Fiscal Year 2013 Apiary Inspection Report Illinois Department of Agriculture (July 1, 2012 through June 30, 2013)

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 87% of the beekeepers managing 10 colonies or less (Table 1). 18 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 2013, 2,519 beekeepers were managing 24,382 colonies in 3,705 apiaries in Illinois (Table 2). The number of registered beekeepers has increased significantly as compared to the past year. 697 new beekeepers were registered during the fiscal year. The total number of registered beekeepers statewide has increased each year since 2002. Table 3 lists the number of colonies and apiaries registered in each county in Illinois. Union County had the highest number of colonies with 2,073. Iroquois County and Lake County placed second and third, with 1,573 and 1,355 colonies, respectively.

Colony inspection statistics for Fiscal Year 2013 and several previous years are included in Table 4. From July 1, 2012, through June 30, 2013, 485 apiaries containing 3,880 colonies were visited. Of these colonies, 2,469 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 2 colonies, or .1% of the colonies actually opened. This shows a decrease in the number of colonies infected with AFB as compared to 2012. In accordance with the Act, the diseased colonies were destroyed. The number of colonies infected with European Foulbrood more than doubled in Fiscal Year 2013 and the number of colonies infected with Chalkbrood remained unchanged as compared to Fiscal Year 2012. The cause or causes of the high number of cases of EFB is unknown at this point and the Department is investigating.

Varroa mites continue to be found throughout the state. Inspection reports during the fiscal year indicated a significant increase 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 and possible resistance to chemicals for varroa mite treatment.

Reports from around the state indicated colony losses following the winter were light in some areas and heavy in other areas. 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 2013, as determined by laboratory tests.

The small hive beetle (SHB) continues to be a problem in Illinois. Based upon the Department's inspections, the SHB has spread to a total of 62 counties in isolated locations. 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, this time in Fiscal Year 2013. 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 investigates as appropriate. Based upon the symptoms displayed and in ruling out other traditional disease problems, there was one confirmed case of CCD found through an inspection in Fiscal Year 2013. 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.

Licensed pesticide applicators can continue to gain contact and locational information related to Illinois beekeepers on the Department's website through the DriftWatchTM 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, 2013

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers		
0	75	2.97		
1-5	1,765	69.98		
6-10	365	14.47		
11-20	175	6.94		
21-50	94	3.73		
51-100	27	1.07		
101-200	9	0.36		
201-300	3	0.12		
301-400	0	0		
401-500	0	0		
>500	6	0.24		
TOTAL	2,519	100.0*		

^{*} May not total 100% due to rounding.

TABLE 2

Illinois Beekeeper and Colony Statistics from 1988 through 2013 as of July 1 of each year.

Year	Number of Registered Beekeepers	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary	
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, 2013

	# O F	# 0 F			# O F	# OF
COUNTY		COLONIES		COUNTY		COLONIES
Adams	41	276		Jefferson	17	97
Alexander	1	-1		Jersey	13	78
Bond	46	143		JoDaviess	58	1,312
Boone	21	342		Johnson	11	65
Brown	14	46		Kane	118	523
Bureau	49	412		Kankakee	65	393
Calhoun	5	14		Kendall	47	265
Carroll	21	285		Knox	30	259
Cass	14	56		LaSalle	65	315
Champaign	93	329		Lake	211	1,355
Christian	27	74		Lawrence	12	55
Clark	31	107		Lee	20	72
Clay	4	34 ·		Livingston	17	54
Clinton	33	88		Logan	20	165
Coles	51	331		Macon	37	111
Cook	270	975		Macoupin	56	219
Crawford	24	80		Madison	113	406
Cumberland	19	68		Marion	31	79
DeKalb	31	127		Marshall	11	64
DeWitt	17	51		Mason	14	73
Douglas	22	79		Massac	3	402
DuPage	163	449		McDonough	19	71
Edgar	23	93		McHenry	126	873
Edwards	7	. 23		McLean	36	176
Effingham	22	81	2 7 2	Menard	14	71
Fayette	34	96		Mercer	19	59
Ford	9	34		Monroe	24	134
Franklin	16	170	Ŷ.	Montgomery	35	165
Fulton	47	260		Morgan	25	163
Gallatin	3	17		Moultrie	27	174
Greene	5	16		Ogle	51	215
Grundy	21	204	(3)	Peoria	61	338
Hamilton	10	27		Perry	18	205
Hancock	25	180		Piatt	16	53
Hardin	1	13	200	Pike	13	33
Henderson	11	24		Pope	1	1
Henry	13	51		Pulaski	3	536
Iroquois	26	1,573		Putnam	6	31
Jackson	46	264		Randolph	15	77
Jasper	36	147		Richland	15	43

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COUNTY	APIARIES	
Rock Island	22	109
Saline	1	2
Sangamon	162	617
Schuyler	9	36
Scott	5	7
Shelby	33	187
St. Clair	89	380
Stark	5	16
Stephenson	31	176
Tazewell	49	279
Union	19	2,073
Vermilion	33	131
Wabash	6	24
Warren	19	138
Washington	20	127
Wayne	44	208
White	5	26
Whiteside	35	214
Will	116	1,095
Williamson	38	670
Winnebago	57	314
Woodford	43	115
TOTAL	3,705	24,382

TABLE 4

Illinois Apiary Inspection Statistics -- 1990 through June 30, 2013

Year	# of Apiaries Inspected	Colonies in Apiaries Inspected	# of Colonies Opened	Al # of Colonies	FB % of Colonies Opened	# of Colonies with EFB	# of Colonies w/ Chalk Brood	Varr # of Colonies	oa Mites % of Colonies Inspected	# of Colonies Tracheal Mites
FY13	485	3,880	2,469	2	.1	113	5	554	14.3.22.4	-
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