## FY '04 Apiary Inspection Report Illinois Department of Agriculture (July 1, 2003 through June 30, 2004)

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 85% of the beekeepers managing 10 colonies or less (Table 1). Only 18 beekeepers maintain 100 or more colonies.

Beekeepers are to be registered with the Department of Agriculture. As of the end of the fiscal year, 1,141 beekeepers were managing 19,572 colonies in 1,940 apiaries in Illinois (Table 2). The number of registered beekeepers has increased slightly compared to the past year. 70 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 2,115. Peoria County was a close second with 2011 colonies.

Colony inspection statistics for this fiscal year and several previous years are presented in Table 4. From July 1, 2003, through June 30, 2004, 219 apiaries containing almost 4,700 colonies were visited. Of these colonies, 1,747 were actually opened and inspected. American Foulbrood Disease (AFB) was detected in 37 colonies, or 2.1% of the colonies actually opened. This percentage represents a sizeable decrease in AFB infections as compared to the previous year. In accordance with the Act, these diseased colonies were destroyed. There also was a decrease in the number of colonies infected with European Foulbrood and Chalkbrood as compared to FY '03.

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 that inspections were made, environmental conditions and possibly increased vigilance on the part of beekeepers in monitoring varroa mite populations and treating accordingly.

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 new 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. 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 2004. 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, 2004

Number of Colonies	Number of Beekeepers	Percentage of Beekeepers		
0	111	9.6		
1-5	712	62.4		
6-10	150	13.1		
11-20	75	6.6		
21-50	49	4.3		
51-100	27	2.4		
101-200	10	0.9		
201-300	1	0.1		
301-400	0	0		
401-500	1	0.1		
>500	6	0.5		
TOTAL	1,141	100.0*		

<sup>\*</sup> May not total 100% due to rounding.

TABLE 2

Illinois Beekeeper and Colony Statistics from 1988 through 2004 as of July 1 of each year.

Year	Number of Registered Beekeeper s	Number of Apiaries	Number of Colonies	Colonies/ Beekeeper	Colonies/ Apiary
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, 2004

County	Number of Apiaries	Number of Colonies	County	Number of Apiaries	Number of Colonies
Adams	36	200	Fulton	31	163
Alexander	1	6	Gallatin	3	60
Bond	8	22	Greene	3	4
Boone	12	329	Grundy	22	296
Brown	20	136	Hamilton	4	14
Bureau	19	105	Hancock	21	151
Calhoun	3	8	Hardin	1	1
Carroll	24	414	Henderson	6	24
Cass	11	94	Henry	14	27
Champaign	56	204	Iroquois	15	862
Christian	13	43	Jackson	14	137
Clark	6	40	Jasper	7	8
Clay	7	14	Jefferson	9	39
Clinton	18	26	Jersey	11	42
Coles	20	80	JoDaviess	81	2115
Cook	83	478	Johnson	4	52
Crawford	8	18	Kane	72	421
Cumberland	11	23	Kankakee	19	184
DeKalb	16	140	Kendall	26	121
DeWitt	7	14	Knox	16	212
Douglas	15	46	LaSalle	28	133
DuPage	43	151	Lake	46	242
Edgar	18	124	Lawrence	6	18
Edwards	6	23	Lee	9	32
Effingham	11	42	Livingston	10	20
Fayette	8	30	Logan	16	166
Ford	10	25	Macon	16	30
Franklin	12	36	Macoupin	30	110

## **TABLE 3 (Continued)**

County	Number of Apiaries	Number of Colonies	County	Number of Apiaries	Number of Colonies
Madison	41	236	Richland	7	18
Marion	17	26	Rock Island	8	49
Marshall	8	63	Saline	3	10
Mason	14	92	Sangamon	94	372
Massac	2	400	Schuyler	12	61
McDonough	14	98	Scott	6	7
McHenry	53	749	Shelby	16	67
McLean	35	158	St. Clair	48	218
Menard	15	40	Stark	1	4
Mercer	5	28	Stephenson	20	364
Monroe	23	521	Tazewell	33	275
Montgomery	12	48	Union	12	1340
Morgan	15	174	Vermilion	17	137
Moultrie	11	37	Wabash	4	22
Ogle	29	221	Warren	10	92
Peoria	40	2011	Washington	11	52
Perry	19	150	Wayne	25	97
Piatt	12	84	White	1	6
Pike	27	149	Whiteside	27	105
Pope	0	0	Will	48	851
Pulaski	4	540	Williamson	32	576
Putnam	3	20	Winnebago	28	103
Randolph	11	83	Woodford	25	90

TABLE 4
Illinois Apiary Inspection Statistics -- 1990 through 2004

Year	# of Apiaries Inspected	Colonies in Apiaries Inspected	# of Colonies Opened	AF of # of Colonies Colonies Opened	FB	# of Colonies with EFB	# of Colonies w/ Chalk Brood	Varr Mites # of Colonies Colonies Inspected	oa % of	# of Colonies Tracheal Mites
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