The Bee Line

Newsletter of the Oregon State Beekeepers' Association

Volume 32, Number 9 October 2007



Image above: Meadowfoam, one of the crops pollinated by honey bees in the Pacific Northwest.

Note: The 2007 OSBA Conference takes place at Agate Beach near Newport the first of November. Last year's conference brought beekeepers from Oregon (99), Idaho (29), Washington (19), California (12), Nevada (2), and Montana (1). Will you be among those attending this year?

THE PACIFIC NORTHWEST HONEY BEE POLLINATION ECONOMICS SURVEY 2006

Michael Burgett, Professor Emeritis, Oregon State University

Since 1986 the Honey Bee Laboratory at Oregon State University has conducted an annual survey of pollination economics in the Pacific Northwest (PNW). The information from each year of the survey has been made available both regionally and nationally. The information has proven to be most useful to individual beekeepers who generate income from pollination rental, which is the primary source of income for the majority of commercial beekeepers in the PNW.

The use of managed honey bee colonies for commercial crop pollination remains the most important function of the PNW beekeeping industry. The vast and diverse agriculture of the region relies on a healthy and strong beekeeping industry to maintain optimum production. An enhanced knowledge of pollination economics is crucial to every beekeeper who enters into the world of commercial crop pollination. It is also important for those growers who contract honey bee colonies for managed pollination to understand the current economic conditions of the beekeeping industry.

The pollination requirement for commercial agriculture in the PNW is enormous. Among the crops grown in Washington, Oregon, and Idaho are *ca.* 355,000 acres of crops that require or benefit from managed honey bee pollination. The "farm-gate" value of these combined crops is approximately \$1,750,000,000! Nearly half of these acres and 60% of the dollar value are in one crop—apples.

The USDA National Agriculture Statistical Service estimates that there are 200,000 production honey bee colonies in the PNW. And with these numbers there are some interesting hypothetical calculations that can be made. If all growers were to rent two colonies for each acre of blooming crop (355,000 acres), the resulting pollination requirement would utilize 710,000 colony rentals. If we multiple this by the 2006 average colony rental fee

The Bee Line

The Bee Line is the official publication of the Oregon State Beekeepers' Association. The newsletter is published ten times a year, and subscriptions are included with membership in OSBA.

Please send news about your bees and your experiences in keeping them, as well as corrections, letters, comments, photographs and stories (old and new), interviews, and requests for advertising to the Editor, *The Bee Line*, 4803 SE Woodstock Blvd Ste 157, Portland OR 97206; e-mail: thebeeline@comcast.net.

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Please submit all copy by the 10th of the month prior to publication. The next issue will be November–December 2007. Contact the Editor for any additional information. Thank you!

MESSAGE FROM THE PRESIDENT

Is your honey crop in the barn yet? Are you proud of what your bees have done for you? Let's all get a few bottles together and have a contest. The Board of Directors has set the wheels in motion to have a honey competition at the OSBA Conference this year. Three one-pound glass jars of one kind of honey will be an entry [see page 11 for details]. Bring as many kinds of honey as you can. Don't label the jars. If I win all the classes or the sweepstakes, you will have a good reason to complain. Marge Ehry will be in charge, as she is for the State Fair. One of our speakers is Virginia Webb, a winner of many gold medals at Apimondia held in Ireland during August 2005. She is one of only about three Americans certified to judge international honey shows. Of course, she will be talking about showing honey.

More on the convention. Have you booked your room? A phone call now will save you from getting up an hour early to drive in from the motel down the road—or from your home. Have you sent in your registration? There is a form in this newsletter [see page 12]. Send it in.

There are many articles being published about CCD. Very scary stuff. There seems to be some connection to viruses and bee nutrition. More information can be found about both from speakers at the convention.

Nearly everyone I talk to is feeding their bees pollen patties and syrup. Most of these beekeepers seem to think that most of the bees they kept in the valley have low stores of honey and pollen. I have heard of some very large mite loads on hives that have been treated with several of the commercial miticides. Everyone should be checking mite loads with sticky boards or another method of their choice. Let's all get our bees buttoned up for the winter and then be off to the convention.

—Chuck

OSBA BOARD MEETING MINUTES September 8, 2007 • Canby, Oregon

Treasurer's Report

Patricia brought up recent work with our accountant to bring everything up to standards for the IRS so that we qualify for nonprofit status. The accountant mentioned the Research Fund account and said it was an inefficient way to hold money. The Research Fund is for research support of a person hired by Oregon State University (OSU) and will be held until such a hire is accomplished. Lynn is to check past minutes to verify this supposition. Patricia has to renew a CD and needs to

know if she should, pending the Endowment Fund and the OSBA promise to match the first \$12,500 in donations. Patricia suggested that the OSBA treasurer be elected for a minimum of three years because the job requires a lot of learning and keeping up with changes. It is difficult for someone in this position for only one year.

Regional Report/Willamette Valley

The State Fair was a success and the booth placed 4th as a commodity booth. Willamette Valley would like more involvement from other groups with the State Fair.

Old Business/OSU Endowment

George Hansen will send out another letter regarding donations to the Endowment Fund. We may be able to get grants for the Endowment Fund. Perhaps we could engage Rosanna to start the search for such grants and give her a small honorarium of \$400.00. The Endowment Board is to have at least three beekeepers as members. George, Vince Vazza, and Kenny Williams would like to do this. Other suggestions included smaller beekeepers as well as women beekeepers. The new letter from George could be printed in *The Bee Line* and also posted on our web site. Jordan Dimock moved that we set up \$400.00 for Rosanna to research possible grants for the endowment. Thom seconded, and the motion carried.

Other Old Business

Remember to notify the regional group presidents of Board Meetings and look into Linn County involvement with OSBA.

A diagnostic service for honey bee pests and diseases (not including viruses) is being set up at OSU. How will they make diagnoses? Where will equipment for diagnoses come from? What is the background of the faculty who will run the service? Lynn suggested that we request the resumes of the appointed staff so that we can be informed when we ask questions of OSU about this service. A concern of other entomologists at OSU is that right now is a good time to get research funds for honey bees; however, if there are no qualified staff or faculty members at OSU, being granted funding

may not be possible. Jordan moved that Thom Trusewicz and Harry Vanderpool look up resumes online, and, if they cannot locate these, then Chuck will request that OSU send copies of resumes to him. Thom seconded, and the motion carried.

New Business / OSBA Conference

Jordan is willing to do the banquet benefit auction and Deb Morgan, the silent auction. Discussion was held regarding how to make the banquet auction an event for smaller beekeepers as well as the larger commercial businesses. Patricia moved that a few items be tagged for bidding by smaller beekeepers only. Deb seconded. Motion carried.

It was decided that rosters of OSBA be included in registration packets. There will be a honey contest at the conference this year. Harry made a motion that \$250 be forwarded to Marge Ehry for materials and awards for the Honey Show. Jordan seconded. Motion carried.

Various conference needs were discussed. Due to cancellations, speaker names were suggested. It was suggested that conference speakers be given winning honey from the contest.

Other New Business

Regional groups have requested representation at OSBA executive meetings rather that lumping groups geographically. We will discuss this at the general meeting in November and can then work on any required changes in the bylaws.

Communication with Washington is still shaky. Keeping a careful paper trail may be helpful so that both sides remember what has been agreed to. In order for Oregon not to lose the \$1200 paid to hold the Seaside conference site, we need to agree to hold a tri-state conference there in 2008. Chuck will go to the Washington Conference and discuss the idea of a legal contract between our Northwest states, which could include a tri-state meeting every other year. It was suggested that, after a tri-state auction, the state executives sit down before leaving the meeting to make sure everyone agrees on how the funds are to be divided. Meeting adjourned.

—Lynn Royce

OREGON STATE BEEKEEPERS' ASSOCIATION RESOURCES

OSBA REGIONAL REPRESENTATIVES

Columbia Basin: Deb Morgan

3800 Benson Rd, The Dalles; (541) 298-5719

Eastern Oregon: Jordan Dimock

2635 Mitchell Butte Rd, Nyssa; (541) 372-2726

Metropolitan Area: Doug Woods 14285 S Union Hall Rd, Mulino

North Coast/Webmaster: Thom Trusewicz

90041 Logan Rd, Astoria

(503) 325-7966; ccbee@intergate.com

Southern Oregon: Pat Morris 1333 Rogue River Hwy, Gold Hills

(541) 855-1402

Willamette Valley: Harry Vanderpool 7128 Skyline Rd S, Salem; (503) 399–3675

shallotman@yahoo.com

OSBA REGIONAL ASSOCIATIONS



Central Oregon Beekeepers

Meets 6:30 pm, third Tuesday, Bend Deschutes Public Library, Hutch Rm **President:** Dennis Gallagher

(541) 389-4776

Secretary/Treasurer: Glenda Galaba (541) 383-1775; galaba@msn.com

Coos County Beekeepers

Meets 6:30 pm, third Saturday (except Dec) Olsen Baxter Bldg, 631 Alder St, Myrtle Pt

President: Thomas Kyelberg (541) 297-4017; usvi@charter.net

Vice Pres: Spike Richardson; (541) 267-4725 Secretary: Marda Burgdorff; (541) 888-5695

Treasurer: Jane Oku; (541) 396-4016

jane_oku@hotmail.com

Lane County Beekeepers

Meets 7:30 pm, third Tuesday, Eugene EWEB Meeting Rooms, 500 E 4th Ave

President: Morris Ostrofsky

(541) 685-2875; ostrofsky@pacinfo.com

Vice President: Judy Scher judy scher@catdreams.com

Secretary: Barbara Bajec; (541) 767-9086;

mbartels@bbastrodesigns.com

Treasurer: Nancy Ograin

(541) 935-7065; woodrt@pacinfo.com

web site: www.lcbaor.org

Portland-Metro Beekeepers

Meets 7 pm, second Thursday, Oregon City Hous Auth Clackamas Bldg, 13930 S Gain

President: Kerry Haskins

(503) 632–8448; kh251@aol.com **Vice President:** Peter Forrest

(503) 236-7787; pdxpete57@msn.com **Secretary:** Paul Hardzinski; (503) 631-3927

Treasurer: Barbara Derkacht

(503) 631-3063; bderkacht@yahoo.com

Southern Oregon Beekeepers

Meets 7:30 pm, first Monday, Central Pt So Or Res & Ext Ctr. 569 Hanley Rd

President: John Jacob

(541) 582-BEES; john@oldsolenterprises.com

Vice President: Floyd Pawlowski 415 Pompadour Dr, Ashland Secretary/Treasurer: Julian Lewis

(541) 535-5817; lewis_adams_00@yahoo.com web site: www.southernoregonbeekeepers.org

Tillamook County Beekeepers

Meets 7 pm, first Thursday, Tillamook Forestry Building, 5005 Third St **President:** Bob Allen; (503) 322-3819

Vice President: Terry Fullan

(503) 368-7160; tfullan@nehalemtel.net **Secretary/Treasurer:** Wayne Auble

Tualatin Valley Beekeepers

Meets 7:30 pm, last Friday, Beaverton OSU Ext, #1400, 18640 SW Walker Rd

President: Andrew Schwab

(503) 537-0506; pyr4ausi@verizon.net

Vice President: Todd Balsiger

(503) 357-8938; toddbalsiger@comcast.net

Secretary: Preston Gabel

(503) 530-1436; preston@gabelhaven.com

Co-Treasurers: Michael and Brigette Hendrickson

hendricm@ece.pdx.edu

Willamette Valley Beekeepers

Meets 7:30 pm, fourth Monday, Salem Chemeketa Comm College, Bldg 34, Rm A **President:** Richard Farrier; (541) 327–2673

Vice President: Harry Vanderpool

(503) 399-3675; shallotman@yahoo.com

Secretary: Mike Rodia

(503) 364-3275; drodia@yahoo.com

Treasurer: Susan Rauchfuss

(503) 391-5600; smokfoot@cyberis.net

REGIONAL ASSOCIATIONS

Lane County

The Lane County group's monthly meeting will take place on Tuesday, October 16th. The topic for the evening will be "Bee Paraphernalia"! This should prove to be an interesting evening of show and tell. See our web site (www.lcbaor. org) for meeting location and more information.

-Katharine Hunt

Portland-Metro

During our last meeting, Kerry Haskins and I made a motion to donate proceeds from the Bill Ruhl Memorial Bee Day to the Endowment Fund. We started with a motion to donate \$500, but during the discussion the amount went up to \$1,000. This motion was seconded and then unanimously accepted by all club members present. We will send a check (ASAP) to Oregon State University with a statement that it is for the fund in honor of Bill Ruhl.

—Peter Forrest

Southern Oregon

We are lucky enough to have Kim Flottum speak at our October meeting, and all who are interested are invited to attend. We will meet at 7:30 pm on October 23rd at the OSU Extension Center, 569 Hanley Rd. Contact me for any additional information.

— *John Jacob*

KEEPING BEES IN WESTERN OREGON

Todd Balsiger

October is a transition month—we typically have nice weather the first two or three weeks, and by Halloween winter is here. The average maximum daily high temperature for Salem in October is 64.3°F; in November it is 52.5°F. This is our last opportunity to feed syrup and finalize winter preparation.

Continue to check for light hives. Heft hives (lift one side up). They should be noticeably heavy. If not, feed light hives with a saturated sugar solution (two parts

- sugar to one part water). Get this done early in October during the remaining warm weather to avoid dysentery and other kinds of problems.
- There is still time in early October for medicating with fumagillin for *Nosema* disease. Feed two gallons per hive. For beekeepers who use exterior feeders, keep in mind that fumagillin breaks down readily in sunlight/with exposure to ultraviolet light, so use opaque feeders.
- Remove miticide strips on schedule.
- Retire poor colonies that are doomed to fail over winter. It is better to take losses now and protect your equipment.
- Add entrance reducers/mouse guards.
- Make sure your colony has a good watertight lid and sufficient upper ventilation (e.g., placing a nail or twig between the inner cover and lid will suffice).
- Ideally, keep hives off the ground (e.g., on pallets, on corrugated metal sheets, or on cinder blocks), exposed to the sun, and protected from wind. Tilt all hives so that moisture drains out and away from the entrance.
- Continue precautions against robbing. Work hives quickly, preferably in the morning.
- ❖ Keep on the lookout for American foulbrood find it early and prevent its spread.
- Protect extracted supers from wax moths. Most beekeepers use paradichlorobenzene placed on a small piece of paper on top of ~every 5th super within a stack, with a lid on top. Vapors flow down, thus killing moths and larvae, but not eggs. With only a few supers, other options are available. Contact Thom Trusewicz (Webmaster) or attend your next regional association meeting and ask questions to find out more.
- Consider securing hive covers to prevent them from being blown off during the next winter wind storm, especially on hives that have had their lids removed (and seal broken) late in the active season.
- Make plans to attend the upcoming fall conference. Register now: November 1st, 2nd, and 3rd at Agate Beach.

Pollination Survey—Continued from page 1

(\$73⁸⁵), we find a potential pollination rental income of more than \$52,433,500. If we add to that the 2006 estimated California almond pollination income available to all PNW commercial beekeepers (\$22.8 million), we end up with a potential gross pollination income of \$75 million. Another way to look at this involves asking how much pollination income, under optimized conditions, should have been produced from one commercial honey bee colony in the year 2006. For the PNW that figure is approximately \$375.

Comparing the hypothetical PNW rental income (\$52.5 million) to the farm-gate value of the crops pollinated in the PNW (\$1.75 billion) shows that the money spent by growers to optimize pollination is 3% of the total crop value. This is another impressive illustration of what a remarkable bargain pollination rental is to the commercial agricultural industry of the PNW.

This year's survey continues to show a number of trends, one of which is the dependence of PNW commercial beekeepers on the income generated from colony rentals. For 2006 the average commercial beekeeper

reported receiving 66.6% of his or her annual operating gross from pollination rentals. This percentage is slightly lower than the previous year 2005 (70%), but continues to show the dominance of pollination rental income to the commercial beekeepers of the PNW.

Recent increases in the average pollination rental fee have been strongly influenced by a dramatic rise in the pollination rental fees paid by California almond growers. In 2005 almond growers responded to a perceived shortage of colonies by dramatically increasing the price they paid for pollination; this has obviously continued for the 2006 pollination season. The average almond pollination fee for 2006 was

\$129²⁰! This is a 63% increase from the 2005 average (\$79⁴⁰).

For 2006 the average pollination rental fee, computed from commercial colony rentals on all crops reported (including almonds), was \$7385. This is a 44% increase from the average pollination fee of 2005 (\$5130) (see Tables 1 and 2). This escalation is due to the continued increase in the average almond pollination rental fee, but many of the crops pollinated within the PNW also experienced increases in rental fees.

Table 1. Average pollination fees.

1995 \$29.60 1996 \$31.55 1997 \$31.05 1998 \$29.65 1999 \$32.25 2000 \$32.85 2001 \$33.65 2002 \$36.40 2003 \$36.45 2004 \$38.65 2005 \$51.30 2006 \$73.85 Table 2 illustrates the average fees paid by crop and a comparison to the average fee received in 2005.

During the past ten years the average rental fee has increased from \$31 05 (1997) to \$73 85 (2006), an increase of 138% (see Table 3). It needs to be stressed that honey bee colony rental has for many decades been an underpaid service to the agricultural industry. It is really only within the past decade that rental fees have begun to more accurately reflect the enormous value-added service of managed pollination. This is shown by the 400% increase in the average pollination fee during the last seventeen years—from 1990 = \$18 40 to 2006 = \$73 85 .

Within the PNW, tree fruits are the dominant crop type for pollination income. In 2006 the combination of pears, sweet cherries, and apples accounted for 37% of all reported rentals and 20% of all reported pollination income. Paradoxically, the single most important crop for PNW beekeepers is grown in California, *i.e.*, almonds. Almonds were responsible for 39% of all rentals and 69% of all rental income in the 2006 survey (see Table 4). Almonds consistently have produced a high average pollination fee and for the past two years have displayed remarkable fee increases (for 2005 the average was \$79⁴⁰ and for 2006, \$129²⁰!).

Table 2. Average pollination fees by crop as reported by 19 Pacific Northwest commercial beekeeping operations in 2006.

Crop	Rentals (number)	Average fee	Fee (+/-)
Pears	7,975	\$3780	-1.5%
Cherries	14,842	\$3950	+4.7%
Apples	33,408	\$4000	+8.4%
Berries ²	5,206	\$24 ⁴⁵	-19.0%
Blueberries	8,568	\$32 ⁴⁰	-13.3%
Cranberries	1,564	\$44 ⁴⁰	+48.0%
Vegetable seed	5,856	\$43 ⁸⁰	-2.4%
Clover seed ³	5,330	\$29 ⁸⁵	-20.8%
Crimson clover seed	50	\$3500	+41.2%
Radish seed	1,589	\$46 ⁸⁰	+88.7%
Cucumbers	398	\$6750	+76.2%
Squash and Pumpkir	า		
seed	788	\$4400	-6.6%
Watermelon	1,100	\$3500	-16.6%
Meadowfoam	3,092	\$42 ⁴⁵	+16.1%
Miscellaneous ⁴	1,162	\$21 ⁶⁵	- 2.2%
Almonds	59,130	\$129 ²⁰	+62.7%

SUM = 150,058 rentals, generating \$11,084,385

Average Pollination Fee = \$7385

- 1% change from 2005
- ² Includes blackberries, raspberries, Marion berries, and Logan berries.
- ³ Includes red and white clover as grown for seed.
- ⁴ Canola, apricots, and kiwi.

In 2006 the combination of California almonds and PNW tree fruit accounted for 76% of all rentals and 89% of all pollination income, which illustrates the dominance and importance of these crops for a commercial PNW beekeeper (see Table 4). All other PNW cropping systems that utilize honey bee pollination contributed 11% of a beekeeper's gross pollination income in 2006.

In 2006, for crops pollinated in the PNW, cucumbers provided the highest average fee at \$67⁵⁰ per colony rental, but this average is derived from only 398 reported rentals. In terms of acreage, apples are the largest crop grown in the PNW and this is reflected by the large number of reported rentals (22% of all rentals and 12% of the total reported rental income).

Berry crops (blackberries, Marion berries, Logan berries, raspberries) are late-spring-to-early-summer bloomers and copious nectar producers. The 2006 average pollination fee for combined berry crops was \$24⁴⁵, a lower price than the average fee because beekeepers have an expectation that a honey crop will also be produced. The rental of colonies for blueberry pollination has been increasing in recent years as a result of more acreage in production. The average fee for blueberries in 2006 was \$32⁴⁰, higher than other berry crops due to the fact that there is little to no expectation of a surplus honey crop.

The average PNW commercial honey bee colony was rented 2.1 times in 2006, and this includes California almonds. This is a slight decrease from 2005. This statistic has been dropping since 1999, when the average number of rentals per colony was 2.8. Does this actually reflect the real-world situation? Are commercial beekeepers concentrating on almonds and PNW tree fruit (which historically provide the major sources of pollination income) and reducing

the number of colonies involved in minor crop pollination? At this time our data are not able to provide a reasonable answer to this question.

For the 2006 pollination season, an average rental fee of \$7385, combined with an average of 2.1 pollination rentals per colony, results in an annual per colony pollination income of \$15510, which is up significantly from the past few years. With the "average" commercial operation running 3,855 colonies, a hypothetical 2006 gross pollination income for the "average" commercial beekeeper was \$597,910.

The combined colony numbers from those commercial beekeepers who responded to the 2006 survey (73,250 hives) represent about 37% of the USDA's estimate of colony numbers

Continued on page 8

Pollination Survey—Continued from page 7

in Oregon and Washington. Therefore, if we multiply the total reported pollination income (\$11,084,385) by a factor of 3, we have a ballpark estimate of the pollination income generated by commercial beekeeping in the PNW, i.e., a regional pollination income of approximately \$33,253,155. This is far more than the normal "estimates" assigned to the bee industry by agricultural economists, who, for reasons unexplained, usually do not even include pollination rental income in their estimates of the beekeeping industry economic status. Pollination income in the PNW far exceeds the value of honey and wax sales for our regional beekeeping industry. Pollination rental income is frequently from three to four times greater than honey and wax sales in any given year, and this disparity between pollination income and honey/wax income has increased dramatically, especially in the past two years.

The 2006 survey asked commercial beekeepers to report the total number of full-time or full-time equivalent employees working for their operations. The figure for the "average"

commercial beekeeping operation in 2004 was 2.9 full-time employees; for 2005 it was 3.4 employees and for 2006, 4.8 Another interesting way to look at this is to consider the *colony equivalent*, meaning: What is the number of colonies necessary to hire one full-time employee? That figure was very close to 1,500 colonies/employee in both 2004 and 2005. In 2006 the colony equivalent is 1,115 hives per full-time employee.

Colony income from pollination rental is a critical statistic; so, therefore, is the annual cost to maintain a healthy hive of honey bees. Responses to this question on the survey have varied widely, often from a misunderstanding of what was being asked. However, numerous commercial beekeepers, who have over the years maintained good cost-accounting records, have responded with numbers that are very reasonable relative to today's economy. The average annual hive maintenance cost was \$138⁴⁵ per colony for the year 2006. The range in responses was a high of \$200/hive to a low of \$80/hive. This wide range suggests that beekeepers should try to be more precise in

Table 3. Average colony numbers, average rental fee per hive, and average annual rental income per hive for a commercial beekeeping operation in the Pacific Northwest.

Year	Average number of colonies	Average rental fee	Average annual rental income per colony
1992	765	\$19 ²⁵	\$49 ⁷⁰
1993	990	\$22 ⁵⁰	\$62 ²⁵
1994	1,225	\$28 ¹⁰	\$78 ⁷⁰
1995	1,348	\$29 ⁶⁰	\$78 ¹⁵
1996	1,350	\$31 ⁵⁵	\$9750
1997	1,504	\$31 ⁰⁵	\$92 ²⁰
1998	1,153	\$29 ⁶⁵	\$8300
1999	2,058	\$32 ²⁵	\$89 ³⁰
2000	2,055	\$32 ⁸⁵	\$7740
2001	3,168	\$33 ⁶⁵	\$64 ⁶⁰
2002	4,255	\$3640	\$63 ⁷⁵
2003	2,612	\$36 ⁴⁵	\$8640
2004	3,555	\$38 ⁶⁵	\$7460
2005	2,055	\$51 ³⁰	\$112 ⁸⁵
2006	3,855	\$73 ⁸⁵	\$151 ¹⁰

Table 4.	Pollination rentals and income by crop type from 19 Pacific
Northwe	est commercial beekeepers.

Crop	Rentals (number)	% of total rentals	Rental income	% of total rental income
Tree Fruit	56,225	37%	\$2,224,397	20%
Almonds	59,130	39%	\$7,638,135	69%
All other crops	34,703	24%	\$1,221,853	11%
Total	150,058	100%	\$11,084,385	100%

calculating their operational costs. If you can't answer the question of your operating cost on a *per colony basis* you need to readjust your operational accounting.

For 2006 the average colony maintenance cost was lower than the average per colony pollination income. From the 2006 survey data, pollination income was \$151¹⁰/colony and the colony maintenance cost was \$138⁴⁵, a difference of \$12⁶⁵ per colony. This a change from recent years when the average operational cost was somewhat higher than the average pollination income on a per colony basis. This still illustrates that the majority of net operational profit is generated by sources of income outside of pollination rental—most importantly, by honey production.

Remember that the data presented here represent the pollination rental situation of a hypothetical "average" commercial beekeeper in the Pacific Northwest. For individual

as benchmarks against which to compare individual operations. Please let me stress again that all of these "projections" are only as accurate as the data provided by responding beekeepers. The projections also assume that the participating beekeepers collectively represent the mainstream of commercial beekeeping in the Pacific Northwest. The 2006 survey is produced from a significantly greater number of commercial beekeepers and, hence, number of colonies and reported rentals than that produced in 2005.

I wish to again thank all those beekeepers in Oregon and Washington who took the time to participate in the survey, which over the past 20 years has generated the most accurate assessment of commercial pollination known in the United States. I also offer sincere thanks to the Washington State Beekeepers' Association for the funding support to continue this annual survey of Pacific Northwest regional beekeeping economics.



SURVEY SUMMARY

- Total number of participating commercial beekeepers = 19
- Total number of colonies in the survey = 73,250
- Total colony rentals = 150,058
- ❖ The average per colony pollination rental fee (for all beekeepers and for all crops, including California almonds) = \$73⁸⁵
- The average commercial colony was placed in 2.1 pollination sets in 2006, for an average per hive rental income of \$151¹⁰
- The average commercial beekeeping operation maintained 3,855 colonies and grossed \$597,910 in pollination rental income in 2006

OSBA Fall Conference 2007						
	Tentative Agenda					
	Thursday, November 1					
7:00 PM	Kick-Off Wine and Cheese Social	4:30 PM	State Business Meeting			
Friday, N 7:30 AM	ovember 2 Registration	6:00 рм	Social Hour			
8:00 AM	Silent Auction Begins	7:00 рм	Banquet and Benefit Auction Keynote: Jay Miller			
8:15 am	Welcome and Announcements Chuck Sowers, OSBA President	Saturday	, November 3			
8:30 AM	Update on Research in France Dr. Marion Ellis	7:30 AM	Registration			
9:15 am	Honey Bee Immunity to Infections	8:15 AM	Welcome and Announcements Chuck Sowers			
	Dr. Eric Mussen	8:30 рм	Medication and Bees			
10:00 AM	Break		Dr. Eric Mussen			
10:15 AM	Update on Research in Thailand Dr. Michael Burgett	9:15 am	TBA Dr. Marion Ellis			
	Disease Identification at OSU Dr. James Young	10:00 AM	Break			
11:00 AM	Hawaiian Queen Rearing Gus Rouse	10:15 AM	National Honey Board Report George Hansen			
Noon	Luncheon Speaker: Pat Heikum	11:00 AM	Preparing Bees for Winter Jay Miller			
1:15 рм	Colony Collapse Disorder George Hansen	Noon	Luncheon Speaker: Dan Cummings California Almond Board			
2:00 РМ	Almond Pollination Pat Heikum	1:15 PM	Feeding Honey Bees Randy Oliver			
2:45 РМ	Break	2:00 РМ	Marketing Virginia Webb			
3:00 РМ	Blue-Ribbon Honey Virginia Webb	2:45 PM	Break			
3:45 рм	Bee Nutrition Randy Oliver	3:00 рм	Cost of Pollination			
4:00 рм	Silent Auction Ends	3:45 РМ	Final Comments Chuck Sowers			

SPECIAL CONFERENCE EVENTS

Plan to attend this year's OSBA Conference and consider additional ways to participate. You might donate an item or a service to the Silent Auction or the banquet Benefit Auction. If you do, be sure to mark your name clearly on your donation. At the conference, direct the donation to Deb Morgan for the Silent Auction and Jordan Dimock for the banquet Benefit Auction.

Oregon Honey Show

In addition, plan to enter this year's Oregon Honey Show. Guidelines and categories for submissions to the show include the following:

Minimum Quantities:

Comb Honey—3 lots of 3 rounds
Extracting Frames—3 frames
All Other Honey—3 1-pint jars
Extracted Honey—3 Standard, Uniform 1-pound queenline jars

Comb Honey: Class #1

- Comb honey, any one variety (3 round section)
- 2. Comb honey, any one variety (3 square section)
- 3. Chunk honey in a jar (3 wide-mouth pint jars)

Extracting Frames:

- 4. Full depth, any one variety (3 frames)
- 5 Shallow, any one variety (3 frames)
- 6. Western, any one variety (3 frames)
- 7. Semi, any one variety (3 frames)

Extracted Honey: Class #2

- 8. Creamed Honey (3 1-pint jars)
 All other extracted liquid honey, 3 1-pound
 queenline jars
- 9. Alfalfa and /or Sweet clover
- 10. Clover
- 11. Vetch
- 12. Blackberry
- 13. Any other Fruit—state the source on entry
- 14. Any other Wildflower—state the source on entry
- 15. Any other Mixed Flowers—state the sources on entry
- 16. Any other Source—state the source on entry

Beeswax: Class #3

- 17. Natural or Sunbleached (2 pounds, 1 piece)
- 18. Beeswax candles, 100% beeswax (2 pounds)

 Dipped large single or several pairs
- 19. Artistic beeswax, 100% beeswax. Entries can be several pieces, but must be fastened together. Entries can be different shades of wax, *i.e.*, brood wax or capping wax. No artificial enhancements.

Beekeeping Photo: Class #4

Entries must be in an 8" x 10" black frame and relate to the theme: "The Joy of Beekeeping!" Use your imagination!

Bee School

Another option to consider for yourself or a member of your faimly is to attend Bee School at the conference. (Yes, similar to dog obedience schools in which the owners are trained, the school is for beekeepers rather than for bees!) Thom Trusewicz is finalizing the schedule, which thus far includes the following tentative agenda:

Friday, November 2

8:30 AM	A Demonstration of Beekeeping
	Equipment and Use

9:15 AM Anatomy: Worker Bee

10:00 AM Break

10:15 AM Worker Bees

11:00 AM Oueens

Dr. Lynn Royce

Saturday, November 3

8:30 AM Honey Bee Pests and Diseases

9:15 AM Swarms

10:00 AM Break

10:15 AM Honey, Wax, and Hive Products

Virginia Webb

11:00 AM Marketing Q & A

OSBA Fall Conference 2007 Agate Beach Inn Best Western * Newport, Oregon November 1, 2, and 3

Attendee's Last Name	First Name	MI	Registration Date
Company Name (if applicable): _			
Home Phone:	Work Pho	one:	
Mailing or Street Address	Cell Phon	ne:	
		e-mail:	
City	State/Pro	ovince	Zip Code

Event	Pre-Registration for Individual Days	Full Conference Pre-Registration
Thursday Night hospitality room	Complimentary	Complimentary
Friday Conference Only @ \$40 (see item I below)/		
Family registration fee @ \$55	\$	xxxxxxxxxxxx
Saturday Conference Only @ \$40 (see item 1 below)/		
Family registration fee @ \$55	\$	xxxxxxxxxxxxx
Full Conference @ \$75 (see item 1 below)/		
Family registration fee @ \$100	\$	\$
Friday Noon Luncheon @ \$15	\$	\$
Friday Evening Banquet @ \$25	\$	\$
Saturday Noon Luncheon @ \$15	\$	\$
OSBA Membership (includes <i>The Bee Line</i>) @ \$20	\$	\$
Total	\$	\$

For exhibitors: Number of tables @ \$25 each ____ Total plus exhibitor's table fee \$_____

- 1. Attendees qualify for pre-registration rate if application form (with registration fee) is postmarked on or before October 1, 2007. Late or on-site registration rates are: \$45 for One Day (\$60 for Family) and \$85 for Full Conference (\$110 for Family).
- 2. Make checks payable to OSBA.
- Mail completed registration form and payment to:
 Patricia Swenson, 11665 SE Webfoot Rd, Dayton, OR 97114
- 4. Hotel reservations are not included in these rates. If you make your reservations at the Agate Beach Inn—(800) 547-3310, ask for the *Beekeepers Fall Conference* special room rate. They need to know that you are with "the beekeepers" to give you the special rate.

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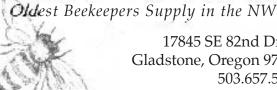
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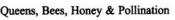
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OSBA MEMBERSHIP

Membership in the Oregon State Beekeepers' Association is open to anyone with an interest in bees and beekeeping. You do not need to own bees or reside in Oregon to join. Membership includes a vote in OSBA elections, discounts on publications, and ten issues of *The Bee Line*. To become a member, send your name and contact information with a check for \$20 (\$29 outside the US) to: Patricia Swenson, 11665 SE Webfoot Rd, Dayton OR 97114. (See a previous issue of the newsletter or contact Patricia for discounts on *American Bee Journal, Bee Culture*, and *The Speedy Bee.*)

UPCOMING EVENTS

October 18–20: **Washington State Beekeepers**' Association Annual Meeting. Sunny Mountain Lodge, Winthrop. See: www.wasba.org.

October 20: The Oregon Agriculture in the Classroom Fall Harvest and Dinner takes place at the Linn County Fair and Expo Center. The nonprofit group is dedicated to helping children grow in their knowledge of agriculture, the environment, and natural resources for the benefit of Oregonians, both today and into the future. To be involved, you can donate auction items (aitc.oregonstate.edu/events/auction.htm) and attend the event (aitc.oregonstate.edu/events/dinner.htm). In addition, you can donate to the foundation directly and inform teachers in your area.

October 25–27: **British Columbia Honey Producers**' Association Annual General Meeting. Dawson Creek. For information, contact: Kerry Clark at (250) 784–2559 or e-mail Kerry.Clark@gov.bc.ca.

November 13–15: **California State Beekeepers'** Association Convention. Harrah's, South Lake Tahoe. See: www.californiastatebeekeepers.com.

January 8–12: **National Beekeeping Congress** (American Beekeeping Federation, American Honey Producers Association, and national groups). Double Tree Hotel, Sacramento, California. See: www.abfnet.org and/or www.americanhoneyproducers.org.

2008 4-H Beekeeping Essay Contest. The topic for the 2008 4-H Beekeeping Essay Contest is *The Results of Honey Bee Pollination in my Community.* Essayists are encouraged to become familiar with pollination activities and then survey their communities for examples. An obvious example might be apples on sale at the supermarket. In addition, consider the benefit to the farmers and the local population. Students interested in writing should contact the local 4-H office for details. The state selection must be done through the 4-H system. For more information, see: www.honeybeepreservation.org.

CLASSIFIED ADS

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—Janet at www.countryrubes.com



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Please check your mailing label. If the date on the label is near *October* 2007, your membership is due to expire. *This is your friendly renewal notice.*

Continue to visit: *maarec.cas.psu.edu*/*ColonyCollapseDisorder.html* for information and updates on Colony Collapse Disorder.

The **Oregon State Beekeepers' Association** is a nonprofit organization representing and supporting all who have an interest in honey bees and beekeeping.

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