



# California Apiary Inspection and Pest Exclusion Activity Report 2019/2020 Shipping Season

## Data Sources and Parameters

This report analyzes inspection and pest find data pertaining to live honey bees moved into California during the 2019/2020 apiary import season (September 1, 2019 through March 31, 2020). The data used for this report was generated at California’s border protection stations (BPS) via the Pest Exclusion Information Management (PEIM) system including Warning Notices, Rejection Notices, and Pest Damage Reports issued. When relevant, 2018/2019 statistics are included for comparison purposes.

## Importations

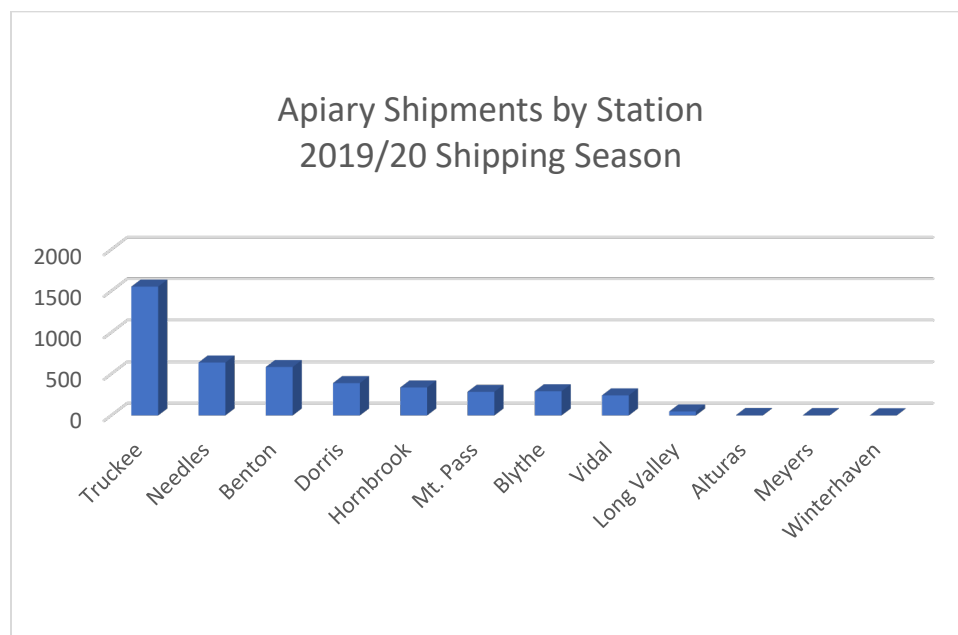
The data below represents all apiary shipments inspected at BPS. Total imported shipments increased by 5.03% in 2019/20 as compared to the 2018/19 shipping season.

	2018/19	2019/20	INCREASE/DECREASE
<i>SHIPMENTS</i>	4,172	4,382	+218
<i>HIVES*</i>	1.71M	1.80M	+90,000

\*Estimate based on average of 411 hives per shipment for 2019/20 season

## Importations by Route

Twelve of the 16 BPS, handled incoming shipments of live bees during the 2019/20 apiary shipping season. Consistent with past years, the Truckee Station, located on Interstate 80 was by far the heaviest used route in terms of volume – receiving 1,553 or nearly 35.45% of all shipments.



### Importations by Origin

During the 2019/20 apiary shipping season, shipments arrived at BPS from 39 different states. The table below details the origins of apiary shipments from the top 20 states. Of significant note is the significant increase in the number of shipments arriving from Florida.

<i>ORIGIN STATE</i>	<i>2018/19</i>	<i>2019/20</i>	<i>CHANGE</i>	<i>% CHANGE</i>
<i>ID</i>	812	792	-20	-2.46%
<i>ND</i>	594	602	8	1.35%
<i>FL</i>	271	431	160	59.04%
<i>OR</i>	419	388	-31	-7.40%
<i>WA</i>	362	371	9	2.49%
<i>MT</i>	303	281	-22	-7.26%
<i>SD</i>	237	229	-8	-3.38%
<i>TX</i>	202	223	21	10.40%
<i>MN</i>	163	157	-6	-3.68%
<i>GA</i>	68	122	54	79.41%
<i>UT</i>	101	94	-7	-6.93%
<i>AZ</i>	31	82	51	164.52%
<i>MI</i>	71	79	8	11.27%
<i>WY</i>	87	67	-20	-22.99%
<i>CO</i>	71	64	-7	-9.86%
<i>OK</i>	54	54	0	0.00%
<i>WI</i>	58	53	-5	-8.62%
<i>NE</i>	62	53	-9	-14.52%
<i>LA</i>	29	44	15	51.72%
<i>NV</i>	46	39	-7	-15.22%
<i>OTHER</i>	131	157	26	19.85%
<b><i>TOTAL</i></b>	<b>4172</b>	<b>4382</b>	<b>210</b>	<b>5.03%</b>

### Inspections/Pest Finds

Except for shipments participating in the North Dakota and Idaho Origin Inspection Pilot Projects (see below), all apiary shipments were inspected for hitchhiking pests at the BPS during the 2019/20 shipping season.

#### Summary of Pest Finds

The table below summarizes pest finds at all BPS. “Pests found” equates to one or more species of viable organisms found during inspection. During the 2019/20 shipping season, pests were detected on 4.72-percent of total incoming shipments. This represents a decrease in the percentage of pest infest shipments of 1.9-percent as compared to the 2018/19 season.

	<i>2018/19</i>	<i>2019/20</i>	<i>CHANGE</i>
<b><i>NO PESTS FOUND</i></b>	3,967	4,175	208
<b><i>PESTS FOUND</i></b>	205	207	2
<b><i>TOTAL SHIPMENTS</i></b>	4,172	4,382	210
<b><i>% PESTS FOUND</i></b>	4.91%	4.72%	-1.9%

### Disposition of Pest Infested Shipments by State

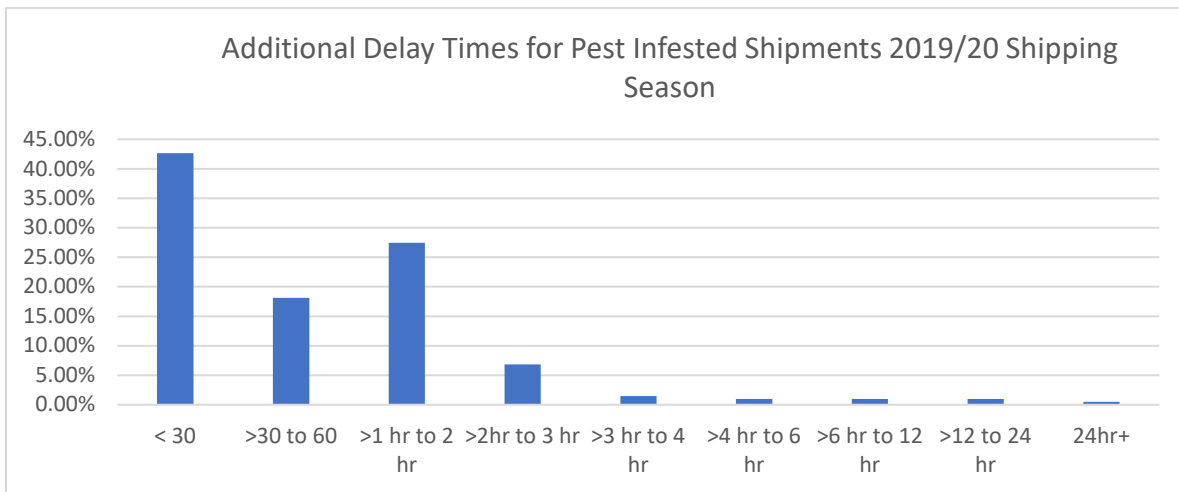
The table below details the disposition of all pest infested shipments for the 2019/20 shipping season. See footnotes for additional detail.

Origin State	All Rejections	Allowed Entry				Refused Entry (5)
		Non-Actionable (1)	SHB Accepting County (2)	Cleaned (3)	Ant-Free Protocol (4)	
FL	59	12	14	20	3	10
GA	21	4	7	5	3	2
ID	18	12	2	1		3
TX	18	5	2	9		2
ND	14	8	2	1		3
MN	10	5	3	1		1
LA	8	1	2	2	2	1
MT	7	7				0
WI	7	5	1			1
SD	6	5				1
AZ	5	4	1			0
IA	4	2		1		1
MI	4	3	1			0
NE	4	3				1
UT	4	4				0
MS	3	1		2		0
WY	3	2		1		0
IN	2	1	1			0
OK	2			1		1
SC	2		2			0
TN	2		2			0
KS	1			0		1
NV	1			1		0
NY	1			1		0
OR	1	1				0
WA	0					0
<b>Total</b>	<b>207</b>	<b>85</b>	<b>40</b>	<b>46</b>	<b>5</b>	<b>31</b>

- (1) Pest identified as non-actionable. Shipment allowed entry.
- (2) Pest identified as small hive beetle and allowed entry destined to an approved county.
- (3) Pest identified as actionable and mitigated by cleaning. Allowed entry after reinspection.
- (4) Shipment pre-inspected under ant-free certification program. Pest identified as actionable worker ants, but within tolerance. Shipment allowed entry.
- (5) Pest identified as actionable and could not be mitigated. Shipment returned out of state.

**Delay of Pest-Infested Shipments**

Shipments infested with hitchhiking pests are subject to additional delays while pests are identified and, if necessary, removal of the pest threat is carried out. The graph below represents approximate delay times for pest infested shipments during the 2019/20 season based on time in and time out data collected on rejection notices. This graph does not account for normal delays for all shipments due to inspection and given traffic flow at time of entry. On average, pest infested shipments were delayed one-hour and 22-minutes. Most pest-infested shipments (88.24%) had an additional delay of under two hours.



**Actionable Pests**

A total 202 actionable pests were intercepted on incoming shipments of bee colonies in the 2019/20 shipping season. Because often a single shipment of bees may be infested with more than one actionable pest (for example, one shipment was noted to be infested with three different species of actionable ants and small hive beetle), it is difficult to make a direct correlation between the number of actionable pests detected and the number of shipments inspected with currently available data. However, the information clearly demonstrates the continued high pest risk, both in terms of pest numbers and pest variety, presented by incoming apiary shipments.

Pest	2018/19	2019/20	Change
Small Hive Beetle	64	83	19
Carpenter Ants	44	51	7
Red Imported Fire Ant	28	27	-1
Pheidole Ants	9	15	6
Bagworm Moths	19	9	-10
Weeds	8	6	-2
Other Ants	3	3	0
Snails	2	3	1
Other Moths	1	2	1
Cereal Leaf Beetle	3	1	-2
Bugs	4	1	-3
Termite	3	1	-2
<b>Total</b>	<b>188</b>	<b>202</b>	<b>14</b>

## Pre-Entry Certification

### Ant-Free Certification Program

There are currently 17 states eligible to participate in the ant-free certification program: Arkansas, Georgia, Florida, Kansas, Louisiana, Maryland, Michigan, Mississippi, North Carolina, Nevada, Oklahoma, Pennsylvania, South Carolina, Tennessee, Utah, West Virginia, and Wisconsin. Eligible shipments are inspected and certified as being “ant-free” at origin. Certified are given the advantage of having a tolerance of up to 5 worker ants without rejection

In the 2019/20 shipping season, 1,001 apiary shipments entered from eligible states. Of these, 394 (39.36%) were certified by 11 of the 17 eligible states (no certificates were received from six eligible states). Of the total shipments from these states, pests were found 17.25% the non-certified shipments vs pest finds on only 10% of the certified shipments, demonstrating value in the program.

State	Non-Certified Shipments				Certified Shipments			
	No Pests Found	Pests Found	Total Shipments	% of Pest Finds	No Pests Found	Pests Found	Total Shipments	% of Pest Finds
Arkansas	3	0	3	0.00%	7	0	7	0.00%
Florida	192	38	230	19.79%	188	13	201	6.91%
Georgia	25	8	33	32.00%	76	13	89	17.11%
Louisiana	2	2	4	100.00%	34	6	40	17.65%
Maryland	3	0	3	0.00%	1	0	1	0.00%
Michigan	74	4	68	5.41%	1	0	11	0.00%
Mississippi	3	1	4	33.33%	14	2	16	14.29%
No. Carolina	5	0	5	0.00%	5	0	5	0.00%
So. Carolina	5	1	7	20.00%	19	1	19	5.26%
W. Virginia	1	0	1	0.00%	5	0	5	0.00%
<b>Total</b>	<b>313</b>	<b>54</b>	<b>358</b>	<b>17.25%</b>	<b>350</b>	<b>35</b>	<b>394</b>	<b>10.00%</b>

### Origin Inspection Pilot Program

For the 2019/20 shipping season, cooperative pilot programs were conducted where bee colonies were inspected and certified, prior to shipment, at origin in Idaho and North Dakota by CDFA inspectors. Under these programs, 275 (197 from Idaho and 78 from North Dakota) shipments of bee colonies were pre-cleared for entry through the BPS without inspection.

At destination, counties were asked to inspect and provide feedback on these shipments. No pests were submitted from these shipments by county inspectors.