Illinois Department of Agriculture Bees and Apiaries Program FY '05 Apiary Inspection Report (July 1, 2004 through June 30, 2005)

The Apiary Inspection Section of the Illinois Department of Agriculture administers the Illinois Bees and Apiaries Act. The Department's 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 almost 85% of the beekeepers managing 10 colonies or less (Table 1). Only 21 beekeepers maintain 100 or more colonies.

Beekeepers are to be registered with the Department of Agriculture. As of the end of the fiscal year, 1,213 beekeepers were managing 27,646 colonies in 2,054 apiaries in Illinois (Table 2). The number of registered beekeepers has increased as compared to the past year. 87 new beekeepers were registered during the fiscal year. Table 3 lists the number of colonies and apiaries registered in each county in Illinois. Jo Daviess County had the highest number of colonies with 2,122. Peoria County was a close second with 2,066 colonies.

Colony inspection statistics for this fiscal year and several previous years are presented in Table 4. From July 1, 2004, through June 30, 2005, 296 apiaries containing almost 4,700 colonies were visited. Of these colonies, 2,603 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 50 colonies, or 1.9% of the colonies actually opened. This shows a small increase in the number of colonies infected with AFB as compared to 2004. In accordance with the Act, these diseased colonies were destroyed. There also was an increase in the number of colonies infected with European Foulbrood and Chalkbrood as compared to FY '04.

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 that inspections were made, environmental conditions and possible resistance to chemicals for varroa mite treatment.

Reports from around the state indicated that 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. Examinations for tracheal mites can still be performed when requested. No tracheal mites were discovered in conjunction with department apiary inspections for FY '04.

A newer pest of honeybees, the small hive beetle (*Aethina tumida*), was discovered in several states in the southeastern United States in 1998. Unfortunately, the pest was found in Kankakee, McLean and Will Counties during 2001. During FY '02 there was no confirmation of small hive beetle spreading to other counties. However, small hive beetles were found in isolated locations in Bureau, Henry and Whiteside Counties in FY '03. No cases of small hive beetle have been reported or confirmed outside of those six counties since FY '03. The Department continues to closely monitor the movement of the small hive beetle as of July 1, 2005. The Department requested and was initially granted a Section 18 exemption 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 during 2000. This exemption has been renewed annually, including 2005. Varroa mites have demonstrated resistance to fluvalinate in some parts of the U.S. so another control product, such as coumaphos, is needed.

TABLE 1

Distribution of Beekeeper Size in Illinois as of July 1, 2005

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers		
0	106	8.7		
1-5	768	63.3		
6-10	154	12.7		
11-20	91	7.5		
21-50	47	3.9		
51-100	25	2.1		
101-200	12	1.0		
201-300	2	0.2		
301-400	0	0		
401-500	1	0.2		
>500	6	0.5		
TOTAL	1,213	100.0*		

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

TABLE 2

Illinois Beekeeper and Colony Statistics from 1988 through 2005 as of July 1 of each year.

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

	# OF	" OF			# OF	# OF
COLINITY	# OF APIARIES	# OF		COLINITY	# OF APIARIES	# OF
COUNTY Adams	APIARIES 39	COLONIES 223		COUNTY Jefferson	APIARIES 10	COLONIES 31
Alexander	1	7		Jersey	11	49
Bond	7	22	+	JoDaviess	81	2122
Boone	14	332		Johnson	4	53
Brown	21	141	Ŧ	Kane	84	438
Bureau	20	119		Kankakee	18	183
Calhoun	3	8	Ť	Kendall	27	137
Carroll	27	438	Ť	Knox	17	209
Cass	10	66	Ť	LaSalle	25	120
Champaign	55	198	Ť	Lake	53	276
Christian	14	36		Lawrence	6	17
Clark	10	48	Ī	Lee	11	42
Clay	3	5	Ī	Livingston	12	27
Clinton	18	26	Ť	Logan	16	140
Coles	23	110	Ī	Macon	17	32
Cook	87	567	Ť	Macoupin	34	126
Crawford	8	18	Ť	Madison	42	264
Cumberland	11	20	T	Marion	16	25
DeKalb	16	132		Marshall	8	59
DeWitt	9	15	T	Mason	14	79
Douglas	17	78		Massac	2	400
DuPage	52	192		McDonough	13	82
Edgar	18	124		McHenry	62	756
Edwards	6	23		McLean	35	141
Effingham	12	34		Menard	15	42
Fayette	12	46		Mercer	3	20
Ford	11	30		Monroe	20	417
Franklin	12	29		Montgomery	11	41
Fulton	33	195		Morgan	15	149
Gallatin	3	38		Moultrie	11	77
Greene	3	4		Ogle	28	215
Grundy	20	315		Peoria	47	2066
Hamilton	5	16		Perry	21	157
Hancock	22	194		Piatt	13	92
Hardin	1	1		Pike	29	136
Henderson	7	22		Pope	0	0
Henry	9	29		Pulaski	4	540
Iroquois	15	866		Putnam	3	20
Jackson	15	145		Randolph	10	63
Jasper	6	9		Richland	8	178

TABLE 3 cont.

Number of Registered Apiaries and Colonies in Illinois Counties as of July 1, 2005

COUNTY	# OF APIARIES	# OF COLONIES	COUNTY	# OF APIARIES	# OF COLONIES
Rock Island	9	62			
Saline	3	10			
Sangamon	97	313			
Schuyler	13	78			
Scott	6	8			
Shelby	12	55			
St. Clair	50	187			
Stark	3	8			
Stephenson	25	346			
Tazewell	36	284			
Union	14	1506			
Vermilion	26	167			
Wabash	4	17			
Warren	10	130			
Washington	11	55			
Wayne	26	104			
White	2	7			
Whiteside	28	111			
Will	50	849			
Williamson	33	856			
Winnebago	37	144			
Woodford	29	116			

TABLE 4

Illinois Apiary Inspection Statistics -- 1990 through July 1, 2005

Year	# of Apiaries Inspected	Colonies in Apiaries Inspected	# of Colonies Opened	A # of Colonies	FB % of Colonies Opened	# of Colonies with EFB	# of Colonies w/ Chalk Brood	Vari	roa Mites % of Colonies Inspected	# of Colonies Tracheal Mites
FY 05	296	4,695	2,603	50	1.9	10	69	171	3.6	0
FY 04	219	4,696	1,747	37	2.1	1	48	54	1.1	0
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