

**FY 10 Apiary Inspection Report
Illinois Department of Agriculture
(July 1, 2009 through June 30, 2010)**

The Illinois Department of Agriculture administers the Illinois Bees and Apiaries 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 85% 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 2010, 1,631 beekeepers were managing 20,547 colonies in 2,565 apiaries in Illinois (Table 2). The number of registered beekeepers has increased significantly as compared to the past year. 267 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. JoDaviess County had the highest number of colonies with 2,007. Iroquois County and Union County placed second and third, with 1,514 and 1,491 colonies, respectively.

Colony inspection statistics for fiscal year 2010 and several previous years are included in Table 4. From July 1, 2009, through June 30, 2010, 406 apiaries containing 2,695 colonies were visited. Of these colonies, 1,998 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 8 colonies, or .04 % of the colonies actually opened. This shows a slight increase in the number of colonies infected with AFB as compared to 2009. In accordance with the Act, these diseased colonies were destroyed. There was a significant increase in the number of colonies infected with European Foulbrood and Chalkbrood as compared to Fiscal Year (FY) 2009.

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. No large infestations were found with inspections.

Reports from around the state indicated colony losses following the winter were light in some areas and moderate 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 discovered in 10 colonies in conjunction with Department apiary inspections for FY 10, as determined by laboratory tests.

A newer pest of honeybees, the small hive beetle (*Aethina tumida*), was discovered in several states in the southeastern United States in 1998. The pest was first found in Illinois in Kankakee, McLean and Will Counties during 2001. Based upon the Department's inspections, the SHB has spread to a total of 28 counties in isolated locations. The Department continues to closely monitor the movement of the SHB across Illinois. The Department has been granted Section 3 approval under the Federal Insecticide,

Fungicide, and Rodenticide Act (FIFRA) for the use of coumaphos impregnated plastic strips to treat small hive beetles and varroa mites. Varroa mites have demonstrated resistance to fluvalinate in some parts of the U.S. so another control product, such as coumaphos, is needed. The Department also received a Section 18 exemption approval under FIFRA in 2009 for the use of a new product, “Hivastan”, for varroa mite control.

Colony Collapse Disorder (CCD) has affected many honeybee colonies across the United States. To date, CCD has not been confirmed in Illinois. The Department monitors colonies closely for CCD-like symptoms and investigates as appropriate. Federal research continues to find 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. 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 honeybees.

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, 2010

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers
0	75	4.6
1-5	1068	65.4
6-10	258	15.9
11-20	124	7.6
21-50	69	4.2
51-100	19	1.2
101-200	8	.05
201-300	3	.02
301-400	1	.01
401-500	2	.01
>500	4	.02
TOTAL	1631	100.0*

* May not total 100% due to rounding.

TABLE 2

**Illinois Beekeeper and Colony Statistics from 1988 through 2010
as of July 1 of each year.**

Year	Number of Registered Beekeepers	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary
2010	1631	2565	20,547	12.6	8.0
2009	1433	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, 2010

COUNTY	# OF APIARIES	# OF COLONIES		COUNTY	# OF APIARIES	# OF COLONIES
Adams	34	232		Lee	12	39
Alexander	1	1		Livingston	18	52
Bond	20	73		Logan	19	270
Boone	16	306		Macon	27	60
Brown	22	122		Macoupin	41	183
Bureau	38	180		Madison	49	231
Calhoun	4	10		Marion	9	27
Carroll	20	337		Marshall	8	60
Cass	12	53		Mason	14	83
Champaign	70	244		Massac	3	402
Christian	15	35		McDonough	19	77
Clark	14	46		McHenry	84	717
Clay	7	59		McLean	27	148
Clinton	14	43		Menard	14	51
Coles	41	185		Mercer	7	25
Cook	168	792		Monroe	13	281
Crawford	13	32		Montgomery	8	48
Cumberland	14	43		Morgan	15	48
DeKalb	17	105		Moultrie	16	73
DeWitt	12	35		Ogle	45	284
Douglas	20	69		Peoria	50	252
DuPage	109	330		Perry	15	189
Edgar	24	124		Piatt	16	60
Edwards	5	21		Pike	11	22
Effingham	13	68		Pope	1	3
Fayette	19	61		Pulaski	4	535
Ford	9	38		Putnam	2	25
Franklin	12	64		Randolph	12	60
Fulton	48	268		Richland	10	30
Gallatin	3	24		Rock Island	12	65
Greene	5	47		Saline	2	11
Grundy	15	152		Sangamon	117	374
Hamilton	4	8		Schuyler	14	41
Hancock	27	193		Scott	4	6

Hardin	1	13		Shelby	16	144
Henderson	10	20		St. Clair	73	356
Henry	11	48		Stark	6	16
Iroquois	16	1514		Stephenson	35	280
Jackson	29	194		Tazewell	46	375
Jasper	22	103		Union	10	1491
Jefferson	10	72		Vermilion	24	102
Jersey	8	66		Wabash	2	13
JoDaviess	81	2007		Warren	15	144
Johnson	11	78		Washington	13	49
Kane	95	425		Wayne	28	149
Kankakee	29	335		White	3	11
Kendall	29	153		Whiteside	32	173
Knox	24	239		Will	60	864
LaSalle	38	145		Williamson	30	660
Lake	102	632		Winnebago	39	310
Lawrence	9	24		Woodford	25	110
				TOTAL	2565	20,547

TABLE 4

Illinois Apiary Inspection Statistics -- 1990 through July 1, 2010

Year	___ 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	
FY10	8	.4	35	28	483	1.8	10
FY09	7	.2	0	5	196	4.9	1
FY08	12	.8	3	10	113	5.5	1
FY07	23	1.3	7	24	157	6.1	1
FY06	36	1.9	2	17	182	6.8	-
FY05	50	1.9	10	69	171	3.6	-
FY04	37	2.1	1	48	54	1.1	-
FY03	89	4.7	8	109	297	8.1	8
FY02	31	2.5	0	4	141	7.0	-
FY01	18	1.4	1	41	217	6.7	-
FY00	21	2.4	0	4	407	23.5	9
FY99	8	0.6	0	19	751	18.4	
FY98	85	6.1	0	51	1,232	40.7	5
FY97	32	2.6	2	7	99	4.7	-
FY96	156	11.8	5	54	260	11.3	-
FY95	15	1.1	3	6	837	32.4	88
FY94	72	3.1	8	33	1,090	28.6	121
FY93	48	3.1	6	10	672	28.4	144
FY92	62	2.8	19	25	389	-	119
Cal92	72	3.7	1	21	618	-	120
Cal91	64	2.6	3	9	392	-	286
Cal90	140	-	11	108	-	-	-

AFB = American Foulbrood Disease
 EFB = European Foulbrood Disease