahoma	9,500	26,000	6,000	23	2,600	260	1
Oregon	77,000	87,000	6,500	8	4,300	2,400	3
Pennsylvania	14,000	21,000	6,500	31	360	-	-
South Carolina	17,000	17,500	2,700	15	2,700	1,400	8
South Dakota	50,000	97,000	4,600	5	8,500	2,800	3
Tennessee	9,500	9,500	2,000	21	1,000	190	2
Texas	191,000	250,000	26,000	10	82,000	51,000	20
Utah	6,000	24,000	3,300	14	2,500	290	1
Vermont	5,500	5,500	700	13	1,200	20	(Z)
Virginia	8,000	9,000	2,500	28	800	460	5
Washington	52,000	105,000	14,000	13	13,500	9,000	9
West Virginia	4,700	6,000	1,800	30	570	60	1
Wisconsin	16,500	29,000	8,000	28	3,100	2,500	9
Wyoming	5,500	12,000	2,000	17	2,000	1,400	12
Other States ⁵	3,410	8,990	2,080	23	870	150	2
United States	2,824,610	(X)	500,020	18	546,980	270,530	10

- Represents zero.

(X) Not applicable.

(Z) Less than half of the unit shown.

¹ January 1 number of colonies 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 January 1 number of colonies.

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 January 1 number of colonies.

⁵ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Number of Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: April 1, 2015 and April-June 2015

State	April 1 number of colonies	April-June					
		Maximum colonies ¹	Lost colonies	Percent lost ²	Added colonies	Renovated colonies ³	Percent renovated ⁴
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama	7,500	7,500	860	12	1,900	680	9
Arizona	33,000	33,000	5,500	17	19,500	7,000	21
Arkansas	13,500	13,500	1,900	14	11,500	5,500	41
California	1,040,000	1,050,000	104,000	10	170,000	285,000	27
Colorado	12,000	25,000	1,900	8	6,000	3,500	14
Connecticut	3,000	3,000	80	3	1,100	150	5
Florida	210,000	215,000	35,000	16	44,000	24,000	11
Georgia	114,000	124,000	23,000	19	25,000	19,000	15
Hawaii	13,500	13,500	120	1	1,100	1,200	9
Idaho	62,000	72,000	6,500	9	16,500	10,500	15
Illinois	9,500	9,500	1,300	14	6,000	1,500	16
Indiana	8,000	12,500	1,300	10	4,900	4,300	34
Iowa	12,500	24,000	1,400	6	6,500	3,100	13
Kansas	6,000	7,000	670	10	2,800	420	6
Kentucky	7,500	8,500	980	12	3,600	1,500	18
Louisiana	44,000	45,000	1,800	4	6,500	8,000	18
Maine	4,600	30,000	3,200	11	3,500	700	2
Maryland	8,000	11,000	370	3	2,600	710	7
Massachusetts	4,100	14,000	320	2	940	510	4
Michigan	58,000	88,000	9,500	11	13,500	5,500	6
Minnesota	71,000	125,000	12,500	10	20,000	21,000	17
Mississippi	89,000	89,000	11,000	12	5,500	10,000	11
Missouri	11,500	12,500	500	4	1,900	1,800	14
Montana	36,000	210,000	4,200	2	14,000	33,000	16
Nebraska	29,000	68,000	4,100	6	15,500	4,600	7
New Jersey	8,500	19,000	1,800	10	2,100	2,900	15
New Mexico	6,500	8,500	1,000	12	1,500	330	4
New York	24,000	34,000	1,100	3	11,000	1,500	4
North Carolina	19,500	23,000	1,800	8	5,500	3,300	14
North Dakota	121,000	450,000	29,000	6	39,000	61,000	14
Ohio	17,500	19,000	2,100	11	10,000	6,000	32
Oklahoma	25,000	27,000	2,200	8	5,500	2,200	8
Oregon	82,000	95,000	5,500	6	14,500	9,500	10
Pennsylvania	15,500	19,000	1,600	8	8,500	2,600	14
South Carolina	17,500	18,500	950	5	1,100	2,000	11
South Dakota	100,000	290,000	21,000	7	27,000	23,000	8
Tennessee	7,500	7,500	730	10	3,600	920	12
Texas	305,000	315,000	33,000	11	76,000	94,000	30
Utah	24,000	27,000	3,400	13	10,000	3,900	14
Vermont	6,000	6,000	100	2	580	50	1
Virginia	7,500	7,500	270	4	2,100	430	6
Washington	105,000	127,000	5,000	4	15,000	13,000	10
West Virginia	4,700	4,700	570	12	2,900	590	13
Wisconsin	25,000	65,000	4,600	7	10,000	5,500	9
Wyoming	12,000	25,000	3,200	13	7,500	5,000	20
Other States ⁵	8,600	11,200	1,940	17	4,140	1,960	18
United States	2,849,500	(X)	352,860	12	661,860	692,850	24

(X) Not applicable.

¹ April 1 number of colonies 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 April 1 number of colonies.

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 April 1 number of colonies.

⁵ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Number of Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: July 1, 2015 and July-September 2015

State	July 1 number of colonies	July-September					
		Maximum colonies ¹	Lost colonies	Percent lost ²	Added colonies	Renovated colonies ³	Percent Renovated ⁴
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama	8,500	9,000	1,400	16	160	260	3
Arizona	40,000	40,000	6,000	15	4,300	15,500	39
Arkansas	23,000	30,000	9,000	30	500	210	1
California	730,000	800,000	76,000	10	40,000	93,000	12
Colorado	29,000	30,000	4,500	15	1,400	1,400	5
Connecticut	3,700	3,700	50	1	190	440	12
Florida	164,000	220,000	36,000	16	37,000	29,000	13
Georgia	108,000	110,000	13,000	12	19,500	15,500	14
Hawaii	14,500	14,500	2,700	19	1,200	5,500	38
Idaho	80,000	128,000	14,000	11	5,500	11,500	9
Illinois	14,000	14,000	1,400	10	1,300	1,100	8
Indiana	15,000	15,000	1,600	11	1,400	420	3
Iowa	29,000	37,000	3,000	8	640	680	2
Kansas	9,000	9,500	1,000	11	100	160	2
Kentucky	10,000	10,000	1,300	13	170	550	6
Louisiana	50,000	55,000	2,000	4	2,300	1,800	3
Maine	6,000	6,000	450	8	410	140	2
Maryland	7,000	7,500	680	9	730	70	1
Massachusetts	7,500	7,500	560	8	290	400	5
Michigan	89,000	89,000	7,000	8	3,300	3,800	4
Minnesota	133,000	136,000	32,000	24	640	2,300	2
Mississippi	23,000	34,000	3,500	10	260	110	(Z)
Missouri	14,000	14,000	1,200	9	700	630	5
Montana	140,000	156,000	10,500	7	3,200	10,000	6
Nebraska	67,000	77,000	6,000	8	500	6,000	8
New Jersey	18,500	18,500	210	1	190	500	3
New Mexico	6,500	6,500	1,600	25	1,300	650	10
New York	44,000	47,000	6,500	14	4,400	7,000	15
North Carolina	24,000	24,000	2,900	12	2,500	1,100	5
North Dakota	460,000	500,000	93,000	19	11,000	22,000	4
Ohio	23,000	23,000	1,900	8	2,300	880	4
Oklahoma	19,500	22,000	230	1	160	190	1
Oregon	68,000	100,000	8,500	9	8,000	21,000	21
Pennsylvania	25,000	25,000	1,800	7	1,800	2,400	10
South Carolina	12,000	12,000	2,000	17	880	580	5
South Dakota	295,000	295,000	53,000	18	2,100	13,000	4
Tennessee	10,000	10,000	1,200	12	500	350	4
Texas	76,000	136,000	16,500	12	5,500	4,800	4
Utah	31,000	36,000	8,000	22	1,400	2,200	6
Vermont	6,000	6,500	40	1	30	20	(Z)
Virginia	8,000	8,000	680	9	520	220	3
Washington	84,000	97,000	11,500	12	1,800	20,000	21
West Virginia	7,000	7,000	300	4	300	270	4
Wisconsin	60,000	62,000	9,000	15	1,300	4,300	7
Wyoming	29,000	35,000	2,500	7	270	440	1
Other States ⁵	12,180	12,280	900	7	1,050	700	6
United States	3,132,880	(X)	457,100	15	172,990	303,070	10

(X) Not applicable.

(Z) Less than half of the unit shown.

¹ July 1 number of colonies 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 July 1 number of colonies.

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 July 1 number of colonies.

⁵ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Number of Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: October 1, 2015 and October-December 2015

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)
Alabama	8,000	8,000	610	8	80	60	1
Arizona	36,000	39,000	12,000	31	3,000	16,000	41
Arkansas	23,000	27,000	2,400	9	1,900	-	-
California	750,000	1,260,000	149,000	12	39,000	75,000	6
Colorado	24,000	24,000	2,500	10	3,400	-	-
Connecticut	3,200	3,200	210	7	40	70	2
Florida	220,000	260,000	37,000	14	30,000	28,000	11
Georgia	110,000	121,000	18,000	15	4,400	1,900	2
Hawaii	13,000	13,000	690	5	2,700	760	6
Idaho	121,000	145,000	22,000	15	5,500	5,500	4
Illinois	14,000	14,000	690	5	-	30	(Z)
Indiana	11,500	11,500	1,100	10	140	-	-
Iowa	35,000	35,000	4,300	12	40	30	(Z)
Kansas	8,500	8,500	3,400	40	50	20	(Z)
Kentucky	8,500	8,500	1,100	13	20	10	(Z)
Louisiana	55,000	71,000	4,900	7	1,100	2,400	3
Maine	4,700	4,700	60	1	530	20	(Z)
Maryland	7,500	9,500	730	8	-	-	-
Massachusetts	4,500	4,500	260	6	30	30	1
Michigan	67,000	73,000	9,000	12	210	1,600	2
Minnesota	104,000	105,000	10,000	10	600	40	(Z)
Mississippi	31,000	34,000	1,500	4	500	230	1
Missouri	13,500	13,500	690	5	30	40	(Z)
Montana	116,000	123,000	10,000	8	1,000	80	(Z)
Nebraska	72,000	73,000	7,000	10	10	5,500	8
New Jersey	8,000	8,500	270	3	20	10	(Z)
New Mexico	6,000	6,000	290	5	290	30	1
New York	45,000	45,000	4,000	9	260	10	(Z)
North Carolina	22,000	22,000	2,200	10	510	70	(Z)
North Dakota	230,000	275,000	35,000	13	2,700	9,000	3
Ohio	19,000	19,000	2,400	13	200	140	1
Oklahoma	5,000	10,000	650	7	290	60	1
Oregon	100,000	114,000	8,500	8	200	1,400	1
Pennsylvania	22,000	23,000	2,500	11	1,300	6,500	28
South Carolina	10,000	17,500	2,200	13	640	1,000	6
South Dakota	194,000	205,000	9,000	4	2,400	-	-
Tennessee	8,500	10,000	1,100	11	70	420	4
Texas	125,000	250,000	25,000	10	13,000	2,000	1
Utah	28,000	28,000	1,900	7	120	100	(Z)
Vermont	6,500	6,500	940	15	10	10	(Z)
Virginia	7,500	7,500	750	10	-	350	5
Washington	87,000	89,000	6,500	7	330	170	(Z)
West Virginia	7,000	7,000	610	9	190	140	2
Wisconsin	48,000	48,000	6,500	14	210	10	(Z)
Wyoming	24,000	25,000	1,300	5	30	-	-
Other States ⁵	11,360	12,560	1,630	13	100	50	(Z)
United States	2,874,760	(X)	412,380	14	117,150	158,790	6

- Represents zero.

(X) Not applicable.

(Z) Less than half of the unit shown.

¹ October 1 number of colonies plus all colonies moved into that state during the quarter.

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		Maximum colonies ¹	Lost colonies	Percent lost ²	Added colonies	Renovated colonies ³	Percent renovated ⁴
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)
Alabama	7,500	7,500	1,700	23	1,200	180	2
Arizona	30,000	30,000	4,700	16	2,200	960	3
Arkansas	27,000	27,000	5,000	19	4,700	2,200	8
California	1,140,000	1,410,000	210,000	15	175,000	63,000	5
Colorado	6,000	7,000	570	8	-	20	(Z)
Connecticut	2,700	2,700	270	10	70	10	(Z)
Florida	245,000	265,000	45,000	17	36,000	18,500	7
Georgia	100,000	100,000	20,000	20	28,000	6,000	6
Hawaii	15,000	15,000	280	2	570	1,100	7
Idaho	90,000	97,000	6,500	7	5,500	6,500	7
Illinois	7,000	7,500	1,300	17	470	20	(Z)
Indiana	6,500	6,500	770	12	40	-	-
Iowa	16,500	16,500	3,200	19	90	-	-
Kansas	4,700	4,700	980	21	-	200	4
Kentucky	7,000	7,000	1,300	19	110	70	1
Louisiana	68,000	69,000	9,500	14	7,500	5,500	8
Maine	2,200	3,700	170	5	-	-	-
Maryland	6,500	6,500	1,400	22	40	20	(Z)
Massachusetts	3,000	3,000	370	12	120	330	11
Michigan	25,000	37,000	5,000	14	2,300	110	(Z)
Minnesota	37,000	39,000	6,000	15	4,400	10	(Z)
Mississippi	24,000	77,000	6,500	8	11,000	1,700	2
Missouri	11,500	11,500	1,200	10	930	290	3
Montana	15,500	48,000	840	2	11,500	-	-
Nebraska	10,500	21,000	330	2	40	30	(Z)
New Jersey	8,500	8,500	1,000	12	80	40	1
New Mexico	6,000	6,500	1,700	26	10	70	1
New York	31,000	31,000	4,000	13	140	1,400	5
North Carolina	18,500	24,000	2,500	10	80	840	4
North Dakota	82,000	173,000	17,000	10	-	-	-
Ohio	16,000	16,000	4,200	26	760	100	1
Oklahoma	6,000	6,000	2,900	48	60	510	9
Oregon	70,000	92,000	2,800	3	3,800	1,800	2
Pennsylvania	12,500	12,500	2,900	23	220	340	3
South Carolina	16,500	16,500	3,400	21	2,100	1,800	11
South Dakota	30,000	91,000	770	1	30	-	-
Tennessee	9,000	9,000	1,700	19	100	150	2
Texas	240,000	290,000	29,000	10	73,000	42,000	15
Utah	12,000	12,500	1,700	14	710	100	1
Vermont	5,500	5,500	410	8	-	-	-
Virginia	6,500	6,500	1,100	17	500	130	2
Washington	78,000	135,000	13,000	10	4,200	2,000	2
West Virginia	6,500	7,500	1,700	23	-	10	(Z)
Wisconsin	22,000	23,000	2,900	13	530	-	-
Wyoming	2,700	5,000	340	7	-	-	-
Other States ⁵	7,290	7,890	900	11	60	10	(Z)
United States	2,594,590	(X)	428,800	17	378,160	158,050	6

- Represents zero.

(X) Not applicable.

(Z) Less than half of the unit shown.

¹ January 1 number of colonies 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 January 1 number of colonies.

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 January 1 number of colonies.

⁵ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Colony Health Stressors with Five or More Colonies – States and United States: January-March 2015

[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 ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	10.0	5.4	(Z)	2.2	9.1	9.4
Arizona	26.9	20.5	0.1	(Z)	1.8	3.1
Arkansas	17.6	11.4	1.5	3.4	1.0	1.0
California	24.7	7.2	3.0	7.5	6.5	2.8
Colorado	14.6	0.9	1.8	0.6	2.6	5.9
Connecticut	2.5	1.4	(Z)	(Z)	21.2	2.4
Florida	22.3	13.5	0.8	8.9	5.1	4.4
Georgia	6.2	4.9	3.3	2.6	4.8	10.5
Hawaii	38.8	37.7	1.6	(Z)	2.0	(Z)
Idaho	39.8	6.7	12.5	4.8	8.9	4.9
Illinois	12.3	6.9	0.7	0.4	12.6	11.6
Indiana	20.7	0.3	0.2	0.3	22.3	11.7
Iowa	26.0	0.7	4.6	3.4	18.0	3.4
Kansas	32.7	1.3	1.1	14.2	9.5	3.4
Kentucky	10.8	10.7	2.5	2.5	22.7	12.9
Louisiana	17.2	4.7	4.3	1.7	3.1	2.1
Maine	4.4	0.1	(Z)	(Z)	7.5	1.9
Maryland	10.1	1.8	0.4	(Z)	24.2	12.4
Massachusetts	23.5	3.5	2.1	2.8	7.6	4.7
Michigan	14.3	3.1	1.1	1.6	8.3	4.6
Minnesota	1.4	0.1	(Z)	0.1	1.6	2.1
Mississippi	9.4	8.2	0.1	2.1	1.2	1.1
Missouri	13.1	6.0	2.2	4.2	11.8	6.3
Montana	8.7	0.5	0.6	0.8	2.3	7.9
Nebraska	5.9	0.1	0.1	0.5	0.3	3.0
New Jersey	40.1	13.2	30.4	11.1	19.5	16.7
New Mexico	17.1	0.1	(Z)	0.2	1.3	0.4
New York	7.6	2.6	0.5	4.4	12.4	8.3
North Carolina	35.5	2.3	0.1	22.9	6.2	12.2
North Dakota	1.7	1.7	(Z)	(Z)	2.5	0.1
Ohio	10.7	1.6	1.0	3.0	17.8	3.1
Oklahoma	14.5	10.1	0.5	(Z)	2.1	2.9
Oregon	20.2	2.0	0.4	0.6	1.6	1.1
Pennsylvania	28.1	6.3	1.9	1.9	17.8	6.3
South Carolina	10.5	2.3	0.2	0.3	3.6	2.9
South Dakota	1.2	0.9	0.3	0.5	1.2	1.8
Tennessee	22.2	17.1	(Z)	(Z)	13.0	4.4
Texas	21.5	12.2	5.0	11.1	2.3	6.2
Utah	13.6	0.9	0.1	4.4	3.0	0.5
Vermont	2.3	5.6	(Z)	(Z)	5.8	4.9
Virginia	19.0	9.4	2.3	(Z)	9.8	11.9
Washington	21.5	0.5	0.3	3.6	6.0	1.1
West Virginia	18.0	7.3	2.2	2.1	14.6	6.1
Wisconsin	18.8	1.6	2.7	8.5	8.3	5.8
Wyoming	0.9	(Z)	(Z)	(Z)	0.7	(Z)
Other States ⁴	0.8	0.1	(Z)	0.1	0.9	(Z)
United States	25.2	8.6	3.1	7.4	6.9	4.3

(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.

⁴ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Colony Health Stressors with Five or More Colonies – States and United States: April-June 2015

[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 ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	16.7	42.5	(Z)	2.3	3.2	4.1
Arizona	8.4	32.1	0.5	20.1	28.2	0.3
Arkansas	65.9	63.4	7.0	22.6	27.4	9.3
California	50.9	21.5	7.8	23.0	14.2	3.1
Colorado	38.6	1.8	4.6	2.8	3.4	6.6
Connecticut	10.2	0.4	1.9	0.8	1.0	0.7
Florida	44.2	26.4	2.7	17.7	13.6	5.4
Georgia	52.8	17.5	2.9	28.7	11.5	4.1
Hawaii	60.1	61.0	0.3	0.1	3.2	0.1
Idaho	25.5	6.7	6.5	6.0	13.7	0.3
Illinois	10.3	3.7	0.2	2.5	2.3	2.4
Indiana	15.4	1.8	7.0	0.5	4.4	2.0
Iowa	21.5	5.1	2.9	7.8	2.7	1.9
Kansas	14.4	2.4	0.9	0.1	3.5	4.9
Kentucky	21.7	18.2	5.3	1.8	9.5	2.9
Louisiana	36.4	3.7	0.2	1.1	5.0	0.5
Maine	72.1	34.5	0.1	34.5	0.5	0.1
Maryland	4.9	1.3	0.2	2.5	1.6	1.5
Massachusetts	66.8	61.7	0.2	61.8	4.4	3.1
Michigan	26.9	13.0	0.6	9.1	16.4	3.1
Minnesota	25.4	6.2	1.4	16.5	10.1	9.3
Mississippi	10.1	6.0	0.3	0.1	2.3	1.7
Missouri	5.1	6.2	3.1	1.6	1.0	7.4
Montana	9.0	0.9	0.8	5.3	1.6	(Z)
Nebraska	6.5	6.9	(Z)	1.4	2.1	1.5
New Jersey	52.5	3.6	0.3	26.1	1.0	2.4
New Mexico	38.8	(Z)	15.5	5.9	0.4	2.7
New York	19.1	12.5	4.5	4.4	3.3	1.1
North Carolina	51.0	14.3	0.3	3.5	5.8	3.0
North Dakota	15.5	3.0	0.1	4.3	4.6	0.3
Ohio	15.8	4.1	3.0	11.9	11.2	29.0
Oklahoma	66.1	6.3	(Z)	0.1	7.0	1.9
Oregon	39.3	20.9	13.2	16.0	5.8	0.4
Pennsylvania	11.4	5.8	2.6	1.6	6.7	2.1
South Carolina	29.9	5.4	0.5	1.4	3.7	0.7
South Dakota	9.8	11.1	1.8	2.0	1.4	1.5
Tennessee	47.8	26.3	1.8	9.8	2.6	3.0
Texas	19.3	22.9	2.5	6.6	7.4	3.0
Utah	27.2	10.8	1.5	12.3	5.6	1.2
Vermont	3.7	1.9	0.1	(Z)	1.3	0.1
Virginia	26.2	13.0	1.8	0.2	3.0	4.5
Washington	48.7	0.2	2.2	2.0	3.2	0.5
West Virginia	15.6	8.3	0.6	2.7	4.6	4.4
Wisconsin	35.3	5.6	1.0	8.2	15.2	2.3
Wyoming	19.1	17.9	0.8	3.6	8.3	2.4
Other States ⁴	36.3	9.1	(Z)	(Z)	0.1	(Z)
United States	43.4	19.5	4.9	16.6	11.6	3.5

(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.

⁴ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Colony Health Stressors with Five or More Colonies – States and United States: July-September 2015

[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 ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	63.1	70.6	(Z)	2.6	2.2	17.7
Arizona	53.5	24.8	5.4	17.3	7.6	5.1
Arkansas	69.2	32.4	0.9	5.0	1.8	1.4
California	39.9	20.4	12.5	19.6	15.0	4.7
Colorado	50.5	1.5	2.7	16.5	3.7	2.7
Connecticut	39.3	1.2	0.4	1.5	7.8	(Z)
Florida	39.5	21.7	6.7	22.9	21.9	3.4
Georgia	47.6	16.2	3.6	21.2	8.9	3.6
Hawaii	78.1	80.5	0.1	0.1	2.5	(Z)
Idaho	46.8	5.2	1.7	10.0	2.2	6.4
Illinois	7.7	3.0	0.6	0.4	3.4	1.0
Indiana	13.7	10.3	4.8	8.2	1.0	6.2
Iowa	17.4	5.8	0.1	4.7	5.6	3.4
Kansas	22.5	16.2	0.2	14.1	14.8	1.7
Kentucky	40.4	11.3	1.2	6.5	9.0	2.0
Louisiana	25.9	2.3	(Z)	1.6	3.0	0.2
Maine	9.9	3.4	13.2	(Z)	2.6	7.8
Maryland	26.9	19.1	2.9	22.8	7.1	2.0
Massachusetts	16.3	2.9	0.4	2.1	2.5	0.3
Michigan	44.6	16.3	7.3	13.7	1.8	8.8
Minnesota	33.3	14.6	7.4	27.4	7.0	7.2
Mississippi	45.5	2.2	(Z)	1.1	3.8	1.4
Missouri	11.1	11.7	3.0	2.0	2.1	1.4
Montana	52.5	16.4	10.7	2.3	6.4	5.3
Nebraska	33.2	10.3	10.9	13.2	4.6	4.3
New Jersey	7.2	1.0	0.1	(Z)	1.1	0.7
New Mexico	61.2	55.0	55.0	58.0	55.5	0.7
New York	40.0	14.3	5.7	17.1	8.8	1.5
North Carolina	33.9	27.9	0.7	7.5	5.7	8.5
North Dakota	33.8	15.5	8.1	12.3	4.1	3.7
Ohio	30.7	8.0	0.6	23.4	1.6	1.7
Oklahoma	1.6	2.3	0.1	0.1	0.6	0.4
Oregon	56.0	20.8	5.2	3.1	4.8	3.8
Pennsylvania	45.1	11.3	3.7	5.1	7.2	0.8
South Carolina	58.4	31.0	18.3	14.7	3.9	3.0
South Dakota	22.0	7.3	2.0	7.1	1.9	5.7
Tennessee	50.8	38.4	0.5	4.8	2.2	1.0
Texas	30.7	26.0	1.3	19.4	4.7	5.2
Utah	40.1	25.0	41.6	33.6	3.6	0.1
Vermont	22.7	0.5	(Z)	(Z)	0.4	(Z)
Virginia	29.0	14.2	1.3	3.7	3.5	8.9
Washington	45.6	3.7	2.3	1.4	3.8	0.3
West Virginia	21.7	5.3	1.0	1.5	3.0	1.1
Wisconsin	47.3	20.1	8.3	20.9	12.6	13.5
Wyoming	28.5	11.0	6.4	3.4	2.0	0.4
Other States ⁴	8.8	0.2	(Z)	0.4	0.7	0.2
United States	41.2	17.6	8.0	15.2	8.8	4.8

(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.

⁴ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Colony Health Stressors with Five or More Colonies – States and United States: October-December 2015

[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 ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	3.1	6.4	0.2	0.2	2.8	1.9
Arizona	50.1	1.7	1.1	3.5	0.5	15.5
Arkansas	38.1	9.7	0.1	8.2	8.5	0.6
California	37.3	12.7	6.2	11.7	10.5	7.3
Colorado	47.6	24.4	21.2	19.7	8.4	1.8
Connecticut	10.5	1.7	0.5	1.1	3.4	2.0
Florida	27.3	18.4	2.5	6.8	3.0	4.2
Georgia	43.5	13.9	5.3	4.5	3.7	1.3
Hawaii	31.0	33.9	0.2	(Z)	(Z)	(Z)
Idaho	38.9	0.6	4.3	4.0	2.8	4.5
Illinois	9.4	2.5	0.3	0.9	1.0	3.1
Indiana	15.1	0.5	6.3	0.1	0.6	3.7
Iowa	53.4	0.9	0.6	6.4	24.8	1.4
Kansas	44.5	24.8	0.2	25.1	33.9	19.0
Kentucky	22.2	14.8	0.4	9.8	7.2	1.7
Louisiana	10.9	1.0	(Z)	0.6	2.4	0.2
Maine	18.0	0.2	(Z)	(Z)	0.1	0.4
Maryland	5.6	2.0	0.1	(Z)	0.2	4.3
Massachusetts	31.4	1.6	6.2	1.9	2.6	1.1
Michigan	30.2	4.1	(Z)	4.1	3.2	3.7
Minnesota	43.6	8.7	8.4	25.0	3.8	8.9
Mississippi	10.6	2.5	0.3	(Z)	0.7	1.3
Missouri	2.8	6.0	3.3	0.1	0.8	1.5
Montana	35.5	19.8	14.4	11.4	3.2	13.9
Nebraska	15.5	(Z)	0.2	0.3	0.4	1.7
New Jersey	7.7	2.2	(Z)	0.4	0.4	1.2
New Mexico	30.9	0.3	0.2	8.4	0.6	1.7
New York	24.5	2.2	0.8	0.9	0.4	6.2
North Carolina	9.6	3.4	0.5	0.4	5.4	3.4
North Dakota	10.8	2.3	1.8	1.5	3.7	2.1
Ohio	36.3	8.8	2.0	7.3	14.5	2.1
Oklahoma	2.8	4.5	0.1	0.1	1.3	2.5
Oregon	16.4	1.3	1.5	1.5	1.7	1.5
Pennsylvania	32.2	4.3	1.0	0.3	0.8	1.0
South Carolina	14.2	2.9	0.4	1.7	5.8	(Z)
South Dakota	16.8	3.0	1.9	7.1	2.4	4.1
Tennessee	43.6	28.3	(Z)	4.6	7.1	3.6
Texas	20.9	8.7	2.7	5.4	2.2	8.0
Utah	75.8	9.1	6.4	0.2	4.4	0.4
Vermont	57.1	16.8	0.9	0.6	0.4	15.6
Virginia	26.3	17.2	0.4	(Z)	5.8	10.4
Washington	6.9	0.1	0.1	0.3	3.0	1.5
West Virginia	18.8	4.5	1.3	3.0	8.2	0.6
Wisconsin	49.4	15.6	2.5	21.9	6.6	21.4
Wyoming	45.0	3.3	6.6	10.5	11.3	3.9
Other States ⁴	8.2	(Z)	(Z)	(Z)	(Z)	8.0
United States	37.0	11.4	5.2	9.5	7.3	6.9

(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.

⁴ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Colony Health Stressors with Five or More Colonies – States and United States: January-March 2016

[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 ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	24.2	22.0	4.3	8.1	2.4	11.3
Arizona	32.8	2.8	(Z)	7.7	6.5	7.2
Arkansas	57.5	7.0	(Z)	0.5	1.9	8.1
California	38.5	15.2	9.0	12.6	8.4	4.3
Colorado	3.5	4.7	0.6	0.3	3.0	0.2
Connecticut	12.3	0.8	0.2	(Z)	7.7	1.7
Florida	21.7	6.3	0.5	5.4	1.9	1.5
Georgia	32.2	7.7	2.1	21.3	3.1	3.9
Hawaii	0.3	1.5	(Z)	0.1	0.8	(Z)
Idaho	31.7	2.3	2.1	5.9	5.5	0.3
Illinois	15.0	7.8	0.4	2.9	5.0	10.4
Indiana	17.4	3.7	0.9	0.3	7.2	5.5
Iowa	41.6	0.5	(Z)	2.1	34.4	12.2
Kansas	32.2	10.6	0.1	1.2	2.6	5.8
Kentucky	20.9	8.0	0.6	5.6	11.1	7.5
Louisiana	18.0	11.1	13.9	0.3	9.9	1.5
Maine	3.3	0.4	0.3	(Z)	0.8	1.4
Maryland	30.2	0.1	(Z)	11.0	7.8	0.8
Massachusetts	10.1	5.2	0.7	(Z)	3.1	1.1
Michigan	5.4	0.2	(Z)	0.5	1.2	10.3
Minnesota	11.8	6.9	0.1	11.3	7.1	14.2
Mississippi	8.5	1.1	(Z)	2.0	0.2	8.8
Missouri	17.8	6.2	0.3	5.4	4.0	5.4
Montana	0.8	(Z)	(Z)	0.6	0.2	0.1
Nebraska	1.7	0.4	0.1	0.2	0.8	0.4
New Jersey	5.5	0.8	0.2	0.4	1.2	8.2
New Mexico	69.0	0.4	31.5	(Z)	1.5	0.3
New York	27.5	5.9	1.5	7.6	9.5	2.6
North Carolina	9.6	2.5	1.9	2.7	4.0	2.5
North Dakota	(Z)	(Z)	(Z)	(Z)	(Z)	9.9
Ohio	41.9	4.4	0.2	1.3	10.2	5.3
Oklahoma	9.7	2.6	0.1	0.6	2.4	41.5
Oregon	20.9	15.0	5.3	(Z)	2.4	0.3
Pennsylvania	44.8	4.3	0.3	3.8	5.5	4.6
South Carolina	11.0	2.3	0.6	2.1	5.1	4.9
South Dakota	0.2	(Z)	(Z)	(Z)	0.4	0.3
Tennessee	19.7	7.1	0.2	3.7	10.1	10.9
Texas	21.0	10.6	2.5	10.2	4.0	2.7
Utah	28.8	7.6	0.1	0.4	1.9	0.6
Vermont	1.3	(Z)	0.3	(Z)	0.5	1.7
Virginia	32.7	7.2	(Z)	0.4	5.0	3.8
Washington	21.6	11.3	1.4	1.7	1.7	5.4
West Virginia	21.9	2.9	1.1	0.6	6.9	6.5
Wisconsin	22.0	1.5	1.0	12.2	8.8	9.4
Wyoming	(Z)	0.5	0.2	3.3	1.0	1.6
Other States ⁴	0.1	(Z)	(Z)	(Z)	13.3	(Z)
United States	34.3	12.6	6.2	10.5	7.0	5.4

(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.

⁴ Alaska, Delaware, Nevada, New Hampshire, and Rhode Island not published separately to avoid disclosing data for individual operations.

Colonies Lost with Colony Collapse Disorder Symptoms with Five or More Colonies – United States: Quarterly January-December 2015 and January-March 2016

[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]

Item	January-March	April-June	July-September	October-December	January-March ¹
	(number)	(number)	(number)	(number)	(number)
Colonies lost	92,250	56,760	88,390	87,610	113,930

¹ 2016.

Number of Colonies, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Inventory of Less than Five Colonies – United States: First of Quarter and Quarterly 2015

Quarter	Colonies on first of the quarter ¹	Lost colonies	Percent lost ²	Added colonies	Renovated colonies ³	Percent renovated ⁴
	(number)	(number)	(percent)	(number)	(number)	(percent)
January-March	50,000	15,500	31	8,000	3,200	6
April-June	43,000	5,500	13	15,000	3,800	9
July-September	52,000	6,500	13	2,800	1,400	3
October-December	49,000	7,000	14	860	470	1

¹ Number of colonies on January 1, April 1, July 1, and October 1.

² Percent lost is the number of lost colonies divided by the first of quarter number of colonies.

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 the first of quarter number of colonies.

Colony Health Stressors with Less than Five Colonies – United States: Annual 2015

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

Item	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Colonies affected	19.8	12.5	2.2	4.9	15.5	20.8

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.

Colonies Lost with Colony Collapse Disorder Symptoms with Less than Five Colonies – United States: Annual 2015

[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]

Item	Annual
	(number)
Colonies lost	7,000

Statistical Methodology

Survey Procedures: Data for operations with honey bee colonies are collected from a stratified sample of operations that responded as having honey bees on the *Bee and Honey Inquiry* and from the NASS list frame. For operations with five or more colonies, data was collected on a quarterly basis; operations with less than five colonies were collected with one, annual survey. 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. Estimates will also be reviewed after data from the 5-year Census of Agriculture are available. No revisions will be made after that date.

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 queen 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 nosema 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. The health percentages for operations with less than five colonies are the percent of colonies reported to be affected during the entire year divided by the maximum number of colonies for all purposes reported to be on operations with less than five colonies, collected from the *Bee and Honey Inquiry*.

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

Dan Kerestes, Chief, Livestock Branch	(202) 720-3570
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Aaron Cosgrove – Egg Products, Poultry Slaughter, Trout Production	(202) 690-3237
Alissa Cowell-Mytar – Cold Storage	(202) 720-4751
Heidi Gleich – Broiler Hatchery, Chicken Hatchery	(202) 720-0585
Tom Kruchten – Census of Aquaculture	(202) 690-4870
Kim Linonis – Layers, Eggs	(202) 690-8632
Sammy Neal – Catfish Production, Mink, Turkey Hatchery, Turkeys Raised	(202) 720-3244
Joshua O’Rear – Honey, Honey Bee Colonies.....	(202) 690-3676

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For your convenience, you may access NASS reports and products the following ways:

- All reports are available electronically, at no cost, on the NASS web site: www.nass.usda.gov
- Both national and state specific reports are available via a free e-mail subscription. To set-up this free subscription, visit www.nass.usda.gov and click on “National” or “State” in upper right corner above “search” box to create an account and select the reports you would like to receive.

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@nass.usda.gov.

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