

Honey Bee Colonies

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

Honey bee colonies for operations with five or more colonies in the United States on January 1, 2018 totaled 2.63 million colonies, down slightly from January 1, 2017. The number of colonies in the United States on April 1, 2018 was 2.69 million colonies. During 2017, honey bee colonies on January 1, April 1, July 1, and October 1 were 2.64 million, 2.69 million, 2.99 million, and 2.85 million colonies, respectively.

Honey bee colonies lost for operations with five or more colonies from January through March 2018, was 425 thousand colonies, or 16 percent. The number of colonies lost during the quarter of April through June 2018 was 270 thousand colonies, or 10 percent. During the quarter of October through December 2017, colonies lost totaled 425 thousand colonies, or 15 percent, the highest of any quarter in 2017. The quarter in 2017 with the lowest number of colonies lost was April through June, with 286 thousand colonies lost, or 11 percent.

Honey bee colonies added for operations with five or more colonies from January through March 2018 was 513 thousand colonies. The number of colonies added during the quarter of April through June 2018 was 726 thousand. During the quarter of April through June 2017, 613 thousand colonies were added, the highest number of honey bee colonies added for any quarter of 2017. The quarter of October through December 2017 added 205 thousand colonies, the least number of honey bee colonies added for any quarter of 2017.

Honey bee colonies renovated for operations with five or more colonies from January through March 2018 was 289 thousand colonies, or 11 percent. During the quarter of April through June 2018, 715 thousand colonies, or 27 percent, were renovated. The quarter in 2017 with the highest number of colonies renovated was April through June with 763 thousand colonies renovated, or 28 percent. The quarter in 2017 with the lowest number of colonies renovated was October through December 2017, with 214 thousand or 8 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 2017. The quarter of October through December 2017 had the highest percentage of colonies reported to be affected by varroa mites at 55.3 percent. The percent of colonies reported to be affected by varroa mites during January through March 2018 and April through June 2018 are 40.8 percent and 53.4 percent, respectively.

Colonies Lost with Colony Collapse Disorder Symptoms Up 15 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 77.8 thousand colonies from January through March 2018. This is a 15 percent increase from the same quarter of 2017. Colonies lost with Colony Collapse Disorder symptoms were reported to 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.

January 1 Honey Bee Colonies Down 9 Percent for Operations with Less than Five Colonies

Honey bee colonies for operations with less than five colonies in the United States on January 1, 2017 totaled 40.0 thousand down 9 percent from January 1, 2016. During 2017, honey bee colonies on April 1, July 1, and October 1 were 35.0 thousand, 43.0 thousand, and 39.0 thousand, respectively.

Honey bee colonies lost for operations with less than five colonies during the quarter of January through March 2017 was 13.5 thousand colonies, the highest number of honey bee colonies lost during any quarter for 2017. The quarter in 2017 with the least number of colonies lost was April through June, with 4.20 thousand colonies.

Honey bee colonies added for operations with less than five colonies during the quarter of April through June 2017 was 12.5 thousand colonies, the highest number of honey bee colonies added during any quarter of 2017. The quarter in 2017 with the least number of colonies added was October through December, with 960 colonies.

Honey bee colonies renovated for operations with less than five colonies during the quarter of April through June 2017 was 4.40 thousand colonies, the highest number of honey bee colonies renovated during any quarter of 2017. The quarter in 2017 with the least number of colonies renovated was October through December, with 1.10 thousand colonies.

Varroa Mites Top Colony Stressor for Operations with Less than Five Colonies

During 2017, the highest reported colony stressor was varroa mites, with 26.3 percent of the colonies reported to be affected. This is a 5 percent increase from the previous year.

Colonies Lost with Colony Collapse Disorder Symptoms for Operations with Less than Five Colonies Up 9 percent

Honey bee colonies lost with Colony Collapse Disorder symptoms on operations with less than five colonies was 6.00 thousand colonies during 2017, a 9 percent increase from 2016. Colonies lost with Colony Collapse Disorder symptoms were reported to 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.

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United States 2,641,090 (X) 398,650 15 478,240 241,210 9	Other States ⁵	6,190	6,490	1,540	24	130	50	1
	United States	2,641,090	(X)	398,650	15	478,240	241,210	9

⁻ 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, 2017 and April-June 2017

	April 1	April-June							
State	number of colonies	Maximum colonies 1	Lost colonies	Percent lost ²	Added colonies	Renovated colonies ³	Percent renovated ⁴		
	(number)	(number)	(number)	(percent)	(number)	(number)	(percent)		
labama	6,500	6,500	440	7	1,200	500	8		
rizona	22,000	22,000	2,600	12	12,500	3,000	14		
rkansas	17,000	24,000	1,900	8	6,000	1,300	;		
California	980,000	990,000	90,000	9	160,000	220,000	2:		
colorado	16,500	31,000	4,500	15	8,000	7,500	2		
onnecticut	3,000	3,000	140	5	2,200	350	1		
lorida	245,000	255,000	35,000	14	40,000	50,000	2		
eorgia	130,000	137,000	12,500	9	21,000	31,000	2		
awaii	12,000	12,000	70	1	3,000	920			
daho	61,000	78,000	10,500	13	22,000	31,000	4		
linois	11,500	12,000	1,200	10	3,600	1,600	1:		
ndiana	7,500	11,000	1,200	11	3,000	510	á		
owa	12,000	23,000	2,400	10	23,000	3,900	1		
ansas	3,800	6,000	390	7	2,500	870	1		
entucky ouisiana	7,000 56,000	7,500	900 2,600	12 4	3,100 4,100	590 8,000	1		
Maine	2,200	62,000 33,000	2,600 910	3	1,100	1,400	ı		
Maryland	8,000	9,500	190	2	3,400	930	1		
lassachusetts	2,500	8,000	140	2	1,400	490			
lichigan	55,000	100,000	7,500	8	20,000	13,500	1		
linnesota	32,000	128,000	12,000	9	19,000	8,500			
lississippi	89,000	89,000	3,800	4	5,500	26,000	2		
lissouri	6,500	7,000	270	4	1,800	1,000	1		
Iontana	47,000	135,000	3,700	3	18,000	18,000	1		
ebraska	7,500	43,000	1,500	3	7,000	27,000	6		
ew Jersey	5,500	21,000	430	2	1,900	660			
lew Mexico	7,000	7,500	1,800	24	3,300	3,900	5		
lew York	25,000	43,000	1,300	3	16,500	7,500	1		
orth Carolina	24,000	25,000	3,000	12	5,000	2,700	1		
lorth Dakota	115,000	450,000	16,000	4	31,000	41,000			
Ohio	13,500	15,000	1,100	7	7,000	2,500	1		
oklahoma	17,000 71,000	17,000 92,000	200 5,000	1 5	4,700 15,500	1,200 22,000	2		
Pregon	15,500	17,500	5,000 540	3	7,500	2,300	1		
outh Carolina	20,000	20,000	870	4	3,000	3,700	1		
outh Dakota	30,000	168,000	13,000	8	10,000	23,000	1		
ennessee	8,500	9,000	1,300	14	2,600	1,500	1		
exas	345,000	350,000	28,000	8	43,000	148,000	2		
tah	21,000	31,000	2,700	9	12,500	10,000	3		
ermont	6,000	8,000	170	2	390	190			
/irginia	8,500	9,500	1,000	11	3,100	1,100	1		
Vashington	75,000	111,000	7,000	6	30,000	20,000	1		
/est Virginia	7,500	7,500	370	5	4,100	2,500	3		
Visconsin	18,000	65,000	4,000	6	13,000	6,500	1		
Vyoming	15,000	30,000	1,300	4	6,000	3,500	1		
Other States 5	5,650	7,160	160	2	870	940	1		
Inited States	2,694,150	(X)	285,590	11	613,360	762,550	2		

(X) Not applicable

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, 2017 and July-September 2017

	July 1			July-Se	ptember		
State	number of colonies	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	9,500	900	9	690	530	6
Arizona	26,000	26,000	4,100	16	5,000	3,200	12
Arkansas	29,000	29,000	6,000	21	4,400	410	1
California	590,000	670,000	67,000	10	73,000	74,000	11
Colorado	35,000	42,000	4,300	10	2,900	6,410	15
Connecticut	3,500	3,500	130	4	50	20	1
Florida	176,000	180,000	39,000	22 13	39,000	42,000	23 19
Georgia Hawaii	121,000 15,000	122,000 15,000	15,500 1,100	7	19,000 430	23,000 20	
daho	89,000	116,000	12,000	10	9,000	16,500	(Z) 14
Ilinois	13,000	13,000	1,100	8	710	1,200	9
ndiana	13,000	13,000	930	7	420	740	6
owa	40,000	43,000	2,200	5	2,100	4,000	9
Kansas	7,000	7,000	1,700	24	1,400	1,000	14
Kentucky	9,000	9,000	1,600	18	450	700	8
ouisiana	64,000	64,000	13,500	21	14,500	34,000	53
/laine	5,500	6,000	400	7	210	290	5
Maryland	8,500	8,500	1,600	19	1,300	600	7
/lassachusetts	9,000	9,000	760	8	790	460	5
Aichigan	103,000	109,000	17,500	16	4,300	11,500	11
/linnesota	136,000	136,000	20,000	15	1,900	2,200	2
Aississippi	24,000	24,000	2,900	12	250	230	1
lissouri	9,000	9,000	580	6	320	310	3
Iontana	154,000	161,000	18,500	11	3,100	23,000	14
lebraska	46,000	47,000	3,700 420	8 3	880 280	13,500	29
lew Jerseylew Mexico	16,000 8,500	16,000 8,500	2,500	29	1,800	110 200	1
New York	59,000	59,000	6,500	11	3,100	9,000	15
North Carolina	26,000	27,000	3,300	12	4,100	2,900	11
North Dakota	470,000	490,000	48,000	10	24,000	100,000	20
Ohio	23,000	23,000	1,800	8	1,100	1,800	8
Oklahoma	4,400	4,400	510	12	80	270	6
Oregon	94,000	101,000	13,500	13	7,500	28,000	28
Pennsylvania	18,500	18,500	1,500	8	6,000	1,600	Ş
South Carolina	14,500	14,500	1,700	12	640	440	3
South Dakota	152,000	159,000	16,500	10	6,000	7,500	5
ennessee	10,000	10,000	1,700	17	800	960	10
exas	104,000	115,000	15,000	13	21,000	7,500	7
Itah ermont	35,000 7,500	35,000 7,500	6,500 180	19 2	5,500 520	3,200 270	9
/irginia	11,500	11,500	1,200	10	430	430	4
Vashington	82,000	92,000	17,000	18	5,500	10,500	11
Vest Virginia	9,000	9,000	930	10	440	1,900	21
Visconsin	74,000	75,000	12,500	17	6,000	9,000	12
Vyoming	35,000	36,000	5,500	15	3,100	3,500	10
Other States 5	8,100	10,000	1,070	11	380	650	7
United States	2,994,500	(X)	394,810	13	284,370	449,550	15
X) Not applicable		` '		<u> </u>	· ·	*	

⁽X) Not applicable.

⁽Z) Less than half of the unit shown.

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, 2017 and October-December 2017

	October 1			October-	December		
State	number of colonies	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	990	13	550	500	7
Arizona	27,000	30,000	6,500	22	1,300	1,100	4
Arkansas	25,000	25,000	7,500	30	2,500	440	2
California	680,000	1,200,000	155,000	13	90,000	104,000	9
Colorado	34,000	34,000	7,000	21	1,500	4,000	12
Connecticut	4,000	4,000	330	8	190	110	3
Florida	180,000	240,000	50,000	21	55,000	36,000	15
Georgia	125,000	145,000	21,000	14	4,300	2,200	2
Hawaii	15,000	15,000	130	1	970	290	2
Idaho	113,000	164,000	9,000	5	10,000	5,000	3
Illinois	13,500	13,500	1,800	13	140	460	3
Indiana	11,500	11,500	1,700	15	320	100	1
lowa	45,000	45,000	6,500	14	250	3,400	8
Kansas	6,500	6,500	830	13	140	40	1
Kentucky	7,500	7,500	870	12	50	120	2
Louisiana	58,000	60,000	2,700	5	390	1,900	3
Maine	5,500	6,000	60	1	220	110	2
Maryland	8,000	10,500	1,300	12	20	410	4
Massachusetts	6,000	6,000	1,100	18	120	550	9
Michigan	88,000	88,000	11,500	13	990	1,900	2
Minnesota	98,000	98,000	7,000	7	1,900	450	(Z)
Mississippi	14,000	22,000	3,400	15	280	830	4
Missouri	9,500	9,500	820	9	100	230	2
Montana	115,000	121,000	13,000	11	5,500	2,900	2
Nebraska	42,000	42,000	7,500	18	80	50	(Z)
New Jersey	15,500	15,500	1,200	8	330	270	2
New Mexico	8,000	8,000	1,900	24	1,700	-	-
New York	51,000	51,000	3,900	8	820	460	1
North Carolina	23,000	23,000	5,000	22	60	290	1
North Dakota	410,000	410,000	26,000	6	10,000	2,900	1
Ohio	18,500	18,500	2,800	15	510	960	5
Oklahoma	3,700	46,000	100	(Z)	40		-
Oregon	94,000	94,000	10,000	11	70	18,500	20
Pennsylvania	24,000	24,000	5,500	23	2,500	1,100	5
South Carolina	12,500	15,000	2,000	13	1,300	750	5
South Dakota	111,000	111,000	6,500	6	- 000	- 200	-
Tennessee	8,500	10,500	1,300	12	230	320	3
Texas	127,000 29,000	285,000 29,000	20,000 2,000	7 7	3,200 480	1,900 70	1 (7)
Utah Vermont	6,500	6,500	2,000 470	7	10	10	(Z) (Z)
Virginia	9,500	9,500	1,100	10	300	210	
Washington	9,500 66,000	72,000	4,000	12 6	2,900	14,000	2 19
West Virginia	8,500	8,500	1,200	14	70	1,600	19
Wisconsin	51,000	55,000	8,500	15	530	3,000	5
Wyoming	28,000	29,000	3,500	12	2,500	320	1
Other States 5	6,070	6,970	360	5	150	240	3
United States	2,849,770	(X)	424,860	15	204,510	213,990	8
- Represents zero	. , .	` '	, -	-	, -	, -	

⁻ Represents zero.

⁽X) Not applicable.

⁽Z) Less than half of the unit shown.

October 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 October 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 October 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: January 1, 2018 and January-March 2018

	January 1			Januar	y-March		
State	number of colonies	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	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	220,000	14	200,000	132,500	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	35,000	14	57,000	38,000 39.000	15
Georgia	134,000 15,000	139,000 15,000	25,000 1,600	18 11	29,000 1,200	5,100	28 34
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)
lowa	41,000	45,000	1,300	3	420	110	(Z)
Kansas	3,700	3,700	950	26	500	410	11
Kentucky	5,500	5,500	1,600	29	520	20	(Z)
Louisiana	50,000	52,000	3,600	7	4,100	320	1
Maine	1,900	1,900	240	13	40	30	2
Maryland	8,000	8,000	1,500	19	- 040	190	2
Massachusetts	3,800	3,800	1,000	26 24	240	290	8 11
Michigan	16,500	34,000	8,000	24	10,500	3,900	11
Minnesota	39,000	62,000	3,900	6	13,500	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	1
Montana	35,000 6,500	60,000 14,000	140 430	(Z) 3	840	-	-
Nebraska New Jersey	6,500	6,500	730	11	180	190	3
New Mexico	7,500	7,500	3,900	52	180	190	- -
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	64,000	99,000	3,200	3	2,600	10	(Z)
Ohio	12,000	14,000	4,000	29	300	580	4
Oklahoma	17,000	18,000	3,700	21	890	240	1
Oregon	81,000	89,000	4,100	5	17,000	3,900	4
Pennsylvania	14,500	14,500	1,500	10	1,600	670	5
South Carolina	13,500	14,500	1,800	12	1,900	2,800	19
South Dakota	23,000 10,000	29,000 10,000	390 3,000	1 30	250 600	90 470	(Z) 5
Texas	205,000	290,000	22,000	8	118,000	42,000	14
Utah	7,500	17,000	620	4	490	50	(Z)
Vermont	5,500	5,500	570	10	20	-	(<u>-</u>)
Virginia	7,000	7,000	2,100	30	540	160	2
Washington	44,000	89,000	4,600	5	7,000	860	1
West Virginia	4,700	8,500	2,000	24	330	60	1
Wisconsin	21,000	29,000	4,600	16	2,800	1,560	5
Wyoming	5,500	8,000	220	3	70	-	-
Other States 5	3,720	6,520	1,870	29	160	40	1
United States	2,631,220	(X)	425,220	16	512,940	288,750	11
- Represents zero							

⁻ 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, 2018 and April-June 2018

	April 1		-	April	-June		
State	number of colonies	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	8,500	810	10	1,300	710	8
Arizona	18,500	19,500	2,600	13	12,000	2,100	11
Arkansas	11,500	11,500	1,500	13	14,000	1,900	17
California	1,140,000	1,190,000	70,000	6	176,000	254,000	21
Colorado	16,500	26,000	2,300	9	9,500	4,570	18
Connecticut	3,600	3,600	120	3	340	170	5
Florida	270,000 134,000	280,000 134,000	48,000 16,000	17 12	54,000 34,000	69,000 16,000	25 12
Georgia	14,500	14,500	280	2	34,000	3,100	21
Idaho	60,000	95,000	4,800	5	17,000	29,000	31
Illinois	10,000	10,500	2,100	20	4,700	2,800	27
Indiana	8,000	9,000	1,800	20	4,000	730	8
lowa	45,000	47,000	4,300	9	15,500	4,800	10
Kansas	3,900	3,900	170	4	1,800	2,100	54
Kentucky	4,800	6,000	450	8	1,400	560	9
Louisiana	48,000	48,000	970	2	7,000	4,000	8
Maine	2,200	17,000	1,100	6	430	880	5
Maryland	7,000	8,000	370	5	2,400	1,200	15
Massachusetts	3,600 36,000	7,500 69,000	260 6,000	3 9	910 18,000	350 8,000	5 12
Michigan	36,000	69,000	6,000	9	16,000	8,000	12
Minnesota	69,000	108,000	6,500	6	46,000	24,000	22
Mississippi	53,000	54,000	5,000	9	3,900	6,500	12
Missouri	7,000	7,000	390	6	1,800	800	11
Montana	50,000	171,000	4,800	3	26,000	20,000	12
Nebraska	10,500	40,000	2,700	7	3,100	700	2
New Jersey New Mexico	4,400 1,900	15,000 4,300	270 50	2	1,200 290	170 450	1 10
New York	20,000	36,000	3,300	9	8,000	2,300	6
North Carolina	16,000	17,500	1,200	7	3,600	800	5
North Dakota	72,000	430,000	11,000	3	30,000	46,000	11
Ohio	11,000	13,000	1,100	8	9,000	1,800	14
Oklahoma	15,500	15,500	1,600	10	9,000	6,500	42
Oregon	41,000	106,000	3,400	3	23,000	24,000	23
Pennsylvania	15,500	19,500	1,100	6	6,000	1,600	8
South Carolina	14,000	14,000	1,300	9	2,400	4,000	29
South Dakota	10,500	161,000	12,000	7	21,000	65,000	40
Tennessee	8,000 305,000	8,000 310.000	1,200 31,000	15 10	3,200 100.000	1,300 69,000	16 22
Texas Utah	14,500	26,000	1,700	7	10,000	4,100	16
Vermont	5,500	6,500	520	8	2,600	140	2
Virginia	5,000	5,500	490	9	2,400	700	13
Washington	55,000	122,000	6,500	5	19,000	18,900	15
West Virginia	7,000	7,000	490	7	2,100	550	8
Wisconsin	24,000	50,000	6,000	12	12,500	6,600	13
Wyoming	8,500	22,000	2,200	10	3,100	2,300	10
Other States 5	4,260	7,660	260	3	1,880	930	12
United States	2,692,660	(X)	270,000	10	725,650	715,110	27
(X) Not applicable	•			I			

(X) Not applicable.

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.

Colony Health Stressors with Five or More Colonies - States and United States: January-March 2017

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	19.9	9.8	0.2	3.2	6.7	9.3
Arizona	35.6	2.0	3.8	1.7	6.5	2.1
Arkansas	31.5	14.6	0.1	0.5	3.0	1.0
California	37.7	12.6	7.5	9.2	6.6	6.3
Colorado	17.0	(Z)	(Z)	0.9	2.6	0.4
Connecticut	51.5	1.5	-	-	6.1	5.6
Florida	37.6	14.8	1.5	14.2	6.2	17.9
Georgia	35.3	7.0	0.2	2.6	4.4	1.8
Hawaii	1.2	2.1	0.2	-	0.1	0.1
Idaho	74.2	42.3	42.3	21.2	1.7	0.4
Illinois	21.2	13.1	0.5	3.7	9.9	8.0
Indiana	15.8	8.0	5.2	4.1	10.4	7.1
lowa	33.6	8.3	8.4	12.0	11.9	11.7
Kansas	47.2	3.0	-	3.6	16.4	14.3
Kentucky	31.9	11.5	0.4	3.8	16.0	7.5
Louisiana	25.8	9.6	0.1	1.8	4.3	1.8
Maine	23.9	20.9	30.5	8.1	26.3	- -
Maryland	11.3	3.3	1.0	1.0	11.9	4.3
Massachusetts	32.5	5.6	3.0	4.5	10.5	5.6
Michigan	7.9	0.3	-	1.9	1.1	3.9
Minnesota	2.1	0.4	0.1	0.9	9.0	5.8
Mississippi	41.7	35.3	(Z)	0.1	0.5	1.4
Missouri	16.6	15.4	0.5	2.7	5.4	5.2
Montana	34.0	15.1	-	2.5	6.0	0.1
Nebraska	14.8	0.3	0.4	-	2.1	1.2
New Jersey	16.3	0.7	0.3	0.1	0.8	0.6
New Mexico	93.9	-	87.4	-	2.0	-
New York	20.4	9.4	9.8	4.4	13.2	10.8
North Carolina	34.7	17.4	0.2	1.5	7.2	3.9
North Dakota	0.8	-	-	-	0.2	0.2
Ohio	25.8	11.6	0.6	0.1	5.2	16.5
Oklahoma	11.9	1.0	-	0.1	0.5	0.3
Oregon	28.7	8.5	10.1	9.1	15.4	8.5
Pennsylvania	20.9	2.4	0.8	2.9	3.6	7.2
South Carolina	12.6	5.3	0.4	1.1	2.7	1.8
South Dakota	2.9	-	-		0.2	0.3
Tennessee	28.6	12.6	0.9	2.4	8.1	7.0
Texas	36.2	22.5	2.0	5.1	3.5	3.6
Utah	38.7	22.5	0.1	5.1	2.0	0.3
Vermont	6.0	0.7	2.1	0.2	0.9	2.2
Virginia	21.4	12.8	2.8	3.2	7.4	8.4
Washington	6.8	0.1	2.0 _	5.2	8.0	4.4
West Virginia	15.8	1.0	0.2	-	11.9	1.3
Wisconsin	19.0	1.0	1.1	2.0	4.0	10.5
Wyoming	0.2	1.9	0.2	2.0	0.6	(Z)
Other States ⁴	3.4	0.8	6.6	2.6	1.8	2.5
United States	42.2	15.5	7.0	8.9	7.2	7.4

⁻ 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

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 2017

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	17.9	13.6	=	4.2	9.4	5.3
Arizona	58.4	15.9	19.7	12.4	20.4	0.7
Arkansas	19.4	9.6	1.9	3.9	2.7	2.5
California	38.0	7.7	3.1	13.0	4.8	3.4
Colorado	31.3	0.8	5.3	3.2	4.6	0.1
Connecticut	9.1	0.2	-	0.5	1.9	0.7
Florida	36.5	14.4	6.1	9.0	6.5	18.9
Georgia	34.1	5.8	1.0	6.6	6.5	2.8
Hawaii	88.9	3.7	(Z)	0.0	0.4	2.0
Idaho	30.5	6.4	4.0	8.3	7.8	4.8
Idano	30.5	0.4	4.0	6.3	7.0	4.0
Illinois	11.3	4.3	0.7	3.0	5.6	1.5
Indiana	5.5	2.1	0.1	43.3	8.6	1.2
lowa	39.3	27.6	7.5	26.6	8.1	0.9
Kansas	17.3	8.5	0.7	22.6	1.7	6.4
Kentucky	25.7	11.6	1.0	4.5	4.3	4.9
Louisiana	23.2	3.1	=	1.6	1.5	0.7
Maine	4.4	4.3	4.1	4.3	2.0	14.8
Maryland	3.3	6.9	0.8	0.3	2.1	1.1
Massachusetts	14.8	12.5	12.9	11.0	0.4	1.6
Michigan	19.1	7.2	0.2	2.1	0.9	0.5
Minnesota	20.5	4.7	2.3	12.8	6.6	2.2
			2.3			
Mississippi	14.0	0.9	-	1.7	3.7	0.8
Missouri	13.4	8.9	3.0	1.0	5.1	1.9
Montana	20.0	4.0	4.2	3.5	4.4	0.6
Nebraska	50.1	38.4	1.0	37.6	16.0	0.8
New Jersey	21.4	5.6	2.3	1.9	0.3	0.8
New Mexico	88.4	0.6	72.9	-	35.6	0.6
New York	22.2	2.1	2.1	2.0	8.9	0.1
North Carolina	23.4	5.5	2.3	0.8	5.1	1.5
North Dakota	29.3	4.0	3.2	5.3	3.2	1.0
Ohio	45.5	6.4	6.2	10.4	16.6	3.0
Oklahoma	23.6	2.3	11.2	0.5	7.7	0.3
Oregon	37.2	10.6	8.8	3.5	15.8	11.3
Pennsylvania	13.5	1.0	0.7	1.5	2.4	1.5
South Carolina	24.3	21.7	15.1	18.5	4.1	0.4
South Dakota	8.7	1.4	1.0		5.0	3.6
				6.4		
Tennessee	53.4	25.5	1.0	3.1	10.6	3.9
Texas	28.7	16.8	1.5	12.4	2.8	1.4
Utah	36.7	1.3	0.3	0.1	12.6	-
Vermont	3.3	0.3	0.3	-	0.2	0.5
Virginia	18.7	18.0	0.9	5.0	1.8	4.8
Washington	21.3	5.0	4.2	7.5	3.6	0.4
West Virginia	11.6	1.6	1.8	0.4	3.7	1.6
Wisconsin	13.8	1.7	1.7	2.2	3.2	0.3
Wyoming	34.1	3.5	12.6	2.8	5.7	1.9
Other States 4	6.7	0.4	0.3	-	3.9	0.6
		10.9	4.6	12.3	7.0	4.9

⁻ 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.

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 2017

State State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	69.5	22.1	-	35.4	7.5	3.9
Arizona	19.8	0.4	0.5	1.1	12.4	6.3
Arkansas	61.4	9.1	=	17.0	9.3	2.3
California	42.3	15.8	5.6	13.4	10.1	3.6
Colorado	52.9	1.4	2.6	9.1	7.8	1.4
Connecticut	25.1	1.5	0.1	-	13.0	-
Florida	42.9	13.2	3.7	6.3	11.4	21.5
Georgia	47.6	18.0	2.3	14.1	15.1	6.9
Hawaii	2.8	4.3	0.3	-	2.0	(Z)
Idaho	53.7	19.1	6.7	15.5	9.5	5.1
Illinois	29.9	14.2	2.8	2.8	4.6	3.3
Indiana	13.9	5.9	0.4	3.9	3.8	2.0
lowa	17.2	7.2	2.4	3.9	4.0	2.2
Kansas	65.4	52.6	14.8	20.3	1.1	7.4
Kentucky	46.4	39.2	4.6	0.6	10.3	6.2
Louisiana	59.2	74.5	0.3	1.6	4.0	14.9
Maine	3.4	0.9	0.9	3.9	1.2	0.1
Maryland	8.8	10.1	0.7	1.6	5.1	9.1
Massachusetts	82.0	0.9	0.7	2.3	0.8	0.1
Michigan	56.8	11.9	8.6	13.7	15.0	2.9
Minnesota	39.8	4.7	1.8	9.4	11.6	2.3
Mississippi	71.1	4.8	0.7	0.2	18.1	0.7
Missouri	77.7	36.0	2.8	34.0	1.6	35.0
Montana	42.3	6.7	6.9	2.2	19.1	2.0
Nebraska	15.1	6.6	0.4	7.1	9.2	0.2
New Jersey	10.7	2.9	-	0.8	0.4	1.9
New Mexico	74.3	3.3	17.8	13.6	3.1	0.3
New York	45.1	19.8	6.2	9.4	13.6	1.8
North Carolina	74.5	36.1	3.3	20.3	7.6	1.8
North Dakota	42.0	11.9	3.4	8.1	8.1	1.9
Ohio	51.5	19.1	4.7	6.7	11.7	7.0
Oklahoma	22.0	23.0	10.0	3.8	4.7	2.0
Oregon	54.4	10.6	11.3	13.2	6.4	1.8
Pennsylvania	41.4	5.7	2.7	3.7	2.2	0.9
South Carolina	26.4	11.8	0.2	3.0	5.2	0.8
South Dakota	47.4	13.4	5.0	10.1	27.0	2.5
Tennessee	42.8	22.1	2.1	6.0	5.3	6.9
Texas	33.7	23.0	0.1	24.0	18.3	1.5
Utah	40.5	0.1	0.5	16.7	15.9	9.1
Vermont	16.8	9.0	4.7	(Z)	7.0	0.7
Virginia	50.3	26.5	1.5	0.5	4.4	1.6
Washington	23.7	2.7	2.0	1.2	0.7	2.4
West Virginia	23.2	6.2	1.4	0.6	9.5	3.8
Wisconsin	61.6	21.0	18.5	21.8	13.0	12.1
Wyoming	21.8	1.6	9.3	4.4	5.6	5.2
Other States 4	51.1	4.7	2.3	6.7	1.2	1.3
United States	45.5	15.0	4.8	10.9	11.6	4.9

⁻ 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

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 2017

State State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	22.3	10.1	8.8	9.5	1.7	5.2
Arizona	61.6	4.2	2.3	1.6	4.1	0.1
Arkansas	37.5	29.2	26.6	31.0	24.1	0.4
California	47.9	14.1	7.4	17.0	17.1	6.3
Colorado	30.2	0.7	0.2	20.0	15.5	5.3
Connecticut	36.4	2.8	-	0.6	1.6	1.6
Florida	41.4	16.8	7.5	10.4	7.6	26.2
Georgia	56.8	15.1	12.3	15.3	3.6	4.6
Hawaii	57.2	66.1	0.1	-	0.1	-
Idaho	34.0	16.9	17.7	14.9	1.7	0.2
Illinois	28.9	10.2	0.8	7.9	4.9	4.9
Indiana	23.5	5.6	1.7	0.7	3.9	8.0
lowa	61.0	25.5	12.3	32.6	17.9	5.5
Kansas	17.9	7.7	3.3	8.6	0.6	10.2
Kentucky	54.3	24.4	0.5	6.5	5.6	19.1
Louisiana	31.5	26.6	0.3	0.6	2.1	10.4
Maine	24.9	6.2	0.4	-	0.6	-
Maryland	7.9	3.1	0.2	1.1	1.8	7.8
Massachusetts	13.2	1.2	6.7	2.7	1.5	0.3
Michigan	53.8	13.6	5.3	23.6	1.5	2.0
Minnesota	62.9	4.0	4.2	39.8	7.2	3.1
Mississippi	19.3	6.1	1.4	1.5	1.5	4.1
Missouri	16.7	14.2	1.0	0.1	4.2	1.6
Montana	54.2	4.1	3.1	5.9	5.3	4.1
Nebraska	26.6	3.3	4.1 4.4	2.1	4.3	11.5
New Jersey	18.9	6.8	4.4	4.4	3.3	1.0
New Mexico New York	86.1 22.3	0.3 12.7	8.0	10.3 5.4	10.0 0.4	2.6
North Carolina	64.2	16.3	3.9	1.5	11.7	6.7
North Dakota	41.7	16.5	0.2	0.5	0.9	0.7
NOTHI Dakota	41.7	10.5	0.2	0.5	0.9	0.3
Ohio	45.3	23.3	7.1	6.4	8.4	2.9
Oklahoma	1.0	0.5	-	-	(Z)	0.2
Oregon	50.6	23.3	28.0	14.2	3.9	1.8
Pennsylvania	44.7	5.4	1.0	6.9	2.9	2.3
South Carolina	31.6	19.4	14.6	0.2	1.9	1.9
South Dakota	17.3	0.1	4.1	4.4	7.5	2.7
Tennessee	22.8	18.9	0.2	2.0	7.5	15.3
Texas	33.9	21.4	7.1	2.9	3.8	5.2
Utah	24.3	8.9	11.0	9.2	9.4	19.8
Vermont	96.6	44.5	22.1	55.2	5.7	1.8
Virginia	20.9	20.6	1.3	7.5	6.9	3.9
Washington	21.7	6.0	(Z)	0.3	0.4	0.2
West Virginia	60.1	5.3	2.4	0.1	7.8	3.6
Wisconsin	53.1	36.9	33.1	22.8	15.3	15.2
Wyoming	38.0	2.4	8.4	5.9	8.1	0.6
Other States ⁴	11.5	1.7	3.0	2.2	1.0	2.4
United States	55.3	18.9	9.4	15.0	11.1	7.6

⁻ 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.

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 2018

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	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	41.4	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	74.5	76.8	0.2		0.1	0.1
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
lowa	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	19.1	1.0	0.8	0.8	9.3	7.2
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	1.2	-	0.9	-
OhioOklahoma	39.6 24.1	10.0 8.5	6.5 3.2	3.2 0.1	15.8	11.6 2.0
	36.0	0.7	1.2	6.7	3.1 3.7	
Oregon						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 Vermont	18.7 17.0	1.2	0.1 0.3	0.6	0.1 2.0	0.5 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	0.9	0.4	0.1	-	2.1	1.0
Other States 4	22.2	0.5	0.2	-	2.0	1.2
United States	40.8	12.7	4.3	10.3	8.7	7.2

⁻ 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

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 2018

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	23.6	25.5	1.2	13.1	11.5	2.1
Arizona	48.8	7.3	33.2	0.8	14.5	3.7
Arkansas	35.5	16.0	0.9	2.8	11.4	16.6
California	41.9	10.2	11.2	13.8	9.1	5.1
Colorado	42.8	(Z)	13.1	3.7	4.3	0.4
Connecticut	11.1	0.9	0.4	0.8	0.8	0.4
Florida	45.0	27.6	9.7	15.6	10.1	21.1
Georgia	53.0	25.6	13.9	14.8	31.6	9.6
Hawaii	59.8	64.0	0.5	14.0	0.2	0.2
				10.0		
Idaho	50.8	4.0	3.2	18.0	4.0	4.1
Illinois	13.8	7.9	6.7	6.6	9.9	2.4
Indiana	78.9	3.5	0.4	4.5	1.3	1.1
lowa	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	35.4	21.8	0.6	1.1	3.7	6.3
Louisiana	8.1	5.9	0.2	0.8	1.2	1.3
Maine	1.9	1.1	0.2	1.8	0.6	0.1
Maryland	11.8	3.4	0.8	0.3	4.4	0.4
Massachusetts	6.3	1.1	1.0	1.5	2.0	2.1
Michigan	65.7	16.7	11.0	11.6	12.9	10.0
Minnesota	12.2	8.5	6.7	5.6	7.8	21.7
Mississippi	44.4	24.1	(Z)	0.2	5.1	2.1
Missouri	11.8	13.2	0.8	1.5	8.3	2.6
	41.3	4.3	2.8	1.3		0.8
Montana					1.0	
Nebraska	3.9	0.4	0.4	3.2	7.5	4.0
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	40.8	20.3	15.4	6.0	17.3	3.6
North Carolina	9.7	2.6	0.5	2.4	14.6	0.8
North Dakota	24.7	7.5	4.8	4.7	3.9	4.3
Ohio	38.8	30.8	1.7	2.7	21.7	1.6
Oklahoma	60.2	10.9	9.6	26.7	12.4	0.1
Oregon	45.9	3.5	8.1	6.6	15.5	0.2
Pennsylvania	31.3	16.2	2.2	2.1	1.6	1.9
South Carolina	14.3	3.4	0.7	1.6	9.8	2.9
South Dakota	53.3	42.2	7.7	4.0	39.4	(Z)
Tennessee	30.0	22.9	3.0	3.4	6.2	2. 5
Texas	26.0	17.4	7.9	4.4	8.3	14.3
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	22.0	10.0	2.0	4.0	22.2	1 5
Virginia	23.0	19.0	3.2	1.2	23.3	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	32.8	16.2	17.8	26.6	29.1	0.9
Wyoming	11.0	0.1	2.4	2.3	2.9	4.2
Other States ⁴	19.7	0.9	1.0	-	3.9	0.3
United States	53.4	19.0	11.4	13.0	14.4	9.1

⁻ 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

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 2017 and 2018

[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)
2017 2018	67,830 77,770	33,010 48,190	49,540	94,750

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 2016 and 2017

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)
2016						
January-March	44,000	11,500	26	7,500	2,900	7
April-June	41,000	4,900	12	13,000	4,000	10
July-September	49,000	6,500	13	2,000	1,200	2
October-December	45,000	6,500	14	800	450	1
2017						
January-March	40,000	13,500	34	8,500	4,200	11
April-June	35,000	4,200	12	12,500	4,400	13
July-September	43,000	6,000	14	2,100	2,200	5
October-December	39,000	7,000	18	960	1,100	3

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 2016 and 2017

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

Year	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
2016 2017	20.9 26.3	13.9 18.2	4.1	4.3 5.0	11.6 13.0	17.5 22.2

⁻ Represents zero.

Colonies Lost with Colony Collapse Disorder Symptoms with Less than Five Colonies – United States: Annual 2016 and 2017

[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	2016	2017	
	(number)	(number)	
Colonies lost	5,500	6,000	

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.

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.

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 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

Travis Averill, Chief, Livestock Branch	(202) 720-3570
Tony Dorn, Head, Poultry and Specialty Commodities Section	(202) 690-3223
Holly Brenize – Poultry Slaughter	
Aaron Cosgrove – Turkey Hatchery, Turkeys Raised	· ·
Alissa Cowell-Mytar – Cold Storage, Capacity of Refrigerated Warehouses	The state of the s
Liana Cuffman – Catfish Production, Trout Production, Egg Products, Mink	
Fatema Haque – Broiler Hatchery, Chicken Hatchery	· ·
Kim Linonis – Layers, Eggs	· ·
Miste Salmon – Census of Agriculture, Census of Aquaculture	, ,
Erica Sadler – Cost of Pollination, Honey, Honey Bee Colonies	, ,

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- ➤ 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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