

Honey Bee Colonies

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January 1 Honey Bee Colonies Up 8 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, 2020 totaled 2.88 million colonies, up 8 percent from January 1, 2019. The number of colonies in the United States on April 1, 2020 was 2.98 million colonies. During 2019, honey bee colonies on January 1, July 1, and October 1 were 2.67 million, 3.18 million, and 3.02 million colonies, respectively.

Honey bee colonies lost for operations with five or more colonies from January through March 2020, was 399,570 colonies, or 14 percent. The number of colonies lost during the quarter of April through June 2020 was 252,630 colonies, or 8 percent. During the quarter of July through September 2019, colonies lost totaled 434,700 colonies, or 14 percent, the highest number lost of any quarter surveyed in 2019. The quarter surveyed in 2019 with the lowest number of colonies lost was October through December, with 399,510 colonies lost, or 13 percent.

Honey bee colonies added for operations with five or more colonies from January through March 2020 was 477,200 colonies. The number of colonies added during the quarter of April through June 2020 was 596,860. During the quarter of July through September 2019, 252,550 colonies were added, the highest number of honey bee colonies added for any quarter surveyed in 2019. The quarter of October through December 2019 added 233,260 colonies, the least number of honey bee colonies added for any quarter surveyed in 2019.

Honey bee colonies renovated for operations with five or more colonies from January through March 2020 was 153,390 colonies, or 5 percent. During the quarter of April through June 2020, 632,680 colonies, or 21 percent, were renovated. The quarter surveyed in 2019 with the highest number of colonies renovated was July through September with 355,330 colonies renovated, or 11 percent. The quarter surveyed in 2019 with the lowest number of colonies renovated was October through December 2019, with 91,000, or 3 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 surveyed in 2019. The quarter of October through December 2019 had the highest percentage of colonies reported to be affected by varroa mites at 45.7 percent. The percent of colonies reported to be affected by varroa mites during January through March 2020 and April through June 2020 are 25.5 percent and 42.3 percent respectively.

Colonies Lost with Colony Collapse Disorder Symptoms Up 76 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 105,240 colonies from January through March 2020. This is a 76 percent increase from the same quarter of 2019.

Contents

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	3
Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: April 1, 2019 and April-June 2019	4
Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: July 1, 2019 and July-September 2019	5
Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: October 1, 2019 and October-December 2019	6
Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: January 1, 2020 and January-March 2020	7
Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: April 1, 2020 and April-June 2020	8
Colony Health Stressors with Five or More Colonies – States and United States: January-March 2019	9
Colony Health Stressors with Five or More Colonies – States and United States: April-June 2019	10
Colony Health Stressors with Five or More Colonies – States and United States: July-September 2019	11
Colony Health Stressors with Five or More Colonies – States and United States: October-December 2019	12
Colony Health Stressors with Five or More Colonies – States and United States: January-March 2020	13
Colony Health Stressors with Five or More Colonies – States and United States: April-June 2020	14
Colonies Lost with Colony Collapse Disorder Symptoms with Five or More Colonies – United States: 2019 and 2020	15
Terms and Definitions of Honey Bee Colony Estimates	16
Statistical Methodology	17
Information Contacts	18

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

	lanuary 1			January	y-March		
State	January 1 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	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	_
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	(2
Seorgia	120,000	129,000	14,500	11	19,500	8,000	
Hawaii	16,500	16,500	390	2	660	3,700	2
daho	132,000	145,000	12,500	9	4,600	1,100	
Ilinois	9,000	9,000	2,300	26	210	80	,
ndiana	6,000	6,000	710	12	440	280	
owa	7,500	11,500	1,600	14	170	140	•
Cansas	4,500	4,500	1,500	33	370	110	
Centucky	3,700	4,400	890	20	60	30	
ouisiana	49,000	51,000	3,500	7	9,000	16,000	3.
Maine	7,000	7,000	470	7	10	30	(Z
Maryland	8,000	8,000	2,300	29	30	10	ÌΖ
Massachusetts	3,800	3,800	680	18	60	20	` .
Michigan	24,000	33,000	6,500	20	-	-	
Minnesota	17,000	43,000	2,200	5	80	470	
Mississippi	26,000	29,000	2,400	8	3,800	1,700	(
Aissouri	8,500	8,500	1,100	13	80	60	
Nontana	37,000	68,000	3,500	5	1,700	1,900	
Nebraska	13,500	16,500	2,500	15	=	-	
New Jersey	6,000	6,000	310	5	130	60	
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	
North Dakota	92,000	102,000	1,100	1	-	1,300	
Ohio	10,500	12,500	3,500	28	1,700	440	
Oklahoma	21,000	55,000	50	(Z)	20	-	
Oregon	89,000	95,000	7,500	8	8,000	1,800	
Pennsylvania	15,000	15,000	2,900	19	370	320	
South Carolina	12,000	13,000	690	5	2,000	340	
South Dakota	18,500	18,500	1,100	6	-		
ennessee	6,000	7,000	1,500	21	240	320	
exas	260,000	330,000	17,000	5	61,000	35,000	1
Jtah	8,500	11,000	1,800	16	900	-	
/ermont	6,500	6,500	260	4	50	(Z)	(Z
/irginia	5,500	5,500	1,100	20	80	110	:
Vashington	51,000	75,000	7,000	9	5,500	2,200	;
Vest Virginia	5,000	7,000	1,300	19	20	60	
Visconsin	16,500	17,000	3,700	22	580	100	
Vyoming	6,500	9,500	250	3	-	-	
Other States 5	6,070	6,070	590	10	70	30	(Z
United States	2,671,470	(X)	407,700	15	247,710	179,500	-

⁻ Represents zero.

⁽X) Not applicable.

⁽Z) Less than half of the unit shown.

¹ January 1 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 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 colonies.

⁵ 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, 2019 and April-June 2019 6

0	April 1			April-			
State	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	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Arizona	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Arkansas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
California	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Colorado	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Connecticut	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Florida	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Georgia	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Hawaii	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
ldaho	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Illinois	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Indiana	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
lowa	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Kansas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Kentucky	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Louisiana	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Maine	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Maryland	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Massachusetts	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Michigan	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Minnesota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Mississippi	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Missouri	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Montana	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Nebraska	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
New Jersey	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
New Mexico	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
New York	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
North Carolina	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Ohio	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Oklahoma	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Oregon	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Pennsylvania	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
South Carolina	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
South Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Tennessee	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Texas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Jtah	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Vermont	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
√irginia	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Washington	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
West Virginia	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Nisconsin	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA
Wyoming	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other States ⁵	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Jnited States	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

April 1 colonies plus all colonies moved into that state during the quarter.

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.

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 colonies.

⁵ Includes data for States not published in this table.

⁶ Data collection for July 2019 quarterly honey bee colonies was suspended.

Colonies, Maximum, Lost, Percent Lost, Added, Renovated, and Percent Renovated with Five or More Colonies – States and United States: July 1, 2019 and July-September 2019

	Luby 4			July-Se	ptember		
State	July 1 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	7,000	990	14	160	330	5
Arizona	26,000	30,000	2,000	7	5,500	3,800	13
Arkansas	20,000	21,000	2,100	10	170	680	3
alifornia	650,000	700,000	93,000	13	87,000	108,000	15
colorado	33,000	36,000	9,500	26	2,200	3,400	9
onnecticut	4,400	4,400	200	5	70	470	11
lorida	210,000	240,000	20,000	8	46,000	33,000	14
eorgia	116,000	118,000	13,000	11	12,000	36,000	31
	17.000	17,000	200	1	200	6,000	35
lawaii	,			9			
daho	95,000	111,000	10,500	9	8,500	12,500	11
linois	13,500	13,500	940	7	460	1,300	10
ndiana	14,000	16,000	1,000	6	2,200	1,500	9
owa	30,000	33,000	3,400	10	2,000	4,800	15
ansas	7,500	7,500	1,900	25	190	400	5
entucky	8,000	8,500	850	10	700	430	5
ouisiana	42,000	44,000	4,100	9	4,400	13,000	30
1aine	11,500	12,000	1,100	9	460	3,500	29
laryland	7,500	7,500	790	11	720	1,200	16
lassachusetts	13,500	13,500	1,100	8	800	560	4
lichigan	94,000	99,000	11,000	11	3,000	3,300	3
linnesota	126.000	129,000	21,000	16	5,000	2,100	2
lississippi	23,000	23,000	2,900	13	550	850	4
lissouri	10,500	10,500	500	5	260	350	3
lontana	147,000	154,000	18,500	12	3,600	12,500	8
ebraska	40,000	41,000	3,700	9	680	1,400	3
ew Jersey	16,000	16,000	680	4	650	3,100	19
ew Mexico	2,400	5,500	170	3	1,000	550	10
ew York	65,000	69,000	8,500	12	3,200	3,700	5
orth Carolina	22,000	22,000	2,700	12	1,800	5,000	23
lorth Dakota	530,000	530,000	81,000	15	15,000	17,500	3
Ohio	19,500	19,500	1,600	8	2,800	3,000	15
klahoma	7,500	7,500	930	12	130	1,100	15
Pregon	83,000	118,000	8,000	7	6,000	21,000	18
ennsylvania	19,000	20,000	980	5	1,800	1,900	10
outh Carolina	14,500	14,500	2,200	15	2,000	1,400	10
outh Dakota	255,000	255,000	51,000	20	1,300	8,000	3
ennessee	14,000	14,000	4,500	32	2,200	2,200	16
	126.000			8			
exas	- /	133,000	11,000		6,500 3,500	7,000	5
tah ermont	24,000 7,000	29,000 7,000	2,800 120	10 2	3,500	1,700 490	6 7
(irginia	9,000	9,000	570	6	350	820	9
irginiaVashington	85,000 85,000	97,000		22		10,000	10
			21,000		12,000		
est Virginia	10,000	10,000	1,100	11	200	1,100	11
/isconsin	63,000	63,000	6,500	10	2,400	10,000	16
/yoming	24,000	27,000	3,000	11	2,500	3,500	13
Other States 5	13,660	13,900	2,080	15	320	900	6
Inited States	3,175,960	(X)	434,700	14	252,550	355,330	11

(X) Not applicable

July 1 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 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 colonies.

⁵ 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, 2019 and October-December 2019

	October 1	<u>, </u>		October-E	December	<u>.</u>	October-December							
State	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	6,000	6,000	660	11	240	70	1							
Arizona	34,000	36,000	7,000	19	300	300	1							
Arkansas	19,000	19,500	1,600	8	430	310	2							
California	700,000	1,300,000	136,000	10	160,000	37,000	3							
Colorado	27,000	27,000	8,000	30	1,100	440	2							
Connecticut	3,800	4,000	300	8	10	50	1							
lorida	270,000	300,000	30,000	10	28,000	15,000	5							
eorgia	119,000	131,000	20,000	15	10,500	10,500	8							
awaii	17,000	17,000	1,300	8	300	50	(Z)							
daho	111,000	196,000	15,500	8	1,800	1,000	ì							
Ilinois	13,000	13,000	1,700	13	1,000	1,500	12							
ndiana	17,500	17,500	1,300	7	160	180	1							
owa	32,000	32,000	7,500	23	1,500	530	2							
ansas	4,800	4,900	650	13	190	460	9							
Centucky	8,500	8,500	410	5	190	170	2							
ouisiana	41,000	46,000	2,300	5	70	80	(Z)							
/laine	11,500	11,500	770	7	110	40	(Z)							
Maryland	6,500	8,000	1,100	14	390	420	5							
lassachusetts	5,000	5,000	1,200	24	60	130	3							
/lichigan	84,000	84,000	6,500	8	820	1,500	2							
linnesota	97,000	97,000	15,500	16	3,400	60	(Z)							
lississippi	21,000	29,000	3,400	12	350	50	(Z)							
issouri	9,000	10,000	1,500	15	260	10	(Z)							
ontana	71,000	79,000	7,000	9	770	4,000	.5							
ebraska	37,000	38,000	2,700	7	320	10	(Z)							
ew Jersey	15,500	15,500	220	1	60	80	1							
ew Mexico	6,000	6,000	70	1	30	10	(Z)							
ew York	65,000	65,000	10,000	15	630	510	1							
lorth Carolina	17,500	18,000	3,200	18	240	770	4							
lorth Dakota	420,000	420,000	27,000	6	3,000	4,300	1							
Ohio	19,000	19,000	2,700	14	800	390	2							
Oklahoma	6,500	37,000	2,500	7	460	2 000	-							
Oregon	115,000	130,000	15,000	12	650	2,000	2 5							
ennsylvania South Carolina	21,000	21,000	3,800	18 14	1,600	1,100	3							
South Dakota	12,500 189,000	13,500 189,000	1,900 7,500	4	1,400	430 40	(Z)							
	11,000	11,000	1,300	12	20	70								
ennessee	129,000	240,000	17,500	7	8,000	1,700	1							
exasltah	30,000	32,000	4,400	14	970	90	1 (Z)							
ermont	7,000	7,000	190	3	100	270	4							
/irginia	8,000	8,000	1,200	15	10	190	2							
Vashington	89,000	93,000	12,500	13	810	100	(Z)							
Vest Virginia	7,500	8,000	1,500	19	30	1,600	20							
Visconsin	46,000	46,000	8,500	18	1,800	3,000	7							
Vyoming	27,000	28,000	3,300	12	100	490	2							
Other States 5	11,010	11,510	1,340	12	280	-	-							
United States	3,018,110	(X)	399,510	13	233,260	91,000	3							

⁻ Represents zero.

⁽X) Not applicable.

⁽Z) Less than half of the unit shown.

October 1 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 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 colonies.

⁵ 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, 2020 and January-March 2020

0	January 1	January-March Sanuary-March							
State	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	5,500	8,000	410	5	1,000	780	10		
Arizona	29,000	32,000	6,500	20	150	120	(Z		
Arkansas	16,500	17,500	1,200	7	700	30	ĺΖ		
California	1,350,000	1,710,000	230,000	13	240,000	66,000	. 4		
Colorado	4,500	16,000	650	4	850	500	;		
Connecticut	3,700	4,100	330	8	60	-			
Florida	295,000	310,000	30,000	10	41,000	8,000			
Georgia	115,000	121,000	14,500	12	32,000	22,000	1		
Hawaii	16,000	16,000	1,500	9	1,000	2,200	1		
daho	156,000	168,000	18,500	11	4,400	920	,		
llinois	11,500	13,000	2,100	16	900	160			
ndiana	11,000	11,500	1,600	14	880	420			
owa	9,000	21,000	1,600	8	1,200	420			
Cansas	4,500	7,000	750	11	1,200	130			
Centucky	7,000	10,500	1,200	11	1,500	120			
ouisiana	44,000	48,000	4,800	10	9,000	20,000	4		
Maine	1,300	1,700	130	8	-				
laryland	7,000	7,500	640	9		30	(2		
lassachusetts	3,800	4,000	350	9	600	100	,-		
lichigan	60,000	65,000	6,000	9	3,800	100	(2		
linnesota	21,000	57,000	1,000	2	2,000	40	(2		
lississippi	26,000	28,000	5,000	18	16,000	660			
lissouri	8,500	8,500	2,100	25	30	(Z)	(2		
Iontana	18,000	48,000	150	(Z)	-	-			
lebraska	9,000	17,000	670	4	70	-			
lew Jersey	6,500	7,000	250	4	110	40			
lew Mexico	6,000	6,000	40	1	120	(Z)	(2		
lew York	29,000	36,000	3,700	10	230	370			
lorth Carolina	15,000	23,000	2,200	10	3,000	490			
lorth Dakota	53,000	82,000	4,500	5	2,500	-			
Ohio	15,500	20,000	5,500	28	840	1,100			
Oklahoma	19,500	19,500	700	4	5,000	4 700			
Oregon	97,000	108,000	4,800	4	9,000	1,700			
Pennsylvania	18,500	24,000	1,000	4	1,100	320			
South Carolina	13,000	16,500	800	5	3,500	1,100			
South Dakota	20,000	20,000	1,200	6	20	400			
ennessee	8,000	14,000	1,500	11	1,000	130			
exas	235,000	340,000	35,000	10	83,000	24,000			
Itah ermont	12,000 6,500	17,000 7,500	400 520	2 7	4,200	70			
/irginia	6,000	7,000	1,100	16	1,600	60			
Vashington	49,000	74,000	1,500	2	580	150	(2		
Vest Virginia	6,000	8,000	1,100	14	450	680	(2		
Visconsin	16,000	26,000	1,500	6	2,000	370			
Vyoming	4,000	17,000	140	1	450	60	(2		
Other States 5	7,800	8,200	440	5	160	20	(2		
United States	2,876,100	(X)	399,570	14	477,200	153,390			

⁻ Represents zero.

⁽X) Not applicable.

⁽Z) Less than half of the unit shown.

January 1 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 colonies.

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 colonies.

⁵ 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, 2020 and April-June 2020

	April 1			April-	June	<u>, </u>	
State	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	8,500	8,500	4,100	48	4,700	2,620	31
Arizona	26,000	26,000	1,300	5	14,000	4,700	18
Arkansas	17,000	17,000	1,900	11	5,000	800	5
California	1,200,000	1,200,000	74,000	6	184,000	240,000	20
Colorado	16,500	27,000	2,100	8	6,000	2,800	10
Connecticut	3,900	4,300	30	1	1,200	480	11
Florida	325,000	· ·	39,000	12	36,000	23,000	7
	· ·	325,000	,				13
Georgia	141,000	143,000	10,000	7	19,500	19,000	
Hawaii	15,500	15,500	40	(Z)	240	2,300	15
daho	48,000	81,000	14,500	18	32,000	29,000	36
llinois	12,000	12,000	1,500	13	4,200	1,700	14
ndiana	11,000	12,000	920	8	4,300	3,200	27
owa	21,000	29,000	3,600	12	14,500	4,700	16
Kansas	7,500	8,000	440	6	1,800	1,800	23
Centucky	11,000	11,000	1,200	11	4,200	3,500	32
ouisiana	53,000	53,000	1,800	3	2,200	4,700	9
/laine	1,600	22,000	1,300	6	520	110	1
Naryland	7,000	8,000	680	9	4,500	1,700	21
Massachusetts	4,300	13,500	740	5	980	590	4
/lichigan	64,000	79,000	2,600	3	9,500	10,000	13
/linnesota	59,000	126,000	6,500	5	20,000	2,600	2
/lississippi	34,000	37,000	3,000	8	3,700	570	2
/lissouri	6,500	6,500	390	6	2,900	1,200	18
Nontana	48,000	120,000	3,800	3	14,000	16,500	14
lebraska	16,500	39,000	1,800	5	7,000	1,100	3
lew Jersey	7,000	20,000	760	4	1,600	720	4
lew Mexico	3,100	6,000	50	1	250	60	•
lew York	33,000	56,000	4,900	9	6,500	3,300	6
Iorth Carolina	24,000	25,000	1,600	6	6,000	1,300	
lorth Dakota	67,000	395,000	17,500	4	29,000	37,000	9
Ohio	15,500	16,500	1,700	10	9,500	3,700	22
Oklahoma	16,000	16,000	1,500	9	6,000	3,100	19
Dregon	89,000	95,000	2,500	3	10,500	19,000	20
Pennsylvania	24,000	27,000	1,000	4	6,000	1,700	6
outh Carolina	19,500	20,000	1,700	9	2,700	2,500	13
outh Dakota	9,500	205,000	4,600	2	8,500	14,500	7
ennessee	13,500	13,500	1,200	9	4,200	3,200	24
exas	360,000	385,000	25,000	6	75,000	136,000	35
Jtah	21,000	31,000	2,700	9	7,000	13,500	44
/ermont	7,000	7,000	260	4	700	130	2
/irginia	7,500	8,000	1,200	15	4,800	1,300	16
Vashington	50,000	114,000	3,100	3	5,000	3,300	3
Vest Virginia	7,500	7,500	570	8	1,600	1,500	20
Visconsin	27,000	53,000	1,700	3	11,500	4,600	2
Vyoming	17,500	24,000	1,600	7	2,300	2,100	Ş
Other States 5	6,500	7,440	250	3	1,270	1,500	20
Jnited States	2,982,900	(X)	252,630	8	596,860	632,680	21

⁽X) Not applicable.

⁽Z) Less than half of the unit shown.

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 Includes data for States not published in this table.

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

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	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	0.4	12.5	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
lowa	34.8	1.7	0.6	0.3	7.7	3.5
Kansas	86.9	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
	2.3	0.1	0.1	0.3	1.4	_
Maine	12.6	-	0.2	- /7\		0.8 2.4
Maryland		5.1	0.2	(Z)	10.1	
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	ì.á	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	0.5	0.1	0.3	0.3	8.8
Vermont	6.2	0.1	2.4	-	0.3	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
Nest 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
Nyoming	0.7	-	0.1	-	0.5	2.3
Other States ⁴	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.

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 Includes data for States not published in this table.

Colony Health Stressors with Five or More Colonies – States and United States: April-June 2019 5

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Arizona	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Arkansas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
California	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Colorado	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Connecticut	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Florida	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	(NA)	(NA)	(NA)	(NA)	` '	` '
Georgia					(NA)	(NA)
Hawaii	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Idaho	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Illinois	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Indiana	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
lowa	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Kansas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Kentucky	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Louisiana	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Maine	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Maryland	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Massachusetts	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Michigan	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Wildingari	(10.9)	(117.9)	(177)	(147.9)	(10.9)	(10.9)
Minnesota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Mississippi	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Missouri	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Montana	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Nebraska	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
New Jersey	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
New Mexico	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
New York	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
North Carolina	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
North Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Ohio	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oklahoma	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oregon	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Pennsylvania	(NA)	(NA) (NA)	(NA) (NA)	(NA)	(NA)	(NA)
Courth Carolina					` '	` '
South Carolina	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
South Dakota	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Tennessee	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Texas	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Utah	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Vermont	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Virginia	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Washington	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
West Virginia	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Wisconsin	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Wyoming	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Other States ⁴	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
United States	(NA)	(NA)	(NA)	(NA)	(NIA)	
UTILLEU States	(INA)	(INA)	(INA)	(INA)	(NA)	(NA)

⁽NA) Not available.

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.

Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.
Includes data for States not published in this table.

⁵ Data collection for July 2019 quarterly honey bee colonies was suspended.

Colony Health Stressors with Five or More Colonies - States and United States: July-September 2019

State	Varroa mites	Other pests and parasites 1	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	30.6	24.6	2.9	0.2	9.7	6.4
Arizona	29.0	9.9	2.7	11.4	13.2	0.6
Arkansas	53.2	19.7	6.8	50.5	6.9	39.3
California	49.0	11.5	8.7	16.0	11.1	3.2
Colorado	79.8	12.5	4.8	10.2	9.4	1.0
				10.2		
Connecticut	24.3	6.9	2.4	40.0	3.9	0.5
Florida	44.9	20.7	6.3	18.2	11.7	10.8
Georgia	52.5	18.6	1.6	25.8	17.1	4.6
Hawaii	37.2	39.0	0.3	-	1.3	0.2
Idaho	59.9	15.4	21.7	9.9	18.5	0.8
Illinois	35.9	8.3	0.7	2.5	5.5	11.5
Indiana	55.7	15.2	3.0	23.1	19.2	1.4
lowa	39.4	7.1	5.8	26.3	27.8	3.6
Kansas	67.5	33.8	21.8	23.9	1.2	0.5
Kentucky	29.2	17.6	0.4	5.2	7.9	8.6
Louisiana	67.1	66.8	0.4	57.0	2.5	2.7
	10.1	0.7	0.1	37.0	0.2	0.1
Manufacid			0.1	0.2		
Maryland	26.7	2.7	-	0.3	5.1	1.4
Massachusetts	13.0	2.9	0.2	(Z)	0.7	7.3
Michigan	42.7	16.4	8.7	7.3	2.1	1.5
Minnesota	54.9	8.2	4.0	13.4	6.6	2.1
Mississippi	59.1	45.6	2.4	25.4	4.0	5.1
Missouri	18.4	7.1	0.4	0.8	2.1	0.6
Montana	28.0	10.0	10.6	6.1	4.1	1.0
Nebraska	29.2	2.7	1.8	2.8	7.2	1.9
New Jersey	26.1	2.3	0.3	0.2	0.5	0.1
New Mexico	39.5	29.1	0.9	-	0.8	-
New York	30.7	11.5	1.2	8.2	2.5	3.8
North Carolina	26.9	11.3	19.7		9.7	5.7
				4.0	-	
North Dakota	48.4	10.2	14.7	9.0	23.7	9.3
Ohio	40.6	23.0	4.2	1.8	5.9	3.9
Oklahoma	29.0	1.4	0.1	0.1	4.1	4.4
Oregon	35.4	12.8	19.8	15.1	16.6	0.4
Pennsylvania	23.4	8.8	1.8	5.0	1.5	5.6
South Carolina	44.9	11.6	0.6	16.2	19.6	3.7
South Dakota	10.4	3.5	0.3	14.0	4.0	1.5
Tennessee	51.4	23.3	0.2	9.1	11.5	1.5
Texas	21.9	18.3	4.4	11.5	7.2	2.1
Utah	29.4	4.9	5.5	0.2	0.6	4.6
Vermont	22.2	4.3	0.7	-	0.5	0.1
Virginia	37.9	18.3	0.9	1.3	2.7	3.1
Washington	47.3	0.9	2.5	4.6	9.4	0.3
West Virginia	33.7	10.7	0.7	2.7	6.9	0.3
Wisconsin	46.4	20.5	13.9	18.1	6.5	3.9
Wyoming	45.7	0.4	3.3	2.2	6.3	2.5
Other States ⁴	11.3	4.5	4.2	7.7	1.4	0.1
United States	44.1	13.4	8.5	13.6	11.9	4.5

⁻ 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 Includes data for States not published in this table.

Colony Health Stressors with Five or More Colonies - States and United States: **October-December 2019**

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	46.7	26.7	0.6	4.9	9.0	11.3
Arizona	53.9	1.5	0.4	23.3	4.0	2.9
Arkansas	47.7	39.7	1.4	7.8	12.5	32.8
California	40.5	10.9	5.2	11.3	8.0	5.0
Colorado	67.7	1.5	-	15.3	2.6	0.8
Connecticut	22.2	11.1	2.4	-	1.7	1.6
Florida	43.5	25.6	7.8	11.7	7.8	4.8
Georgia	34.3	18.2	5.6	9.1	2.6	4.4
Hawaii	44.0	61.8	0.2	1.0	0.1	-
Idaho	20.3	4.3	5.4	10.5	9.9	1.1
Illinois	28.9	27.3	1.1	3.4	8.9	8.9
Indiana	20.7	15.0	2.6	6.7	1.6	0.6
lowa	61.0	17.8	5.6	25.2	19.7	4.2
Kansas	65.8	15.0	11.9	43.4	0.4	14.4
Kentucky	33.0	20.1	0.2	5.3	12.0	9.9
Louisiana	33.0	18.5	3.5	0.7	6.1	0.9
Maine	20.5	-	0.1	2.5	0.3	0.2
Maryland	12.6	4.5	1.8		0.3	5.0
Massachusetts	7.6	0.2	0.8	_	1.1	10.7
Michigan	37.0	9.7	9.2	8.3	1.1	3.8
Minnesota	37.3	7.8	1.2	6.1	1.8	4.0
Mississippi	41.0	38.0	4.1	13.9	10.5	5.2
Missouri	19.2	5.9	0.2	0.1	1.5	0.4
Montana	15.7	1.8	(Z)	0.8	2.8	0.3
Nebraska	5.8	1.0	(—) -	3.5	2.8	6.4
New Jersey	2.5	0.9	_	-	1.3	0.5
New Mexico	5.2	0.3	0.4	_	2.6	-
New York	33.3	24.8	3.0	8.7	3.2	4.0
North Carolina	44.5	21.0	4.5	2.4	15.7	11.7
North Dakota	43.0	7.1	1.8	3.7	2.0	1.7
Ohio	33.2	5.6	0.4	0.6	3.3	7.6
Oklahoma	1.0	0.4	-	0.4	0.4	0.1
Oregon	35.8	2.1	4.7	1.8	16.6	16.0
Pennsylvania	33.2	4.6	1.0	3.2	2.3	2.9
South Carolina	56.7	18.4	1.7	3.5	13.1	6.3
South Dakota	12.2	6.1	3.2	5.6	11.2	1.5
Tennessee	66.6	53.5	-	33.6	7.6	9.1
Texas	23.1	14.0	4.6	4.9	5.8	1.4
Utah	22.1	2.0	2.0	10.3	0.2	0.3
Vermont	21.0	1.3	0.6	0.8	0.6	0.9
Virginia	37.7	18.6	0.4	-	5.3	6.0
Washington	40.3	2.3	0.6	19.6	2.9	3.2
West Virginia	65.8	10.7	1.1	0.4	6.1	2.2
Wisconsin	40.0	22.1	14.8	14.1	22.0	7.3
Wyoming	27.6	12.3	3.2	-	4.3	13.2
Other States ⁴	13.6	2.3	0.3	0.3	32.4	0.9
United States	45.7	15.0	5.4	10.9	8.6	5.3

⁻ 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

Includes weather, starvation, insufficient forage, queen failure, hive damage/destroyed, etc.
 Includes data for States not published in this table.

Colony Health Stressors with Five or More Colonies - States and United States: January-March 2020

State	Varroa mites	Other pests and parasites ¹	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	12.4	3.4	(Z)	0.1	1.7	4.3
Arizona	31.7	0.1	0.1	-	10.1	9.0
Arkansas	31.7	22.7	0.2	2.6	0.4	11.2
California	22.4	6.0	5.0	5.3	5.3	4.2
Colorado	20.8	(Z)	0.1	0.4	10.8	2.4
Connecticut	11.2	2.9	0.4	0.4	2.8	3.0
			5.5	5.3	8.7	
Florida	28.0	14.2			-	10.9
Georgia	50.9	3.4	0.2	0.3	0.4	7.5
Hawaii	75.3	60.8	0.1	-	0.2	0.2
Idaho	10.4	0.8	0.1	2.8	2.1	1.9
Illinois	17.2	8.9	0.2	(Z)	7.3	10.0
Indiana	8.2	0.5	0.1	2.9	1.9	6.2
lowa	22.3	1.9	-	0.2	5.7	5.5
Kansas	13.3	8.1	7.8	7.8	3.1	11.3
Kentucky	17.4	2.6	2.0	0.3	7.6	6.5
Louisiana	26.5	7.0	0.7	1.2	1.4	0.6
Maine	19.6	1.2	0.7		2.2	3.0
Maryland	19.9	1.5	0.1	_	8.5	2.4
				0.2		
Massachusetts	13.9	0.5	1.8	0.3	4.5	2.2
Michigan	8.1	0.5	0.2	0.2	0.4	0.7
Minnesota	3.5	=	(Z)	0.2	4.3	0.3
Mississippi	58.6	50.9	0.3	1.8	14.5	3.6
Missouri	8.4	3.4	0.9	1.6	2.1	3.4
Montana	4.0	-	-	-	0.5	(Z)
Nebraska	2.2	0.1	0.1	=	0.3	Ò.Ŕ
New Jersey	9.4	2.9	0.5	0.1	3.2	2.3
New Mexico	2.1		-	-	0.7	0.2
New York	6.6	2.9	(Z)	_	1.7	7.7
North Carolina	35.7	7.1	4.8	0.6	1.4	5.1
		7.1	4.0	0.0		5.1
North Dakota	0.6	-	-	-	3.1	-
Ohio	17.6	3.6	1.1	0.1	3.0	13.4
Oklahoma	11.4	0.6	0.4	0.5	0.4	0.3
Oregon	24.4	10.4	10.8	14.5	1.3	0.3
Pennsylvania	15.5	3.9	2.8	1.8	2.7	3.2
South Carolina	15.5	11.5	9.6	0.3	6.4	5.4
South Dakota	14.7	0.1	-	2.1	0.3	0.3
Tennessee	18.9	17.3	1.0		4.1	7.8
Texas	12.2	6.8	1.3	3.4	5.2	4.6
Utah	38.9				15.7	
Vermont	9.1	17.2 0.8	17.1 0.6	2.3 0.9	2.0	22.4 3.1
Ministra		40.0	2.2			<u> </u>
Virginia	17.5	10.6	0.3	0.3	3.8	3.5
Washington	1.7	0.1	0.1	0.5	0.2	0.3
West Virginia	17.3	7.0	1.3	0.6	2.6	0.3
Wisconsin	9.0	1.9	0.4	(Z)	2.7	3.1
Wyoming	0.2	0.1	0.1	-	0.8	1.7
Other States 4	5.5	-	(Z)	(Z)	0.7	0.4
United States	25.5	8.0	4.4	5.0	5.6	5.4

⁻ Represents zero.

⁽Z) Less than half of the unit shown.

1 Tracheal mites, nosema, hive beetle, wax moths, etc.

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

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

⁴ Includes data for States not published in this table.

Colony Health Stressors with Five or More Colonies - States and United States: April-June 2020

State	Varroa mites	Other pests and parasites 1	Diseases ²	Pesticides	Other ³	Unknown
	(percent)	(percent)	(percent)	(percent)	(percent)	(percent)
Alabama	28.5	18.0	1.6	7.7	7.9	9.5
Arizona	22.1	(Z)	(Z)	4.2	5.5	0.6
Arkansas	40.5	15.3	5.1	24.6	2.1	12.4
California	33.4	4.7	3.9	5.4	7.5	3.0
Colorado	35.4	0.1	0.1	_	0.5	2.5
Connecticut	14.8	2.1	(Z)	_	0.1	0.6
Florida	31.4	15.2	3.2	5.5	5.5	7.5
Georgia	49.2	20.2	7.1	3.0	8.1	13.8
Hawaii	43.1	41.1	1.0	3.0	1.1	13.0
	44.2			9.6		5.8
Idaho	44.2	10.9	11.1	8.6	6.9	5.6
Illinois	23.5	8.2	1.0	8.3	11.9	4.0
Indiana	26.8	12.5	1.8	20.2	5.4	1.5
lowa	30.4	24.6	16.5	0.8	3.5	0.5
Kansas	68.4	34.1	24.0	32.8	28.9	14.3
Kentucky	18.3	10.9	0.2	1.2	2.9	3.2
Louisiana	23.7	4.7	0.5	0.1	3.5	1.3
Maine	12.1	0.2	6.9	-	0.5	-
Maryland	12.0	1.1	0.1	1.1	3.2	0.5
Massachusetts	14.7	2.1	0.3	0.4	1.1	0.4
Michigan	38.0	11.5	2.2	6.0	3.2	1.1
Minnesota	20.6	2.9	0.7	8.8	4.4	0.4
Mississippi	51.2	36.8	_	0.9	8.4	0.2
Missouri	17.4	1.5	5.7	3.1	11.2	1.9
Montana	12.1	5.6	5.9		4.6	0.3
Nebraska	15.8	1.0	4.4	10.9	0.1	2.6
New Jersey	7.2	0.8	22.1	0.1	22.3	0.1
New Mexico	3.0	0.4	0.3	0.4	0.4	0.1
New York	21.2	2.6	0.6	0.2	3.6	0.6
North Carolina	23.0	5.5	1.9	0.2	1.8	1.4
		1.7		2.0		
North Dakota	25.7	1.7	2.6	3.0	2.9	1.5
Ohio	23.8	12.0	6.2	5.8	7.3	13.3
Oklahoma	14.8	3.9	0.4	0.9	18.1	5.1
Oregon	28.0	1.7	7.5	2.2	5.9	0.7
Pennsylvania	27.3	2.7	1.4	0.3	3.4	1.3
South Carolina	27.4	5.8	0.5	(Z)	5.3	0.4
South Dakota	53.4	31.4	4.8	0.4	37.5	5.3
Tennessee	31.2	7.8	0.2	6.8	3.3	3.0
Texas	30.2	7.7	3.3	4.6	5.7	5.8
Utah	38.4	-	0.3	13.1	0.1	7.7
Vermont	10.7	0.5	0.1	-	1.1	-
Virginia	33.7	7.9	0.3	0.4	7.9	1.1
Washington	10.6	(Z)	0.7	1.0	1.3	0.4
West Virginia	46.2	1.8	0.7	0.5	2.8	1.9
Wisconsin	46.1	27.3	25.0	25.1	25.8	26.1
Wyoming	28.8	(Z)	0.1	1.1	3.5	1.2
Other States ⁴	16.8	1.1	0.7	-	0.3	0.3
United States	42.3	12.2	5.5	6.1	10.8	5.2

⁻ 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 Sinai II, etc.

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

⁴ Includes data for States not published in this table.

Colonies Lost with Colony Collapse Disorder Symptoms with Five or More Colonies – United States: 2019 and 2020

[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)	
2019 2020	59,940 105,240	(NA) 55,830	67,240	83,710	

(NA) Not available.

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.

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.

Special Note: Data collection for July 2019 quarterly honey bee colonies was suspended.

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@usda.gov

Travis Averill, Chief, Livestock Branch	(202) 692-0069
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, Mink, Census of Aquaculture	(202) 720-8784
Fatema Haque – Turkey Hatchery, Turkeys Raised	
Adam Peters – Honey, Honey Bee Colonies	(202) 690-4870
Autumn Stone – Layers, Eggs, Egg Products	(202) 690-3676
Takiyah Walker – Broiler Hatchery, Chicken Hatchery	

Access to NASS Reports

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.
- 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 email, 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 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.

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