



Bruce Rauner, Governor
Raymond Poe, Director

Office of the Director

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September 2, 2016

The Honorable Bruce Rauner
Governor of Illinois
Capitol Building
Springfield, Illinois 62706-1150

Dear Governor Rauner:

In accordance with Section 3 of the Illinois Bees and Apiaries Act [510 /LCS 20/3], the Illinois Department of Agriculture is directed to submit an annual apiary inspection report to the Governor and the Illinois State Beekeepers Association. The report contains the findings of the Department's inspections of apiaries across Illinois on a fiscal year basis.

Please find enclosed the Fiscal Year 2016 Apiary Inspection Annual Report. Do not hesitate to contact Steve Chard, Apiary Inspection Supervisor, if there are questions regarding the contents of the report.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond Poe".

Raymond Poe
Director

Copy: Laura Sinclair, IDOA
Rebecca Clark, IDOA
IDOA Apiary Inspectors
Mike Mason, ISBA
Dale Hill, ISBA
Rich Ramsey, ISBA

Enclosure

Fiscal Year 2016 Apiary Inspection Annual Report
Illinois Department of Agriculture
(July 1, 2016 through June 30, 2017)

The Illinois Department of Agriculture administers the Illinois Bees and Apiaries Act (Act). Department Apiary Inspectors examine honeybee colonies around the state for the issuance of moving permits, to monitor the health of the bee population, to help prevent the spread of diseases and pests of the honeybee and to provide advice on general honeybee management.

Beekeeping in Illinois continues to be a hobbyist endeavor with almost 89% of the beekeepers managing 10 colonies or less (Table 1). 27 beekeepers maintain 100 or more colonies in the state.

Beekeepers are required to register with the Department of Agriculture. As of the end of Fiscal Year 2017, 4009 beekeepers were managing 28,864 colonies in 5,652 apiaries in Illinois (Table 2). The number of registered beekeepers has again increased significantly. 576 beekeepers were registered during the fiscal year. The total number of registered beekeepers statewide has increased each year since 2002 and is the most registered since 1990. Table 3 lists the number of colonies and apiaries registered in each county in Illinois. Will County had the highest number of colonies with 2,523. Lake County and Cook County placed second and third, with 2,093 and 1,803 colonies, respectively.

Colony inspection statistics for Fiscal Year 2017 and several previous years are included in Table 4. From July 1, 2016, through June 30, 2017, 632 apiaries containing 11,423 colonies were visited. Of these colonies, 5,472 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 14 colonies, or 0.3% of the colonies actually opened. This shows a significant decrease in the number of colonies infected with AFB as compared to 2016. In accordance with the Act, the diseased colonies were destroyed. The number of colonies infected with European Foulbrood (EFB) decreased while the number of colonies with Chalkbrood also decreased from Fiscal Year 2016.

Varroa mites continue to be found throughout the state. Inspection reports during the fiscal year indicated a large decrease in varroa mite levels as compared to last year. This may be due in part to the randomness of inspections, the time of year inspections were made, environmental conditions, more effective treatments for varroa mite control and rotating miticides.

Reports from around the state indicated colony losses following the severe winter affected all beekeepers to some degree. Many lost most or all of their colonies. Some beekeepers had a minor loss. Also, interest in colonies for pollination continues to increase due to the lack of feral colonies and the realization of the importance of honeybee pollination.

Tracheal mites are not listed as a regulated parasite in the Illinois Bees and Apiaries Act and rules. However, examinations for tracheal mites can still be performed when requested. Tracheal mites were not discovered in any colonies in conjunction with Department apiary inspections for Fiscal Year 2017, as determined by laboratory tests.

The small hive beetle (SHB) continues to be a growing problem in Illinois. Based upon the Department's inspections, the SHB has spread to most Illinois counties in isolated locations. Other counties may have SHB populations as well. Beekeepers are using various control methods (e.g., traps, other non-chemical control methods) to manage the beetle. The Department continues to closely monitor the movement of the SHB across Illinois.

The USDA-Animal Plant Health Inspection Service (APHIS) invited the Department to participate in another national honeybee survey in Fiscal Year 2017. The survey was designed to document which bee diseases/pests of honeybees are and are not present in the U.S. The Department collected samples at different apiaries across the State and the samples were processed by APHIS. APHIS will share the results of the survey with the cooperating beekeepers and the Department. Thanks to all the beekeepers who granted permission for their colonies to be surveyed.

Colony Collapse Disorder (CCD) has affected many honeybee colonies across the United States. The Department continued to monitor colonies closely for CCD-like symptoms and investigated as appropriate. There were no confirmed cases of CCD found through inspections in Fiscal Year 2017. Federal research continues to determine the cause(s) of and cure for CCD. The CCD issue has greatly increased public awareness on the importance of honeybees to humankind.

The Department and the Illinois State Beekeepers Association continue to encourage active communication between beekeepers and licensed pesticide applicators to accomplish the reduction of honeybee exposure to various pesticides (herbicides, insecticides, fungicides, etc.). There have been some instances where honeybees have been exposed to these materials, at times with catastrophic impacts. Progress is being made with the needed communication.

Licensed pesticide applicators can continue to gain contact and locational information related to Illinois beekeepers on the Department's website through the FieldWatch™ internet site. In addition, beekeepers can register their colonies on the FieldWatch™ site. The Department encourages pesticide applicators to contact beekeepers well in advance of an application to allow them to take needed steps to protect his or her honeybee colonies. This is a voluntary process that does not guarantee the complete elimination of potential pesticide exposures to honeybee colonies. However, if the pesticide user community and beekeepers work together, these potential exposures can be greatly reduced.

TABLE!

Distribution of Beekeeper Size in Illinois as of July 1, 2016

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers
0	134	3.8
1-5	2,578	73.11
6-10	457	12.96
11-20	192	5.45
21-50	112	3.18
51-100	26	.74
101-200	15	.43
201-300	3	.09
301-400	0	0
401-500	0	0
>500	5	.14
TOTAL	3,522	100.0*

* May not total 100% due to rounding.

TABLE 2

**Illinois Beekeeper and Colony Statistics from 1990 through 2016
as of July 1 of each year.**

Year	Number of Registered Beekeepers	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary
2016	3,522	5,136	25,339	7.2	4.9
2015	3,114	4,517	24,690	7.9	5.5
2014	2,766	4,023	26,004	9.4	6.5
2013	2,519	3,705	24,382	9.7	6.5
2012	1,825	2,849	21,231	11.6	7.5
2011	1,815	2,786	21,266	11.7	7.6
2010	1,631	2,565	20,547	12.6	8.0
2009	1,433	2,325	19,680	13.7	8.5
2008	1,366	2,303	19,556	14.3	8.5
2007	1,329	2,216	18,821	14.2	8.5
2006	1,264	2,157	20,217	16.0	9.4
2005	1,213	2,054	27,646	22.8	13.5
2004	1,141	1,940	19,572	17.2	10.1
2003	1,117	1,926	18,649	16.7	9.7
2002	1,107	1,914	17,963	16.3	9.4
2001	1,160	2,038	19,627	16.9	9.6
2000	1,142	1,975	18,504	16.2	9.4
1999	1,208	2,025	16,939	14.0	8.4
1998	1,295	2,136	18,129	14.0	8.5
1997	1,521	2,464	17,276	11.4	7.0
1996	1,515	2,506	16,896	11.2	6.7
1995	1,782	2,879	19,037	10.7	6.6
1994	1,999	3,252	21,872	10.9	6.7
1993	2,021	3,350	24,240	12.0	7.2
1992	2,249	3,668	26,405	11.7	7.2
1991	2,329	3,758	27,693	11.9	7.4
1990	2,705	4,336	33,800	12.5	7.8

TABLE 3

Number of Registered Apiaries and Colonies in Illinois Counties as of July 1, 2016

COUNTY	# OF APIARIES	# OF COLONIES	COUNTY	# OF APIARIES	# OF COLONIES
Adams	62	323	Jefferson	25	118
Alexander	I	I	Jersey	35	116
Bond	54	217	JoDaviess	68	1,136
Boone	35	479	Johnson	10	66
Brown	II	14	Kane	163	701
Bureau	45	384	Kankakee	74	299
Calhoun	5	15	Kendall	65	338
Carroll	37	459	Knox	32	159
Cass	9	19	LaSalle	93	385
Champaign	123	414	Lake	324	1,883
Christian	38	108	Lawrence	13	50
Clark	41	117	Lee	32	91
Clay	6	100	Livingston	36	113
Clinton	65	197	Logan	29	183
Coles	68	339	Macon	47	109
Cook	430	1,439	Macoupin	86	239
Crawford	37	123	Madison	173	514
Cumberland	27	78	Marion	42	111
DeKalb	36	173	Marshall	15	79
DeWitt	17	41	Mason	15	60
Douglas	26	80	Massac	7	16
DuPage	236	654	McDonough	21	97
Edgar	38	87	McHenry	161	1,310
Edwards	8	32	McLean	66	290
Effingham	25	102	Menard	30	111
Fayette	48	203	Mercer	27	78
Ford	10	28	Monroe	44	234
Franklin	31	192	Montgomery	52	197
Fulton	45	206	Morgan	33	84
Gallatin	5	15	Moultrie	36	156
Greene	7	11	Ogle	73	259
Grundy	23	200	Peoria	85	212
Hamilton	II	34	Perry	27	206
Hancock	31	208	Piatt	22	59
Hardin	2	18	Pike	22	60
Henderson	10	44	Pope	3	14
Henry	36	98	Pulaski	4	3
Iroquois	36	392	Putnam	16	84
Jackson	55	354	Randolph	27	114
Jasper	45	186	Richland	21	59

COUNTY	# OF APIARIES	# OF COLONIES
Rock Island	37	138
Saline	7	16
Sangamon	193	579
Schuyler	6	7
Scott	4	7
Shelby	42	182
St. Clair	132	437
Stark	7	19
Stephenson	28	107
Tazewell	57	163
Union	27	1,060
Vermilion	40	116
Wabash	12	42
Warren	25	118
Washington	26	137
Wayne	48	291
White	8	50
Whiteside	36	231
Will	190	2,332
Williamson	49	181
Winnebago	62	323
Woodford	71	226
TOTAL	5,136	25,339

TABLE4

Illinois Apiary Inspection Statistics - 1990 through June 30, 2016

Year	# of Apiaries Inspected	Colonies in Apiaries Inspected	# of Colonies Opened	AFB		# of Colonies with EFB	# of Colonies w/Chalk Brood	Varroa Mites		# of Colonies Tracheal Mites
				# of Colonies	% of Colonies Opened			# of Colonies	% of Colonies Inspected	
FY16	632	10,363	3,268	31	1.0	89	5	314	9.6	-
FY15	724	8,164	4,904	24	5	82	12	348	7.1	-
FY14	565	6,553	3,504	15	4	91	16	364	10.4	-
FY13	485	3,880	2,469	2	.1	113	5	554	14.3	-
FY12	399	2,807	2,031	17	.8	45	5	391	13.9	2
FY11	308	2,135	1,538	1	.1	14	6	265	12.4	2
FY10	406	2,695	1,998	8	.4	35	28	483	17.9	10
FY09	344	4,027	2,947	7	.2	0	5	196	4.9	1
FY08	314	2,073	1,523	12	.8	3	10	113	5.5	1
FY07	343	2,561	1,824	23	1.3	7	24	157	6.1	1
FY06	346	2,673	1,939	36	1.9	2	17	182	6.8	-
FY05	296	4,695	2,603	50	1.9	0	69	171	3.6	-
FY04	219	4,696	1,747	37	2.1	1	48	54	1.1	-
FY03	266	3,662	1,915	89	4.7	8	109	297	8.1	8
FY02	196	1,999	1,254	31	2.5	0	4	141	7.0	-
FY01	231	3,228	1,273	18	1.4	1	41	217	6.7	-
FY00	115	1,731	855	21	2.4	0	4	407	23.5	9
FY99	156	4,083	1,424	8	0.6	0	19	751	18.4	-
FY98	199	3,027	1,388	85	6.1	0	51	1,232	40.7	5
FY97	277	2,086	1,236	32	2.6	2	7	99	4.7	-
FY96	279	2,480	1,349	156	11.8	5	54	260	11.3	-
FY95	333	2,584	1,363	15	1.1	3	6	837	32.4	88
FY94	530	3,809	2,357	72	3.1	8	33	1,090	28.6	121
FY93	419	2,366	1,530	48	3.1	6	10	672	28.4	144
FY92	460	-	2,173	62	2.8	19	25	389	-	119
Cal92	474	-	1,916	72	3.7	1	21	618	-	120
Cal91	459	2,944	2,437	64	2.6	3	9	392	-	286
Cal90	400	-	-	140	-	11	108	-	-	-

AFB = American Foulbrood Disease

EFB = European Foulbrood Disease