

# Washington State Beekeepers Association



*Keep the "Bee" in Business*

Publication of Washington State Beekeepers Association

February 2004

## President's Message

Well, Paul tells me I better get on the stick and get this note off to the membership. For all of you that went to California the season never ended but for all the beekeepers that stayed home this has been a nice break from worrying about everything.

About the end of Feb. we will all start to wonder about how strong everything is and what our winter losses were like. I'm hearing from several folks that have started coming by the shop that their bees are still alive and seem to be doing ok. It would be nice to have a year without high winter losses among the hobbyist beekeepers. If anyone wants sticker shock this year look at the price of package bees. I'm not sure the price of queens is any better.

We are starting in to work the WSU Bee Lab Short Course, hoping to have a similar forum including wine and cheese on Friday night and a BBQ on Saturday. Lisa has again agreed to handle the registration. We are looking forward to all of you attending.

Jerry Tate



## Washington State Updates

### 2004 Program Calendar for the Association.

**March-** Meeting March 6, 2004, Ellensburg at the Cattlemen's Club, 10 AM. See map & directions on the back of the newsletter.

**June-** Field Day At WSU, Friday June 4th and Saturday the 5th  
**June-** WSBA Executive Board Meeting-WSU June 4th

**October-** WSBA Convention, Spokane Oct 14, 15,16

**October-** WSBA Executive Board Meeting Oct 14, 4pm

**October-** WSBA General Membership Meeting Oct 15 4pm

- It is time to register your hives for 2004. The WSDA Beekeeper/Broker REGISTRATION is in this newsletter.
- Section 18 exemption has been approved by the EPA for 2004 in the use of Coumaphos for Washington State mite control. Thanks goes to WSBA and the WSDA for once again supporting effective mite treatments in our State.
- If you have not paid your dues, this is your last newsletter.

## STATE WEB SITE IS UP AND RUNNING!

[www.wasba.org](http://www.wasba.org)

Frank Seiler, spear-heading another program vital to communication and information for Washington State beekeepers, announced this month the state web site is alive.

Go to [www.wasba.org](http://www.wasba.org) to see the great results of a lot of volunteer work.

Some features of the web site are;

- WSU Research
- Current Events
- State Organization
- Your Local Organizations
- Technical Advisory Program
- Beekeeping in the Pacific Northwest

More to come!

If you would like something added to the web site, contact Frank at [f.seiler@worldnet.att.net](mailto:f.seiler@worldnet.att.net).

## Washington State Updates (continued)

### 2004 Spokane Conference OCTOBER 14, 15 & 16

**Date:** October 14, 15, 16, 2004

**Where:** DoubleTree, Spokane, WA

The IEBA is hosting the 2004 WSBA convention. Many of our members are already hard at work putting the program together. If you would like to help out, contact the appropriate committee leaders listed here:

- **Registration** — Collette Lehinger (509-924-1001)
- **Program** — Frank Seiler (509-226-2382)  
& Jack Knox (208-773-5442)
- **Thursday Night Reception** —  
Wine tasting hosted by John Pierce (509-455-4110)  
and Katuska Kohut of Vins de Vie
- **Suppliers Booths**— Ted Swenson (509-238-6489)
- **Friday Night Auction** — Roger Carney (509-448-0417)

The Program Committee is working on bringing in first class speakers to help us with these main topics:

- **Friday Morning** — Research, Queen Breeding, Carniolan & Russian Breeding Programs
- **Friday Afternoon** — WSU research, marketing for small beekeepers, cold climate management
- **Saturday Morning** — Integrated Pest Management (IPM) Implementation, practical beekeeping, Ask the Experts

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**Membership dues are  
OVER due.  
If you have not paid this is  
your last newsletter.**

## Mite Treatments Update:

Dadant has Sucroicide in stock. If Sucroicide is right for you, Dadant says it's time to order! This is the sugar ester formula that the WSU Entomology department developed.

### Integrated Pest Management (*thought of the day*)

Ever thought about rotating your mite treatments from year to year? This is an important approach to management of miticides in honeybee colonies.

The more thought put into a rotation cycle of these miticides means extending the useful life of the treatments currently available.



Frank Seiler has proposed that WSBA pursue state & federal grants for the purpose of beekeeping education.

He states:

“The success of many non-profit organizations depends on how well they use the tools available to them. One such tool that is at our disposal to fund programs that we have talked about is the availability of state and federal grant monies. While many of these grants are available only to institutions or government organizations, there are some exclusively set aside for non-profit and educational groups such as the WSBA.

I propose that the WSBA actively pursue such monies to fund activities that enhance beekeeping in the state of Washington.

Areas that may benefit from such funding are:

- The T.A.P. (Technical Advisory) Program
- Outreach programs to help establish beekeeping associations where there are none
- Developing interest in apiculture at the high school grade levels

I am sure that other suggestions will be added to this list.”

This proposal is open for discussion at the March meeting in Ellensburg



### HONEYBEE INVESTIGATIONS

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# Regional Updates



Friday, January 02, 2004

## Miticides having adverse effect on queen, drone bees, research shows

By JOHN SCHMITZ Freelance Writer

HOOD RIVER, Ore. – Leading honeybee scientists in America strongly suspect the very miticides that have saved the beekeeping industry from almost total destruction are now interfering with the health of queen bees and drones.

“The use of such compounds for control of varroa and tracheal mites has become an almost universal practice, but relatively little work has been done on the effect these compounds have on bees,” said Virginia Tech entomologist Richard Fell in an interview.

“Recent reports have documented that both Apistan and formic acid (varroa miticides) can affect drone production and survival, and have suggested possible effects on reproductive ability,” Fell said.

He added that the chemicals are also suspected of causing physiological and/or reproductive problems with queens, which can disrupt queen acceptance and lead to supersedeure.

Supersedeure occurs when the queen weakens and the hive replaces her with one of her daughters.

“We tend to look at these compounds, test them and don’t see immediate bee kill or damage to brood, but that doesn’t mean there are still not other effects that we have not seen,” Fell said.

Fell, who earned a master’s and doctorate in entomology at Cornell University, decided to investigate the miticides after he received numerous complaints from Virginia beekeepers a few years ago that they were either losing queens or the queens were not producing offspring well.

One of the most eye-opening findings so far is that miticides could very possibly be interfering with the ability of drones to produce sperm.

“We found with some of the chemicals (specifically fluvalinate, the active ingredient in Apistan) sperm reduction in drones over 50 percent. We’ve not seen any significant effects (of Apistan) on the queen.”

Fell said that while declines in sperm production in drones is also found with coumaphos (check-mite), the tests are incomplete because coumaphos has been found to inhibit the production of drones.

“And it inhibits the production of queens,” Fell said. “When we put coumaphos in colonies and tried to rear queens, we could not get queens produced, and drone production was down to about zero.”

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# National Updates

## National Honey Board

### Honey Bee Genome Published

Researchers in biology and agriculture, along with the public, can now analyze the draft *Apis mellifera* genome. The sequence shows that the bee genome is about one-tenth the size of a human's and contains about 300 million DNA base pairs. Scientists believe knowledge about the bee genome may aid understanding about the genetics of aging and social behavior as well as assist with mite resistance and Africanized bee work.

### Bioterrorism Regulation Implementation Continues

The FDA has published further guidance and examples on food facility registration titled "*Questions and Answers Regarding the Interim Final Rule on Registration of Food Facilities.*" Registration continues online under federal bioterrorism legislation. The National Honey Board has prepared and mailed a summary of how these regulations affect honey businesses. The summary is also available to download or call the Board office to request a copy.

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Queens, Bees, Honey & Pollination

# International Updates

### Canadian Honey Production Down in 2003

The Foreign Agricultural Service at USDA reports that Canadian honey production fell nearly 10% from last year's level. The decline was due to heavy winter losses from disease and weather-reduced yields in eastern and western Canada.

### 63rd Annual CHC Meeting (Resolutions for 2004)

January 28, 2004

Winnipeg Manitoba

#### #1. Carried

**Whereas** the Canadian Food Inspection Agency (CFIA) is proposing to amend the current regulation that prohibits the importation of honeybees from the continental United States. The amendment will allow the importation of honeybee queens and their attendants from continental USA. Packaged bees will continue to be prohibited from importation.

**Whereas** the proposed amendment will not result in the uncontrolled entry of honeybee queens into Canada. The existing

provisions of the Health of Animal Regulations require importation to occur with the use of an import permit. The conditions of the import permit will be further developed with industry and other stakeholders.

**Be it resolved** that the CHC support the CFIA proposed amendment to allow the importation of queens from the continental United States under the conditions of the import permit developed with industry and other stakeholders

For more information on other resolution passed at the Winnipeg meeting, go to; [www.honeycouncil.ca](http://www.honeycouncil.ca) .

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## WSBA Beekeeper Classified Ad Form

Classified ads are \$5 per insertion, for a maximum of 30 words. (**FREE for WSBA Members**).

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(You may email your submission to [plundy@seagen.com](mailto:plundy@seagen.com) and mail your payment to the P.O. Box.)

## Newsletter Advertising Rates for 2004

<u>Charge/year</u>	
Business card size	\$ 25.00
Quarter page	\$ 35.00
Half page	\$ 50.00
Full page	\$250.00

### Classified Ads (30 words, per issue)

WSBA Members	no charge
Non-members	\$ 5.00 (per issue)

- The newsletter is printed the 1<sup>st</sup> week of the month.
- Copy, art and payment must be submitted by the 15th of the month prior to publication.
- Full color ads available for electronic newsletter version. Black & white/grey scale for print version.

## Classified Ads

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Call 425-335-0488 or HONEYMAN007@AOL.COM

WSBA "Proudly Produced in Washington" gold labels for sale. Rolls of 500 are \$ 7<sup>00</sup> each. To order, Call 360-297-6743 or email myrasprings@centurytel.net .



## Other News

### Highway 20 abuzz after bee truck crashes

By Jennifer Rouse  
Albany Democrat-Herald (February 3, 2004)

LEBANON - A semi-truck loaded with honeybees overturned on Highway 20 Monday night, leaving millions of the insects buzzing on the side of the highway this morning.

The wreck happened at 10:30 p.m. at milepost 22 of Highway 20 eastbound. The truck overturned right in front of Jones Well Drilling, at 29404 Santiam Highway, between Sweet Home and Lebanon.

The truck, a Freightliner owned by Randy Hill Trucking of Albany, was headed east and drove through the ditch for a short distance before overturning.



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Beekeepers sort through broken hives along Highway 20 east of Lebanon. (photographer Mark Ylen/Democrat-Herald)

The driver, Brian George, 39, of Sweet Home, was cited and released on charges of driving under the influence of intoxicants and careless driving. He sustained serious injury to his legs, according to an Oregon State Police report.

Today workers had closed down the right-hand eastbound lane of the highway while volunteer beekeepers, dressed in protective suits, sorted through the wreckage and salvaged what they could from the hives. A cloud of bees was visible surrounding the workers and the smashed hives.

Dozens of bees sat on beekeeper John Mespelt's back and shoulders as he worked. Mespelt, of Albany, said he'd been told there were 480 hives on the truck, and that hives normally have between 30,000 and 40,000 bees in them. He said six beekeepers from Albany and four from Sweet Home had been working all morning to clean up the mess.

He said the hives were on a truck destined for California, where the bees were to be used for pollinating almonds.

The hives that were still intact were loaded onto pallets, and a man on a forklift loaded them on trucks to be hauled away.

Bret and Diane Jones of Jones Well Drilling said the insects had mostly stayed near the site of the wreck and hadn't bothered them at their nearby house or business. They said some beekeepers first showed up at the site at about 1 a.m. today to evaluate the situation, and that more returned at 7:30 this morning to begin cleaning up.

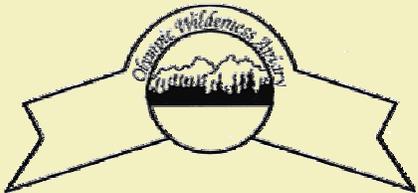
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**WHITE PAPER -**

**BEEKEEPER MEMBERSHIP  
IN THE LOCAL AND  
STATE BEEKEEPERS ASSOCIATIONS**

by James C. Bach  
December 2000

**Background:** The issue of whether beekeepers should be members of local associations and associate members of the Washington State Beekeepers Association (WSBA) has been discussed many times in past years. The discussion usually revolves around "what do we get for our money?" The answer usually given is that you get some level of representation with other interest groups. But what is representation worth? How do you measure that value in a manner that others can relate to it? To answer these legitimate questions let me explore the relationships between people, groups, and in the political arena.

**The Real World of Relationships:**

Why do we associate or develop relationships with others? In a family or extended family setting it is because of blood relationships, for mutual support, exchange of ideas, to develop a team approach to achieving our common goals in

life, and relative safety. In our communities we develop relationships in our parent teacher associations, school boards, fire districts, and other groups that may be helpful to us in improving the quality and environment of our lives.

In the political arena we elect persons, who generally represent our views on issues, to conduct community business on the local, state and national levels on our behalf.

We join our local beekeeper association for the benefit we get from associating with others who have the same interest. We exchange ideas, ask questions and learn that others are concerned about the same issues. We also acquire ideas of how we can be more successful at managing our bees. If we find it difficult to attend the meetings we become members to receive the monthly newsletter from which we hope to get the education we seek.

**We associate with others for at least four reasons:**

1. Education: We seek and acquire the information we need or want.
2. Efficiency: We can benefit from the work and experience of others who can take the time to conduct the activities necessary to advocate for and maintain our common interests. If we do not have the knowledge, skills, ability or time to insure that our interests can be maintained, we can enable others to do it for us.
3. Politics: We elect others to negotiate our interests in a manner that will provide for the common good of the majority. In this arena, it is important to represent a large number of persons to establish "standing" within a group of issues being considered as priorities for decision making. It is also quite helpful if these persons are widely scattered throughout the state, which makes our issues important to many elected representatives. The larger the affected group, the more vital the issue and the more political equity and power is accrued by the representing organization.
4. Value: By joining with others and supporting the common interest with a small fee, we can buy a great deal of someone else's time and effort on our behalf. Membership fees are usually small, \$5 to \$10 including a \$1.00 associate membership fee that is passed through to the state association for membership for the year. They can then speak for a larger number of beekeepers in the state. Of course it is still incumbent on the individual to maintain a sufficiently high level of knowledge on the issues so they can give adequate direction to the persons representing them.

*(Continued on page 8)*





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## Efforts by the Washington State Beekeepers Association (WSBA):

1. **Legislative: Over the years the WSBA has been instrumental in promoting industry interests.**  
Some examples are the:
  2. King and Pierce County beekeeping ordinances,
  3. WSDA Apiary Program funding,
  4. 1992 revision of the Apiary Statute and Program, and
  5. legislation to foster, protect, and promote apiculture in Washington – commonly known as the “right to keep bees.”

Without their efforts it would have been much harder to accomplish all the activities that have supported the interests and needs of beekeepers.

2. **Influence:** WSBA has been very instrumental in influencing the outcome of numerous public policy decisions in the interests of beekeepers across the state. Among the activities conducted are:
  - advocating interests with the department of agriculture,
  - discussing highway right-of-way maintenance policies,
  - discussing water issues,
  - participating in legislative issues,
  - fostering the interests of other agriculture groups through attendance at Ag Association Presidents meetings, and
  - Farm Bureau meetings.
3. **Reality:** Political influence is measured by the number of persons a group represents, their relative strength in the political arena and the breadth of the interest distribution among the population. In other words, who do you speak for, how many of you are there, and where are you on the issues.

Another important factor that is hard to measure but easy to perceive is the cohesiveness of a particular interest group. Political power and credibility drains away quickly if cohesiveness is lacking or absent, or perceived to be. In other words, does the interest group go in a commonly accepted direction based upon consensus building, and are they properly prepared to address and advocate their interests in the issues.

All of these points build political equity. Without any one of them, equity is diminished, credibility is reduced, and the ability to influence others suffers.

## Three important points:

1. An important point to consider in thinking or discussion of this subject is that **PERSONALITIES DO NOT MATTER!** Everyone has a different, more or less effective personality. People, even leaders have different styles of approaching public and private relations and issues.
2. **IT IS THE ISSUES THAT ARE IMPORTANT.**
3. If you are not involved, even peripherally, your interests will not be heard nor considered. Your political equity will be minimal. The needs of others will be met at the expense of your own. And you will find that decisions have been made that will affect you but you are too late to make a change in the outcome. You will have to live with the results until they can be changed again two to four years in the future.

Revised 2/05/04



## Pacific Northwest Honey Bee Pollination Survey – 2001/2002

by  
Michael Burgett  
Professor Emeritus  
Department of Entomology  
Oregon State University  
Corvallis, OR 97331

Since 1986 the Honey Bee Laboratory at Oregon State University has conducted an annual survey of pollination economics in the Pacific Northwest (PNW). An annual report was not published for the pollination year 2001, so this year's report will include data from both 2001 and 2002.

With each year's information, the strength and importance of our region's beekeeping industry is highlighted. All participants in a regional agricultural industry need to understand the critical role played by beekeeping in overall agricultural production. This is especially true today with the increased costs and problems caused by the presence of honey bee mite parasites and the expanding geographical range of our European honey bee's tropical "cousin" the Africanized honey bee, now well established in southern California, as well as Texas, New Mexico, Arizona and

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Nevada.

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 PNW relies on a healthy and strong beekeeping industry to maintain optimum production. An enhanced knowledge of pollination economics is critical to every beekeeper that 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 current economic conditions of the beekeeping industry.

This year's survey provides data that continue to show a number of trends, one of which is the dependence of PNW commercial beekeepers on the income generated from colony rentals. For 2001/02 the average commercial beekeeper reported receiving 70% of his or her annual operating gross from pollination rental. I am aware of no region in the U.S., or the world for that matter, where the rental of honey bee colonies for pollination is of such importance to the economic survival of a regional beekeeping community and of such benefit to the agricultural base that requires insect pollination for optimizing product yield. Even in California, the state with the largest and most varied beekeeping industry in the U.S., pollination rental income is just slightly over 50% of operational revenues (California State Beekeepers' Association 2000 pollination rental survey).

Ever since the arrival of the tracheal mites and varroa brood mite the average size of an individual commercial operation has increased. This is a reflection of higher colony mortality and the need to maintain adequate colony numbers for pollination contracts. The mite "plague" effectively eliminated marginal beekeeping operations and those that remained needed to become larger in order to fulfill the need for rental colonies by the at-large agricultural base in the PNW and in California.

As in past years, the 2001/02 surveys were sent to all Washington and Oregon beekeepers that registered more than 25 colonies with their respective state agriculture departments. A total of 14 commercial beekeepers returned completed surveys. These individual beekeepers collectively owned 59,576 colonies. A total of 104,322 colony rentals were reported for all respondents, which produced \$3,799,814 in rental income for the participating beekeepers.

For 2002 the average pollination rental fee, computed from commercial beekeeper rentals on all crops reported, was \$36<sup>40</sup>. This is a \$2<sup>75</sup> (8%) increase from the average pollination fee charged in 2001 (\$33<sup>65</sup>) (see Table 1 and Figure 1). The 2002 average rental fee is nearly an 11% increase from the 2000 average of \$32<sup>85</sup> (the last published figure.) Commercial beekeepers were responsible for 99% of all reported pollination rentals and a corresponding 99% of all pollination income. This is very similar to past years and shows how dominant commercial beekeepers are in the arena of large-scale agricultural pollination and what a minor role is played by semi-commercial beekeepers in contributing to the regional pollination requirement.

The average pollination rental fee for semi-commercial beekeepers for the 2002 season was \$30<sup>35</sup>, which was significantly lower than that charged by commercial beekeepers (\$36<sup>40</sup>.) For

semi-commercial beekeepers the average annual per colony pollination income was \$37<sup>40</sup>. A semi-commercial colony, on average, was rented for 1.23 sets in 2002 which accounts for the difference in the per colony income generation compared to a commercial hive.

For a commercial beekeeper the gross amount of income generated from pollination rental leveled off in 1997 and 1998, but increased in 1999 (\$183,780). For 2002 this figure was calculated to be \$271,213. This dramatic increase results largely from the increasing size of the average commercial operation. During the past eight years the average rental fee has increased from \$28<sup>10</sup> (1994) to \$36<sup>40</sup> (2002). 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 98% increase in the average pollination fee during the last twelve years; 1990 = \$18<sup>40</sup> to 2002 = \$36<sup>40</sup>.

Within the PNW, tree fruits are the dominant crops for pollination income (see Table 2). In 2002 the combination of pears, sweet cherries and apples accounted for 55% of all reported rentals and 48% 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 36% of all rentals and 44% of all rental income in the 2002 survey. Almonds possessing the highest average pollination fee reported for 2002 (\$45<sup>00</sup>). More than 95% of all commercial colonies in Oregon and Washington are taken to California for almond pollination. In 2002 the combination of almonds and tree fruit accounted for 90% of all rentals and 92% of pollination income, which illustrates the dominance and importance of these crops for a commercial PNW beekeeper.

In 2002, for crops pollinated in the PNW, cranberries pollination provided the highest average fee at \$39<sup>00</sup> per colony rental. In terms of acreage, apples are the largest crop grown in the region and this is reflected by the large number of reported rentals (44% of all rentals and 40% of the total reported rental income.) The crops with the lowest pollination fees are the legumes crimson clover and hairy vetch, both of which are grown as seed crops but are also traditional honey producers, hence historically low fees. Their significance to regional pollination income is very minor, in terms of rental income, the number of colonies involved, and the very regional nature of both crops (mid- to northern Willamette Valley). Berry crops (blackberries, raspberries and blueberries), which as late spring to early summer bloomers and copious nectar producers (blackberries and raspberries), often produce honey crops as well as pollination fees. The 2002 average pollination fee for all combined berry crops was \$23<sup>75</sup>.

The crop with the most remarkable change from the late 1990<sup>ies</sup> is meadow foam. For 2002 only one beekeeper reported colony rentals on meadow foam, which compares to 21 beekeepers with 3,830 rentals reported in 1999. The reason is simple, very little meadow foam is now being grown due to major financial disruptions in the meadow foam industry within the Willamette Valley.

The average PNW commercial honey bee colony was rented 1.75 times in 2002 and this includes California almonds.

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(Continued from page 9)

This is a decrease from the 1.92 figure generated from the 2001 survey. This statistic has been dropping for the past four years; in 1999 the average number of rentals per colony was 2.77 times during the pollination season. 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?

For the 2002 pollination season an average rental fee of \$36<sup>40</sup>, combined with an average of 1.75 pollination sets per colony, results in an annual per colony pollination income of \$63<sup>70</sup>, which is an 29% decrease from the 1999 colony income statistic of \$89<sup>70</sup>. This trend of reduced per colony rentals, along with the accompanying reduced per colony income result in a lessening, or at least a stagnation in pollination "effort" on the part of regional beekeepers. Agriculture at-large is presently experiencing serious financial problems, and one needs only look to the apple and cranberry industries to see this. Beekeepers have been reluctant to implement increased pollination fees to an already stressed agriculture industry within the PNW.

The combined colony numbers from those commercial beekeepers who responded to the 2002 survey, (59,576 hives), represent at least one-fourth to perhaps as many as one-third of the commercial hives in Oregon and Washington. Therefore, if we multiply the reported pollination income (\$3,799,814) by a factor of 4 and 3, we have a ball park estimate of the pollination income generated by commercial beekeeping in the PNW, *i.e.*, a pollination income perhaps as low as \$11,000,000 to a reasonable high of \$15,000,000. This is far more than the normal "estimates" assigned to the bee industry by agricultural economists, who, for reasons unexplained, usually do not include pollination rental income in their estimates of 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 four to five times greater than honey and wax sales in any given year.

An added question to the survey in 2001 and again in 2002 was how frequent is the use of written pollination contracts between beekeepers and their respective growers. In both years the responses were very similar. It appears that using written contracts is the unusual case. 70% of the commercial beekeepers said they do not use them; 15% said they always use them; and 15% said they use written contracts only for new accounts involving growers they have never worked with in the past. A frequent beekeeper comment went along the lines of 'a handshake has always been enough for me and my growers.' While 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 excellent cost accounting records, have responded with numbers that are very reasonable relative to today's economy. The average annual hive maintenance cost was \$96<sup>35</sup> per colony for the year 2002 (highest maintenance cost = \$180; lowest = \$52<sup>50</sup>), which is obviously, a reduction from the \$104 reported for 1999.

It is very important to recognize that the average colony maintenance cost is higher than the average per colony pollination income and this is especially so from the 2002 survey information (colony pollination income = \$63<sup>75</sup>, colony maintenance cost = \$96<sup>35</sup>; a difference of \$32<sup>60</sup> per colony.) This illustrates that operation profits are generated by other sources of income outside of pollination rental, most importantly, honey production. As all beekeepers realize, the year 2002 resulted in the most dramatic increase in the wholesale price of honey in the history of American beekeeping. Depending on when you sold or contracted your honey in 2002, the wholesale price was from a low of \$0<sup>90</sup> to as much as \$1<sup>60</sup> per pound. Basing wholesale honey prices at a conservative \$1<sup>25</sup> cents per pound, the average commercial hive had to produce about 26 pounds of honey in order to break even.

Remember that much of the data presented here represent the pollination rental situation of the "average" commercial beekeeper. For individual beekeepers the survey results are most useful as benchmarks against which they should compare their 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.

#### Reflections:

There are some recent observations that perhaps do not necessarily represent the "normal" conditions for commercial pollination rental by PNW beekeepers. One is the dramatic increase in the average size of a commercial beekeeping operation (4,255 colonies in 2002; 3,168 in 2001; and 2,055 in 2000.) In the past few years a number of very large sized operations have begun contributing to the survey, while the number of medium sized operations who report has dropped. This has unduly, perhaps artificially produced an "average" for a PNW commercial operation that does not really reflect the actual situation. Additionally, the average number of rentals per individual colony has decreased (1.75 in 2002; 1.92 in 2001; compared to 2.77 in 1999.) A small amount of this decrease could be explained by a shift of colonies away from pollination to honey production due to the incredibly dramatic increase in the wholesale price of honey in 2002, but that is far from the whole picture, especially considering that the sharp rise in honey prices began at least mid-way through the 2002 pollination season. For the production year of 2003 I would expect to see the higher honey price remove colonies from the pollination rental scenario.

A bright spot for PNW beekeepers is the steady and significant increase in the average price paid for almond pollination (\$45<sup>00</sup> in 2002; \$40<sup>70</sup> in 2001 and \$39<sup>00</sup> in 2000.) These almond averages represent the highest fees for any single crop pollinated by PNW beekeepers and reflect the concern and willingness of California almond growers to pay a premium rental fee in order to ensure adequate colony numbers.

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 eighteen years, has generated the most accurate assessment of commercial pollination known in the U.S.

**Summary Information - 2002**

A total of **14** commercial beekeepers, owning **59,576** colonies returned survey forms.  
 A total of **104,322** colony rentals generated **\$3,799,814** in rental income.  
 The average per colony pollination rental fee (for all beekeepers, for all crops including California almonds) was: **\$36<sup>40</sup>**  
 The average commercial colony was placed in **1.75** pollination sets in 2002, for an average per hive rental income of **\$63<sup>75</sup>**.  
 The average commercial bee operation maintained **4,255** colonies and grossed **\$271,256** in pollination rental income for 2002.

**Table 1. Average Pollination Fee 1992-2002**

<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>
19.25	22.50	28.10	29.60	31.55	31.05	29.65	32.25	32.85	33.65	36.40

**Table 2. 2002 Average Commercial Pollination Fees by Crop**

<u>Crop</u>	<u>No. Rentals</u>	<u>Avg. Fee</u>	<u>Income(\$)</u>
Pears	4,694	\$30 <sup>85</sup>	144,822
Cherries	5,566	\$30 <sup>05</sup>	176,156
Apples	46,657	\$32 <sup>30</sup>	1,506,986
Berries <sup>1</sup>	2,460	\$23 <sup>75</sup>	58,435
Blueberries	1,103	\$21 <sup>45</sup>	23,672
Cranberries	1,416	\$39 <sup>00</sup>	55,224
Vegetable seed	1,748	\$36 <sup>60</sup>	64,008
Clover seed <sup>2</sup>	420	\$32 <sup>00</sup>	13,440
Crimson clover seed	75	\$15 <sup>00</sup>	1,125
Radish seed	344	\$14 <sup>60</sup>	5,016
Cucumbers	400	\$23 <sup>00</sup>	9,200
Sq. & Pump. Seed	532	\$32 <sup>60</sup>	17,354
Watermelon	1,132	\$34 <sup>80</sup>	39,420
Meadowfoam	42	\$35 <sup>00</sup>	1,470
Misc. <sup>3</sup>	337	\$27 <sup>05</sup>	9,112
Almonds	37,396	\$45 <sup>00</sup>	1,683,374
SUM = 104,322			\$3,799,814
Average Pollination Fee = \$36 <sup>40</sup>			

<sup>1</sup>Includes blackberries, raspberries, Marion berries, & Logan berries.

<sup>2</sup>Includes red & white clover as grown for seed.

<sup>3</sup>Includes apricots, kiwi, vetch & holly.

**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 1992-2002.**

<u>Year</u>	<u>Average No. Colonies</u>	<u>Average Rental Fee</u>	<u>Average Annual Rental Income per Colony</u>
1992	765	\$19 <sup>25</sup>	\$49 <sup>70</sup>
1993	990	\$22 <sup>50</sup>	\$62 <sup>25</sup>
1994	1,225	\$28 <sup>10</sup>	\$78 <sup>70</sup>
1995	1,348	\$29 <sup>60</sup>	\$78 <sup>15</sup>
1996	1,350	\$31 <sup>55</sup>	\$97 <sup>50</sup>
1997	1,504	\$31 <sup>05</sup>	\$92 <sup>20</sup>
1998	1,153	\$29 <sup>65</sup>	\$83 <sup>00</sup>
1999	2,058	\$32 <sup>25</sup>	\$89 <sup>30</sup>
2000	2,055	\$32 <sup>85</sup>	\$77 <sup>40</sup>
2001	3,168	\$33 <sup>65</sup>	\$64 <sup>60</sup>
2002	4,255	\$36 <sup>40</sup>	\$63 <sup>75</sup>



BEEKEEPER/ BROKER
REGISTRATION- 2004

CASHIER USE ONLY

8110

Notice: Each person owning one or more hives with bees, brokers of hives, and beekeepers resident in other states who operate hives in Washington shall register with the Department of Agriculture on or before April 1 each year.

TO REGISTER as an apiarist and/or broker, please complete this form and return it with your personal check to:

Washington State Department of Agriculture - Laboratory Services Division
PO Box 42591 - Olympia WA 98504-2591

Application Information: (make corrections as needed):

Input box for name

Input box for ID No.

Apiarist ID No.:

UBI No.:

County:

Input box for telephone

Input box for telephone

Telephone:

I will not own or operate any colonies of bees in Washington state in 2004. Please sign below and return this form so we can remove your name from our database.

I am a Washington state resident. Yes No

I will own and/or operate (number) colonies of bees in 2004. Will these bees be used for pollination? Yes No

Registration fees assessed are based on the number of colonies you will own or operate in Washington in the year 2004. Funds due by April 1, 2004.

Table with 3 columns: A. Beekeeper: Own Only, B. Broker & Beekeeper: Own & Operate, C. Broker Only. Lists colony counts and fees.

Registration Fee Due \$

Late Fees \$

Total Fees / Amount Enclosed \$

If you will operate bees other than your own during this year, please list the sources of the colonies on the back side of this form giving name(s), address(es), phone number(s), and number of colonies rented from each.

I certify that the above registration information is true and correct. Signed Date

If you have any questions, please contact Brad White at bwhite@agr.wa.gov or (360) 902-2071, or Eloise Rudolph at erudolph@agr.wa.gov or (360) 902-2070.

Note: Registrations received after April 1 may be subject to a late fee of 1 1/2% per month on the amount owed. (RCW 15.60.043)

Checks returned by the bank will be charged a handling fee of \$25.00. (RCW 62A.3-515 and .3-520)

# WASHINGTON STATE BEEKEEPERS ASSOCIATION

## 2004 MEMBERSHIP APPLICATION

The fees listed below cover WSBA membership for one person. Additional persons from the same operation may join for \$7.50 each.

Check one category:

<input type="checkbox"/> 0 to 50 colonies.....\$15.00	<input type="checkbox"/> 1,501 to 2,000 colonies.....\$90.00
<input type="checkbox"/> 51 to 150 colonies.....\$22.50	<input type="checkbox"/> 2,001 to 3,000 colonies.....\$120.00
<input type="checkbox"/> 151 to 300 colonies.....\$30.00	<input type="checkbox"/> 3,001 to 4,000 colonies.....\$150.00
<input type="checkbox"/> 301 to 500 colonies.....\$40.00	<input type="checkbox"/> 4,001 to 5,000 colonies.....\$180.00
<input type="checkbox"/> 501 to 1,000 colonies.....\$55.00	<input type="checkbox"/> 5,001 to 6,000 colonies.....\$225.00
<input type="checkbox"/> 1,001 to 1,500 colonies.....\$70.00	<input type="checkbox"/> 6,001 or more colonies.....\$250.00
<input type="checkbox"/> Industrial/Supply Member .....\$50.00	

Your contributions to our research and scholarship funds are much appreciated:

ROY THURBER SCHOLARSHIP FUND \$ \_\_\_\_\_

CARL VANWECHEL RESEARCH FUND \$ \_\_\_\_\_

ALVINA TIMMONS SCHOLARSHIP FUND \$ \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Total Enclosed \_\_\_\_\_

E mail address \_\_\_\_\_

**Send annual dues to: Washington State Beekeepers Association  
P.O. Box 1331  
Kingston, WA 98346-1331**

**NOTE: The annual membership fee is payable in advance. Keep your dues current to remain on the mailing list for the WSBA NEWSLETTER.**

**NEXT MEETING!**  
**WSBA Executive Board Meeting**  
**March 6, 2004 Starting at 10AM**  
**Cattlemen's Club at**  
1301 N. Dolarway Road, Ellensburg, WA 98926  
**Everyone is Invited,**  
**especially your local Association Presidents.**

**Directions from I-90:**

**From West:** Exit 106 follow road over overpass, at the four-way stop turn right.\*

**From East:** Exit 106 take a right at end of off ramp. At four-way stop turn right.\*

\*After right turn, Cattlemen's is the next building after the 76 station.



P. Lundy  
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