

Pacific Northwest (PNW) 2014 Beekeeper Pollination Survey

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For our 2014 pollination survey, a total of 37 survey responses were used that includes 29 responses from PNW commercial beekeepers (7 from Oregon) and 8 from semi-commercial beekeepers (4 from Oregon). Oregon commercial respondents managed an average of 2994 colonies/individual whereas semi-commercial respondents had 262 colonies/individual. The survey response from Oregon beekeepers was lower this year than our previous year's survey (See 2013 summary results in June 2014 BEELINE – it is posted on orsba.org website).

Total colonies (22,006) reported by survey respondents represents an estimated 31% of total managed honey bee colonies in Oregon (USDA NASS estimate of 71,000 honey producing colonies). This is lower than last year's survey representation of about 60% of total colonies in Oregon. Overall for the 3 states (OR, WA and ID), our survey responses included owners of about 56% of the total estimated colonies in these states.

The 2014 pollination survey continues to illustrate the importance of pollination rental for PNW beekeepers. Overall, the 7 commercial Oregon beekeepers reported an average 8.8 crop rentals (range 4-13) and semi-commercials had an average of 3.25 crop rentals (range 1 to 9). The PNW average was 4.1 colony rentals/individual (both commercial and semi-commercial).

The 37 PNW beekeepers reported 128 crop rental opportunities of over 15 crops for a total of over 183,200 colony rentals with just over \$21.5 million gross income (see accompanying table and graph).

By far the largest rental fee generator for OR and PNW beekeepers was California almond rental, which has been the case for the last several survey years. Eleven Oregon beekeepers rented 14,318 colonies (range 108 to 5800 colonies) to almond growers. Rental fee received from almonds ranged from \$145 to \$185 with a weighted average of \$173.40, an increase of \$20 over the 2013 rental average and above the PNW average of \$164. Almonds represent nearly 1/3rd (29.5%) of total OR beekeeper pollination rentals, but 59% of total gross income. This relationship has been essentially the same for the last two years.

Closer to home, OR beekeeper rental for pears, sweet cherries and some apples remains the top pollination opportunities. In 2014, 27.5% of total yearly pollination rentals were in fruit orchards. Gross income was 11.5% of total rental income. Excluding almond rentals, tree fruit represents 66% of both total rentals and gross income for rentals within the 3-state region.

Berry rental (blackberries, raspberries, marionberries, blueberry and cranberry) represents an increasingly important rental opportunity for Oregon and PNW beekeepers, primarily with blueberry. For OR beekeepers, berries represent 15% of rental opportunities (21% of rentals in the 3-state region). The total fee income generated was 8.5% (regionally 20.8%). As with tree fruits, a widely varying rental price was reported by survey respondents (for example in black- and raspberries from \$25 to \$50).

The accompanying table illustrates both PNW and Oregon beekeeper rental numbers and gross income. The graph illustrates the last 16 year weighted pollination fee – both annual weighted average (\$117.62 for all rentals in 2014) and for almond (\$164.10 weighted average) and other crops. As shown, legume seed rentals (4% of Oregon rentals) and vegetable seed rentals (3.5% of Oregon rentals) together accounted for about an additional 4% of gross income. Gross income from irrigated seed pollination rentals are about double the average for Willamette valley or other area growing region rentals. Pollination rental pertaining to 3 cucurbits (watermelon, pumpkins and squash/pumpkins) and meadowfoam (oil seed crops) were the other major crop rentals (8% each), with rental income of both collectively representing 8% of total gross income.

The eleven Oregon commercial/semi-commercial beekeepers returning surveys estimated their approximate income source as 36% honey sales, 62% pollination and 2% other. Honey accounted for a higher gross income in 2014 (36% vs 30% in previous year survey).

Further, in our survey we asked the respondents if a pollination contract was used during pollination rentals. Almost equal numbers of PNW commercial beekeepers indicated yes, no or sometimes one was used, while fewer semi-commercial beekeepers said they were using a contract or sometimes used a contract. Respondents were also asked regarding number of employees in their respective operations. Responses included 1 to 9 employees with 60% saying 0, 1 or 2.

When asked to estimate cost of maintaining a colony, responses varied widely with a range from under \$90 to \$300. Twenty four commercial beekeepers estimated average colony maintenance costs of approximately \$200.

Although the survey populations have varied over the 28 years of the PNW survey, we believe the returns of beekeepers of our 2014 survey as managers of over 60% of the estimated PNW colony numbers maintained points to the rigor of the survey and validity of our sampling method. We believe we present a realistic snapshot of beekeeping activities of larger-scale Oregon and PNW beekeepers. This is only such survey of pollination economics available and as with all such surveys the information is only as accurate and complete as provided by individual respondents.

We thank all those who sent back a survey.

Figure 1. Weighted Colony rental fee for all PNW rentals (middle bold line with circles), almond (top bold line with diamonds), tree fruits (Lower bold line with squares - includes pears, sweet cherries and apples combined), blueberry, vegetable seed crops (principally carrot, radish & onion), squash & pumpkin and Meadowfoam crops, 15 years 2000-2014.

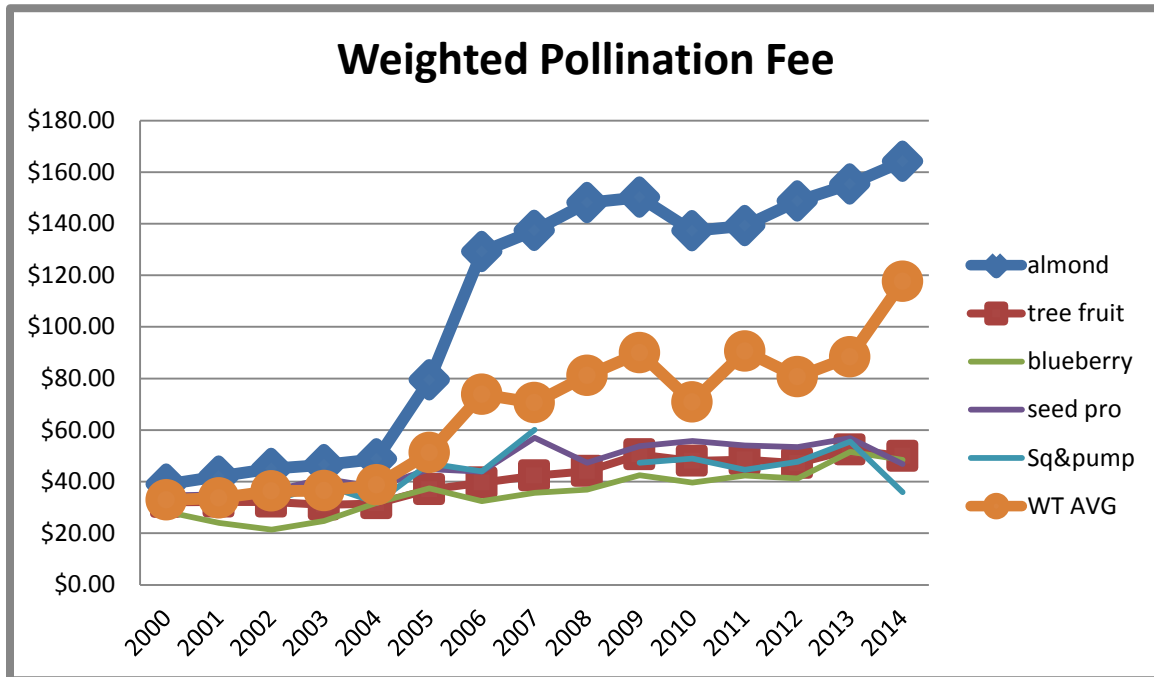


Table 1. Pollination rentals and income by crop type as reported by 38 PNW (11 Oregon) beekeepers, 2014

Crop	PNW & OR # individuals	# colony rentals	% rentals	gross rental income	% rental income
almonds	PNW/38	108,081	59%	\$17,731,027	82%
	OR/11	14,318	29.50%	\$2,483,010	59%
tree fruit	PNW/42	50,312	27.50%	\$2,511,222	11.50%
	Or13	8476	17.50%	\$434,050	10%
berries	PNW/17	7498	4%	\$372,356	2%
	OR/16	7298	15%	\$361,356	8.50%
Veg seed	PNW/16	6663	4%	\$387,030	2%
	OR/10	4743	10%	\$239,430	5.50%
legume seed	PNW10	6300	3.50%	\$389,860	2%
	OR/7	5880	12%	\$366,400	8.50%
cucurbits	PNW/5	4348	2.50%	\$156,230	1%
	Or/4	3848	8%	\$131,230	3%
meadowfoam	OR/4	3964	8%	\$207,090	5%
totals	PNW/128	183,202		\$21,547,725	
	Or/61	48,527		\$4,222,566	