### **Apiary Inspectors of America 2021 Survey Results**

#### **Total number of responses**

- 27 States
- 3 Provinces

## 1. Total number of state, regional, or other apiarists/inspectors/assistants in your state/province.

- 14 respondents have only one inspector for the whole year, some of which have parttime or seasonal inspectors
- Delaware: 2; Florida: 13; Hawaii: 10; Massachusetts: 4; North Carolina: 6; North Dakota: 3; Oregon: 0 inspectors at this time; Pennsylvania: 7; South Carolina: 4; Texas: 4; Utah: 10 (1 state inspector, 1 seasonal inspector, 8 county inspectors); Virginia: 15; West Virginia: 4; Wisconsin: 3 (all part-time); Wyoming: 3
- Alberta: 1 full-time inspector, 3-5 seasonal inspectors depending on funding; Ontario: 1 Provincial Apiarist, 14 inspectors, 8 office staff; Quebec: 15-20.

## Analyze samples in house Government/research affiliated lab in my state/province Private lab in my state/province USDA Beltsville Bee Lab National Agricultural Genotyping Center NC State Honey Bee Queen & Disease Clinic I do not submit samples for lab analysis Other 0 5 10 15 20 25

#### 2. What lab do you use for analyzing pest/pathogen samples?

Other labs used:

- Logan Bee Lab
- National Bee Diagnostics Center
- Oregon State University Honey Bee Lab
- Utah Department of Agriculture and Food

### 3. Does your state participate in the USDA National Honey Bee Survey?

- Yes = 20 (68.97%); No = 9 (31.03%)

### 4. How has your office been affected by COVID-19?

- Transitioned to telework for the most part, with some inspectors still coming to the office from time to time.
- Some inspection services attempted virtual inspections, but were not successful.
- Challenges with training new employees.
- Some services saw a lag in conducting inspections because beekeepers did not want inspectors to come out. Other services that were able to conduct inspections wore masks and practiced social distancing.
- Unable to send samples in for analyses/slow response on samples that were sent in.
- Some reduction in meeting with local beekeeping groups.
- Inspections restricted to "emergency and regulatory" purposes
- Travel restrictions
- Issues with transporting hives across state lines early in the shutdown
- Trouble acquiring sanitization materials (i.e. alcohol, bleach) and PPE (i.e. nitrile gloves).

# 5. Did you have to make any adjustments to your inspection activities? If yes, how did you have to adjust?

- Wear masks during inspection
- Beekeepers discouraged from being present during inspection
- Practice social distancing
- Refrain from entering homes and places of business
- Required to call beekeeper the night before the scheduled inspection to confirm their health status.
- Limit inspections to 2-3 days a week and only for emergency or regulatory purposes.
- Maintain a log of who the inspector visits, for how long, and if the inspector made any stops along the way
- Increased the number of consultation phone calls
- Limited the number and type of inspections done; only did inspections if necessary for regulatory reasons
- Restrictions in hiring seasonal inspectors

### 6. Is apiary/hive/beekeeper registration required by law in your state/province?

- Yes = 58% No = 42%
- States/provinces where registration is required:
  - USA: Connecticut, Delaware, District of Columbia, Florida, Maine, Maryland, Montana, North Dakota, Ohio, Oregon, Pennsylvania, Tennessee, Utah, Vermont, West Virginia, Wyoming
  - Canada: Alberta, Ontario, Quebec

### 7. Are beekeepers required to renew their registration on an annual basis?

- Yes = 17 (51.52%); No = 11 (33.33%); Other = 5 (15.15%)

- All of the states and provinces listed above that require registration (with the exception of Pennsylvania and Tennessee) also require that it be renewed on an annual basis.
  Exceptions:
  - 1. **Pennsylvania** registration is valid for up to two years.
  - 2. **Tennessee** registration renewal is every three years.

### 8. Are there fees associated with registration?

- Yes = 12 (37.5)%; No = 20 (62.50%)
- States that have a registration fee: District of Columbia, Florida, Maine, Montana, North Dakota, Ohio, Oregon, Pennsylvania, Utah, Vermont, Wyoming
- Provinces that have a registration fee: Quebec
- 9. Has your state/province enacted any new legislation this year pertaining to beekeeping, beekeepers, honey bees, pollinators, etc.?
  - Yes = 1 (3.303%); No = 32 (96.97%)
  - States that have enacted new legislation: Vermont

# 10. In comparison to previous years, what was the greatest beekeeping issue(s) you saw in your state/province? 1 = greatest issue, 9 = least greatest issue

- 1. Parasites Varroa mites, Tracheal mites, Small Hive Beetles, etc.
- 2. Beekeeper management and husbandry
- 3. Pathogens AFB, EFB, Chalkbrood, Nosema, viruses, etc.
- 4. Nutrition availability of resources
- 5. Environmental issues weather, land use, etc.
- 6. Tied between:
  - Genetics and breeding
  - Pesticides
- 7. Pests bears, skunks, mice, etc.
- 8. Other
  - Pandemic related transportation
  - Education efforts were hindered due to closures of the cooperative extension offices, travel restrictions
  - Misuse of Oxalic Acid
  - Bees stored honey in brood and did not move up, causing queen to quit laying
  - Queen failure

### 11. What programs/support services would you like to see AIA offer in the future?

- Funding for apiary programs/research/education
- Comparison of inspection data across inspection services
- More support for pollinator habitat initiatives
- Exotic honey bee genetics screening
- Training on Nosema disease identification
- Training on fire ant detection and certification process
- One year mentor program for new inspectors to be paired with current inspectors in the AIA.

- Training programs for new inspectors and veterinarians
- Maintain regular virtual AIA meetings
- Uniform policy used for ELAP
- Uniform queen inspection and certification policy
- Work with ABF and other national organizations on illegal pesticide use
- Informational webinars on pest and disease management
- Update website to provide more information/forms/presentations for inspectors
- Webinar series for beekeepers
- Continue collaboration with the EPA and USDA
- National reports and coordination of surveillance through state and provincial programs
- Better communication with the veterinary community

### 12. What changes can AIA make to be more supportive of your state/program?

- National SOP would greatly assist as being backbone of procedures used in individual state programs. Referring to these would be a great way to support local programs.
- Develop a brochure or program highlighting the importance of apiary inspection programs and its benefits to agriculture.
- Excel file of regulated pests and diseases in each state/province
- Share files across states to prevent re-inventing the wheel
- Standardized SOPs
- More conversations about the programs/initiatives that each state/province provides to their beekeepers. Talk about the pros/cons, what worked/what didn't, etc.
- More frequent regional meetings
- National reports and coordination of surveillance through state and provincial programs

State/Province	Total # of beekeepers	Total # of colonies	# of hobbyist/backyard beekeepers (1-50 colonies)	# of sideliner beekeepers (51- 500 colonies)	# of commercial beekeepers (501+ colonies)	Total # of registered beekeepers	Total # of registered apiaries
Connecticut	1200	9000	90%	9%	1%	850	Unknown
Delaware	400	2097	330	16	0	366	444
District of Columbia	125	500	124	1	0	N/A	N/A
Florida	5000+	630,000	4175	519	245	4939	N/A
Hawaii	Unknown	Unknown	580	17	3	N/A	N/A
Indiana	4550	16,000	4500	45	17	N/A	Unknown
Kentucky	1800 - 2000	50,000	1600	150	50	N/A	N/A
Maine	1200	11,000	1100	90	10	1200	Unknown
Maryland	2160	16,494	2000	150	10	Unknown	2706
Massachusetts	6000 - 6500	40,000 - 45,000	5500	500	10	266	266
Michigan	10,000	150,000 - 175,000	9500	400	100	N/A	N/A
Montana	503+	260,000	400	2	90	503	260,000
New Hampshire	596	2486	Unknown	Unknown	Unknown	Unknown	596
North Dakota	300	691,665	108	28	164	300	18,193
Ohio	9000	50,000	4000	2500	500	7000	9500
Oregon	214	80,442	153	33	28	214	214
Pennsylvania	5700	56,000	5527	128	11	5700	7800
Tennessee	6673	39,733	6163	500	10	6673	8071
Texas	6000	600,000	5300	500	200	2204	Unknown
Utah	3200	37,000	1450	100	50	1600	N/A
Vermont	761	15,000	720	30	11	761	500
West Virginia	2500	24,000	95%	4%	1%	1284	1809
Wisconsin	1000+	65,000	800	200	50	0	0
Alberta	2400	325,000	2000	250	150	2400	Unknown
Ontario	2850	101,989	2700	100	150	4722	5900
Quebec	1382	55,508	1268	91	23	1382	4112

State/Province	# of honey bee colonies that migrate in and out of state/province each year	# of packages of bees that are imported into your state/province each year	# of nucleus colonies that are imported into your state/province each year	# of queen producers that sell queens	# of queens imported into your state/province
Connecticut	1000	7000	10	20	4000
Delaware	1500 - 2000	Unknown	Unknown	19	Unknown
District of Columbia	10	100	50	1	100
Florida	400,000+	Unknown	Unknown	70+	Unknown
Hawaii	0	0	0	11	0
Indiana	6000	600 - 700	20	12	100
Kentucky	4000	3000 - 4000	2000 - 3000	50	1000
Maine	47,000	4000	1500	16	Unknown
Maryland	5000	2000	Unknown	Unknown	Unknown
Massachusetts	30,000	10,755	4140	10	1000
Michigan	30,000+	Unknown	Unknown	Unknown	Unknown
Montana	240,000	Unknown	Unknown	Unknown	Unknown
New Hampshire	150	2500	100	3	Unknown
North Dakota	691,334	Unknown	Unknown	Unknown	Unknown
Ohio	3000	20,000	1200	1000	Unknown
Oregon	70,000	Unknown	Unknown	Unknown	Unknown
Pennsylvania	17,795	Unknown	Unknown	218	Unknown
South Carolina	60,000	15,000	Included in estimated imported colonies	Unknown	Unknown
Tennessee	12,000	10,000	5000	50	5000
Texas	450,000	Unknown	Unknown	13	Unknown
Utah	30,000	Unknown	Unknown	Unknown	Unknown
Vermont	5000 - 6000	200+	2000	10	Unknown
West Virginia	5250	1000	500	25	Unknown
Wisconsin	57,000	10,000	3500	Unknown	30,000
Alberta	60,000	0	Several thousand	5	Unknown
Ontario	39,231	300	892	200	11,618
Quebec	2500	0	792	53	Unknown

State/Province	Total # of beekeepers inspected in 2020	Total # of colonies inspected in 2020	Total # of colonies certified through inspections in 2020	Total # of colonies positive for AFB	Total # of colonies positive for EFB
Connecticut	600	900	Unknown	6	N/A
Delaware	70	1252	475	6	55
District of Columbia	21	78	78	0	0
Florida	2250	23,000	457,972	2	N/A
Hawaii	N/A	N/A	740	0	0
Indiana	87	620	6000	10 (in 1 apiary)	0
Kentucky	39	300	3000	0	4
Maine	149	4781	Unknown	0	5
Maryland	185	4200	Unknown	Unknown	5
Massachusetts	574	5448	20,000	6 apiaries	67
Michigan	25	40,000	15,000	3	Unknown
Montana	43	1000	Unknown	2	8
New Hampshire	11	200	200	1	2
North Dakota	38	368	44,135	4	0
Ohio	N/A	25,000	Unknown	5	20
Oregon	19	72	Unknown	Unknown	Unknown
Pennsylvania	600	8000	Unknown	5	7
South Carolina	84	888	36,000	0	35
Tennessee	500	15,000	20,000	5	150
Texas	293	4643	516,593	0	13
Utah	390	2284	2819	25	57
Vermont	53	875	3000	28	21
West Virginia	Unknown	Unknown	Unknown	1	0
Wisconsin	141	2396	16,267	6	13
Alberta	99	3500	3500	Unsure	Unsure
Ontario	279	2589	39,718	5	10
Quebec	128	3165	Unknown	24	45