

Fiscal Year 2014 Apiary Inspection Report
Illinois Department of Agriculture
(July 1, 2013 through June 30, 2014)

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 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 slightly more than 88% of the beekeepers managing 10 colonies or less (Table 1). 21 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 2014, 2,766 beekeepers were managing 26,004 colonies in 4,023 apiaries in Illinois (Table 2). The number of registered beekeepers has again increased significantly. 247 new 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. Union County had the highest number of colonies with 2,071. Will County and Iroquois County placed second and third, with 1,731 and 1,574 colonies, respectively.

Colony inspection statistics for Fiscal Year 2014 and several previous years are included in Table 4. From July 1, 2013, through June 30, 2014, 565 apiaries containing 6,553 colonies were visited. Of these colonies, 3,504 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 15 colonies, or .4% of the colonies actually opened. This shows an increase in the number of colonies infected with AFB as compared to 2013. In accordance with the Act, the diseased colonies were destroyed. The number of colonies infected with European Foulbrood (EFB) decreased from Fiscal Year 2013 and the number of colonies infected with Chalkbrood more than tripled in Fiscal Year 2014. While the total number of EFB cases decreased in FY14, there are still areas with a heavy concentration of EFB that appears to be a stronger strain. The Department continues to investigate and confer with experts.

Varroa mites continue to be found throughout the state. Inspection reports during the fiscal year indicated a significant 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. The Department also received approval by the USEPA for the use of Hop Guard II in Illinois for varroa mite control. This gives beekeepers another good option for combating this major pest.

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. The average winter loss in Illinois was 50%. 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 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 2014, 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 a total of 64 counties in isolated locations. 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 2014. 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 24 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 2014. Federal research continues to determine the cause(s) of 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 DriftWatch™ internet site. In addition, beekeepers can register their colonies on the DriftWatch 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 1

Distribution of Beekeeper Size in Illinois as of July 1, 2014

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers
0	81	2.92
1-5	1,967	71.01
6-10	399	14.40
11-20	172	6.21
21-50	93	3.36
51-100	33	1.19
101-200	13	0.47
201-300	2	0.07
301-400	0	0
401-500	0	0
>500	6	0.22
TOTAL	2,766	100.0*

* May not total 100% due to rounding.

TABLE 2

Illinois Beekeeper and Colony Statistics from 1988 through 2014
as of July 1 of each year.

Year	Number of Registered Beekeepers	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary
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
1989	2,783	4,413	34,966	12.6	7.9
1988	2,966	4,649	37,025	12.5	8.0

TABLE 3

Number of Registered Apiaries and Colonies in Illinois Counties as of July 1, 2014

COUNTY	# OF APIARIES	# OF COLONIES	COUNTY	# OF APIARIES	# OF COLONIES
Adams	42	288	Jefferson	21	108
Alexander	1	1	Jersey	18	83
Bond	45	151	JoDaviess	58	1,169
Boone	24	357	Johnson	10	65
Brown	12	34	Kane	122	589
Bureau	47	425	Kankakee	67	388
Calhoun	5	13	Kendall	53	262
Carroll	26	379	Knox	31	258
Cass	13	42	LaSalle	74	456
Champaign	98	337	Lake	263	1,558
Christian	31	93	Lawrence	11	47
Clark	30	110	Lee	21	95
Clay	4	58	Livingston	26	94
Clinton	41	119	Logan	24	131
Coles	50	343	Macon	41	119
Cook	321	1,196	Macoupin	60	220
Crawford	25	111	Madison	117	395
Cumberland	21	88	Marion	34	94
DeKalb	35	134	Marshall	11	68
DeWitt	16	42	Mason	15	70
Douglas	27	87	Massac	3	402
DuPage	184	491	McDonough	16	56
Edgar	28	130	McHenry	123	874
Edwards	8	25	McLean	43	214
Effingham	22	91	Menard	23	107
Fayette	38	163	Mercer	22	74
Ford	10	29	Monroe	27	156
Franklin	19	183	Montgomery	39	179
Fulton	42	228	Morgan	28	116
Gallatin	3	17	Moultrie	31	167
Greene	5	16	Ogle	58	232
Grundy	21	217	Peoria	60	254
Hamilton	10	28	Perry	22	202
Hancock	28	199	Piatt	18	54
Hardin	1	13	Pike	15	31
Henderson	10	40	Pope	1	3
Henry	14	47	Pulaski	3	534
Iroquois	28	1,574	Putnam	9	22
Jackson	46	294	Randolph	18	83
Jasper	42	194	Richland	17	51

COUNTY	# OF APIARIES	# OF COLONIES
Rock Island	27	110
Saline	1	2
Sangamon	172	624
Schuyler	9	36
Scott	5	7
Shelby	36	208
St. Clair	91	339
Stark	8	26
Stephenson	32	174
Tazewell	50	229
Union	20	2,071
Vermilion	31	96
Wabash	9	32
Warren	19	117
Washington	21	117
Wayne	45	249
White	5	31
Whiteside	36	268
Will	137	1,731
Williamson	35	635
Winnebago	57	294
Woodford	46	131
TOTAL	4,023	26,004

TABLE 4

Illinois Apiary Inspection Statistics - 1990 through June 30, 2014

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	
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	-
FY 05	296	4,695	2,603	50	1.9	10	69	171	3.6	-
FY 04	219	4,696	1,747	37	2.1	1	48	54	1.1	-
FY 03	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