

FY 09 Apiary Inspection Report
Illinois Department of Agriculture
(July 1, 2008 through June 30, 2009)

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 86% of the beekeepers managing 10 colonies or less (Table 1). 16 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 2009, 1,433 beekeepers were managing 19,680 colonies in 2,325 apiaries in Illinois (Table 2). The number of registered beekeepers has increased slightly as compared to the past year. 175 new beekeepers were registered during the fiscal year. Table 3 lists the number of colonies and apiaries registered in each county in Illinois. JoDaviess County had the highest number of colonies with 2,009. Iroquois County and Union County placed second and third, with 1,510 and 1,507 colonies, respectively.

Colony inspection statistics for fiscal year 2009 and several previous years are included in Table 4. From July 1, 2008, through June 30, 2009, 344 apiaries containing 4,027 colonies were visited. Of these colonies, 2,947 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 7 colonies, or .2% of the colonies actually opened. This shows a decrease in the number of colonies infected with AFB as compared to 2007. In accordance with the Act, these diseased colonies were destroyed. There was a decrease of about 50% in the number of colonies infected with European Foulbrood and Chalkbrood as compared to Fiscal Year (FY) 2008.

Varroa mites continue to be found throughout the state. Inspection reports during the fiscal year indicated a slight 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 1 colony in conjunction with Department apiary inspections for FY 09, 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. Since then, the SHB has spread to a total of 23 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 2008 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, in cooperation with the Illinois State Beekeepers Association, has undertaken a project to assist in the possible 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. In an effort to limit these exposures, the IDA is hoping to increase communication between the pesticide user community and the state's beekeepers.

The name of the project is entitled, "Reducing Potential Bee Exposure to Pesticides." Licensed pesticide applicators can now 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, 2009

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers
0	75	5.23
1-5	948	66.2
6-10	209	14.6
11-20	103	7.19
21-50	57	4.
51-100	25	1.7
101-200	9	.063
201-300	2	.014
301-400	1	.007
401-500	2	.014
>500	2	.001
TOTAL	1433	100.0*

* May not total 100% due to rounding.

TABLE 2**Illinois Beekeeper and Colony Statistics from 1988 through 2009
as of July 1 of each year.**

Year	Number of Registered Beekeepers	Number of Apiaries	Number Of Colonies	Colonies/ Beekeeper	Colonies/ Apiary
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, 2009

COUNTY	# OF APIARIES	# OF COLONIES	COUNTY	# OF APIARIES	# OF COLONIES
Adams	33	182	Knox	20	216
Alexander	1	6	LaSalle	35	143
Bond	10	35	Lake	88	518
Boone	18	317	Lawrence	9	25
Brown	22	141	Lee	11	36
Bureau	32	121	Livingston	27	98
Calhoun	4	9	Logan	16	274
Carroll	22	377	Macon	17	43
Cass	13	62	Macoupin	42	166
Champaign	63	213	Madison	48	236
Christian	10	24	Marion	11	35
Clark	12	61	Marshall	8	59
Clay	7	41	Mason	15	84
Clinton	13	32	Massac	3	402
Coles	39	166	McDonough	19	76
Cook	129	701	McHenry	69	621
Crawford	8	21	McLean	35	282
Cumberland	15	31	Menard	12	43
DeKalb	16	96	Mercer	6	18
DeWitt	10	24	Monroe	16	288
Douglas	19	63	Montgomery	8	35
DuPage	86	263	Morgan	14	77
Edgar	22	145	Moultrie	15	59
Edwards	5	19	Ogle	43	272
Effingham	9	57	Peoria	41	223
Fayette	17	71	Perry	18	185
Ford	10	33	Piatt	15	55
Franklin	8	30	Pike	12	21
Fulton	45	245	Pope	1	3
Gallatin	3	24	Pulaski	3	534
Greene	4	36	Putnam	2	18
Grundy	17	183	Randolph	12	60
Hamilton	3	7	Richland	8	22

Hancock	25	167		Stephenson	29	237
Hardin	0	0		Tazewell	46	459
Henderson	10	81		Union	10	1,507
Henry	8	33		Vermilion	20	92
Iroquois	16	1,510		Wabash	1	12
Jackson	21	153		Warren	13	138
Jasper	17	68		Washington	13	55
Jefferson	7	49		Wayne	27	132
Jersey	8	49		White	2	9
JoDaviess	81	2,009		Whiteside	33	157
Johnson	10	71		Will	47	796
Kane	98	436		Williamson	34	676
Kankakee	17	291		Winnebago	37	253
Kendall	28	146		Woodford	24	119
				TOTAL	2,325	19,680

TABLE 4

Illinois Apiary Inspection Statistics -- 1990 through July 1, 2009

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	
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