

1993 Oregon Pollination Survey

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The honey bee continues to play a critical role in agricultural production. The importance of managed pollination will be even more important in future years as several factors will likely reduce the overall number of honey bee colonies available for pollination rental. A knowledge of current pollination economics is important to all beekeepers involved in colony rental and to growers of crops that require honey bee pollination. Once again the results from the 1993 pollination survey point out the vital importance of honey bee pollination to agricultural production in Oregon.

The survey was sent to all beekeepers who register more than 25 colonies with the Oregon Department of Agriculture. 39 surveys were returned. The nineteen commercial beekeepers (defined as owning more than 300 colonies) who responded collectively owned 18,850 colonies which is approximately 55% of all registered commercial colonies in Oregon. The total number of registered colonies owned by all respondents to the survey was 20,640. A total of 57,939 rentals were reported, which produced a rental income of \$1,302,051!!!!!! The average pollination fee was \$22.⁵⁰, which is a 17% increase from 1992 (see Table 2). Commercial beekeepers continue to be responsible for by far the greatest part of pollination rental. Commercial bee colonies accounted for 94% of all rentals and 96% of all rental income.

New for this year's survey was the inclusion of almond pollination in California. In past years the survey has concerned itself only with crops grown in Oregon. However, as is apparent, the "California Run" for almond pollination is vitally important for Oregon's commercial bee industry. As shown in Table 1, almond pollination income represents 33%

of reported pollination income for the Oregon beekeepers who responded to the survey. On a single crop basis, almonds are responsible for generating the most pollination income. The in-state tree fruit industry (apples, pears & sweet cherries) accounted for 32% of all reported pollination income. Vegetable seed pollination (primarily carrots and onions) continues to be the largest in-state income source with 15% of pollination income. Almond pollination had the highest average colony rental fee at \$31.⁶⁰. For in-state crops, cranberries had an average rental fee of \$30.⁰⁰ which was closely followed by vegetable seed pollination at \$29.⁵⁰. Interestingly, a few beekeepers are beginning to generate pollination rental income from crimson clover and vetch seed, which have traditionally been crops for which the beekeeper charges no rental fee.

The "average" commercial honey bee colony was rented 2.9 times in 1993 and generated a rental income of \$65.²⁵. The average non-commercial bee hive was rented 1.9 times for an income of \$42.⁷⁵. The average commercial beekeeping operation owned 990 colonies and had a gross pollination rental income of \$64,600. The average non-commercial operation had 90 colonies and a rental income of \$3,850.

For the "average" commercial beekeeper, pollination rental income accounted for 72% of total gross income for 1993. The non-commercial beekeeper's rental income represented 50% of total bee generated income.

Table 2 Average Pollination Fee 1986 - 1993

1986	1987	1988	1989	1990	1991	1992	1993
\$14.75	16.15	17.50	16.05	18.40	19.45	19.25	22.50

Table 1 1993 POLLINATION SURVEY SUMMARY

Crop	Number of Rentals	High - Low \$S Fee	Average \$S Fee	Total \$S Income	Number of Beekeepers
Pear	6,930	31 - 13	25.70	178,100	20
Sweet cherry	5,272	30 - 13	27.20	143,348	21
Apple	3,656	29 - 11	27.45	100,428	12
Berry ¹	2,585	25 - zero	13.60	35,220	15
Vegetable seed	6,713	35 - zero	29.50	198,491	17
Red Clover seed	5,246	32 - zero	10.90	57,268	8
Crimson Clover seed	3,936	10 - zero	0.60	2,380	11
Vetch seed	3,813	18 - zero	4.40	16,846	8
Radish seed	1,263	30 - zero	17.20	21,717	10
Cranberry	971	30 - 30	30.00	29,130	2
Blueberry	1,900	30 - 15	23.20	44,117	13
Cucumber	430	32 - 15	19.20	8,250	6
Squash & Pumpkin	790	30 - zero	20.60	16,270	7
Misc. ²	657	30 - zero	23.00	15,094	7
California Almonds	13,777	34 - 26	31.60	435,392	20
TOTAL	57,939 Rentals	Average Rental fee	\$22.50	1,302,051 Total Income	

Survey Review

A total of 39 beekeepers returned survey forms:
 19 Commercial (>300 hives) owning 18,853 colonies
 20 Sideline (<300 hives) owning 1,787 colonies

The average per colony pollination rental fee (for all beekeepers, for all crops including California almond pollination) for 1993 was:
\$22.50

The average commercial beekeeper rented each colony 2.9 times in 1993 for an average per hive rental income of \$65.25 (this includes pollination of almonds in California.)

The average sideline beekeeper rented each colony 1.9 times in 1993 for an average per hive rental income of \$42.75 (very few sideline colonies went to California.)

For the surveyed beekeeping operations, 94% of all pollination rentals were conducted by commercial beekeepers, who also accounted for 96% of all reported pollination income.

The average commercial bee operation maintained 990 colonies and grossed \$64,600 in pollination rental income for 1993.

The average sideline bee operation maintained 90 colonies and grossed \$3,850 in pollination rental income for 1993.

¹Includes blackberries, raspberries, boysenberries, marionberries.

²Includes bell peppers, eggplants, turpin seed and watermelons.