THE BEE LINE

The Newsletter of the Oregon State Beekeepers Association

Volume 24, Number 4

May 1999

1998 Pacific Northwest Honey Bee Pollination Survey

By Dr. Michael Burgett

For the 13th year the Honey Bee Laboratory at Oregon State University has reviewed the pollination economics of commercial beekeeping in the Pacific Northwest (PNW). This is the sixth year for which combined data are given for the states of Washington and Oregon. 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 vital role played by beekeeping in agricultural production. This is especially true today with the increased costs and problems caused by the presence of honey bee mite parasites and the slowly increasing geographical expansion of our honey bee's tropical "cousin" the Africanized honey bee, now recorded in several counties in southern California, as well as Texas, New Mexico and Arizona.

The use of managed honey bee colonies for commercial crop pollination remains the most important function of our regional beekeeping industry. 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 rent colonies to understand current economic conditions of the beekeeping industry.

This year's survey provides data that continues to show an number of trends, one of which is the dependence of PNW commercial beekeepers

on the income generated from colony rentals. For 1998 the average commercial beekeeper received nearly 65% of his or her annual operating gross from pollination rental. This is down from the record high figure of 72% reported in 1995. I am aware of no region in the US, or the world for that matter, where honey bee pollination rental 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 US, pollination rental income is just slightly over 50% of operational revenues.

For the previous five years the average size of an individual commercial operation had increased. This trend of upward growth in the average number of colonies maintained has stopped. In 1997 the average commercial operation reported 1,504 colonies. For 1998 the average commercial operation reported 1,153 hives, which is a 23% decrease from 1997. However, this statistic is misleading because for the 1998 survey two very large beekeeping operations provided input and the average operation size of 1,153 colonies excludes these two operations. Adding them to the beekeeper operational base produces an average operation size of 2,290 colonies, which would be a 52% increase in the average commercial operation. (cont. on page 3)

WHAT'S INSIDE:

- *Final Farmer's Market Guidelines
- *Apimondia Update
- *Field Day Report

Page 2 The Bee Line May 1999

Oregon State Beekeepers Association

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

To join the OSBA, complete the membership application in this issue and send with payment to: Phyllis Shoemake, 1874 Winchester NW, Salem, OR 97304

Editorial Offices: Send news, announcements, letters, comments and advertising to: Diane Varner, Editor PO Box 123 Yamhill, OR 97148-0123 Tel. 503-662-4559 Fax 503-662-4594 e-mail Raybee@band1.bandwidth.net

©1999 Oregon State Beekeepers Association

Advertising Rates

Business Ads, per issue:

Business card size \$ 7.50 Quarter page 20.00 Half page 35.00 Full page 100.00

Copy, art and payment must be submitted by the 15th of the month prior to publication. Contact the editor for any special requirements and mechanical information.

Classified Ads, 30 words, per issue:

OSBA members \$ 2.00

Non-members \$ 3.00

President's Notes

by Torey Johnson

The Field Day went over well. Many people who had attended earlier Field Days said it was probably the best one yet. Perfect weather, good company and bees go hand in hand. Thanks to all who helped make it a truly great day.

Afterwards the OSBA Board met. Dr. Royce presented a funding proposal for an upcoming research project. It will develop what she calls smart keys for certain pest identification. Caneberries will be the first crop studied. Growers would be able to find out what pesticide or pheromone trap or biological control would be appropriate. The bottom line is that we would have a more educated grower using less destructive practices for insect control. The Board felt the proposal was worthwhile and pledged \$1,000.

I was watching my son's Little League game the other night. His team was in the field. They (the Cardinals) had a man on first and two outs. It was a close game. They hit the ball into play. Our guys fielded it well, threw it to second but the ball was dropped. The runner hadn't reached second yet. The second baseman and an infielder (my son) are both going for the ball, but neither one knew who should pick it up. The runner still hasn't reached the base yet. The parents are yelling, the game is on the line, both boys reach for the ball, the second baseman gets it and reaches the base at the same time as the runner. The parents get quiet, and all look at the umpire. Out of the blue a man next to me yells "Safe!" and the umpire follows suit. The moral of this story is I should have yelled out first, or maybe the second baseman should have caught the ball, or maybe my son should have stayed in his position, or.....I could rattle on forever. You Little League parents know the feeling. Happy Spring!

(cont. from page 1)

As in past years, the 1998 survey was sent to all Washington and Oregon beekeepers that registered more than 25 colonies with their respective state agriculture departments. A total of 16 commercial beekeepers returned completed surveys. These individual beekeepers collectively owned 36,649 colonies. A total of 102,665 colony rentals were reported for all respondents, which produced \$3,044,139 in rental income.

For 1998 the average pollination rental fee, computed from commercial beekeeper rentals on all crops reported, was \$29.65. This is a \$1.40 decrease from the average pollination fee charged in 1997 (\$31.05) (see Table 1). This is the second year where the average pollination fee has declined.

 1990 18.40			
 1997 31.05	1998		

Table 1. Average Pollination Fees 1989-1998

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. The average pollination rental fee for semi-commercial beekeepers was \$32.85, somewhat higher than that charged by commercial beekeepers but semi-commercial beekeepers account for only 1% of reported pollination rentals.

The amount of income generated from pollination rental has leveled off during the past two years. This is inferred from the average rental income generated on a per colony basis as seen in Table 3. During the past five years the average rental fee has increased from \$28.10 (1994) to \$29.65 (1998), which is somewhat misleading because the average pollination fee has decreased for the past two years. Since 1994, for the typical commercial beekeeper in Washington and Oregon, the average annual revenue from pollination rental has decreased

from \$96,405 in 1995 to \$95,699 in 1998. This reverses an upward trend that began in 1992. It needs also to be pointed out that honey bee colony rental has for many decades been an underpaid service. It is really only within the past seven or eight years that rental fees have begun to more accurately reflect the enormous value-added service of managed pollination.

Within the PNW, tree fruits are the dominant crops for pollination income (see Table 2). In 1998 the combination of pears, sweet cherries and apples accounted for 40% of all reported rentals and 37% of all reported pollination income. Paradoxically, the most important pollination crop for PNW beekeepers is grown in California, *i.e.*, almonds. This single crop was responsible for 33% of all rentals and 42% of all rental income in this year's survey. More than 95% of all commercial colonies in Oregon and Washington are taken to California for almond pollination.

Crop	# rentals	Avg.fee	Income
Pears	11,247	\$26.65	\$299,822
Cherries	8,084	28.90	233,700
Apples	21,378	27.95	607,801
Berries(1)	4,388	20.70	90,910
Blueberries	1,451	26.10	37,828
Cranberries	1,479	35.40	52,384
Vegetable see	ed 7,378	28.65	211,211
Clover seed(2	2) 4,315	12.50	54,030
Crimson clov.s	seed 2,037	4.50	9,160
Vetch seed	437	-0-	-0-
Radish seed	245	24.20	5,921
Sq.&pump. se	eed 695	27.30	18,985
Watermelon	972	33.90	32,936
Meadowfoam	sd. 1,820	33.70	61,350
Misc.(3)	782	30.10	23,534
Almonds	34,292	36.95	1,267,167
SUM	102,665		\$ 3,044,139
Average p	ollination fee	\$31.06	

- (1) Includes blackberries, raspberries, marionberries, and loganberries;
- (2) Includes red & white clover as grown for seed;
- (3) Includes arrow-leaf clover seed, bird's foot trefoil seed, turnip seed, kiwi and holly

Table 2. 1998 Average Commercial Pollination Fees

For crops pollinated in the PNW, cranberries provided the highest average fee of \$35.40 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 (21% of all (cont. on page 4)

(cont. from page 3)

reported rentals and 20% of reported rental income). The combination of almonds and tree fruit accounted for 73% of all rentals and 79% of pollination income for PNW beekeepers in 1998.

The crops with the lowest pollination fees are the legumes crimson clover (\$4.50/colony) and hairy vetch \$0/colony), both of which are grown as seed crops and are traditional honey producers, hence historically lower fees. The situation is somewhat similar for our berry crops, which as late spring to early summer bloomers and copious nectar producers, often produce honey crops as well as pollination fees. The average pollination fee for all berry crops combined was \$24.75/hive in 1998.

The average PNW commercial honey bee colony was rented 2.8 times in 1998 and this includes California almonds. With the average rental fee of \$29.65, this results in an average per colony pollination income of \$83, which is a 10% reduction from the previous year.

	Avg. #	Average	Average annual
Year	Colonies	Rental Fee	Rental income/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	\$ 97.50
1997	1,504	\$ 31.05	\$ 92.20
1998	1,153	\$ 29.65	\$ 83.00

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, 1992-1998

The combined colony numbers from those commercial beekeepers who responded to the survey (36,649 hives), represent approximately one-third of the of the commercial hives Oregon and Washington. Therefore, if we multiply the pollination income (\$3,086,818) by a factor of 3, we have a ball park estimate of the pollination income generated by commercial beekeeping in the PNW, *i.e.*, \$9,260.454. This is less than 1.5% of the estimated farm-gate value of PNW crops that require or benefit from managed pollination. Pollination income in the PNW

far exceeds the value of honey and wax sales for our regional beekeeping industry. Pollination rental income is frequently two to three times greater than honey and wax sales in any given year, a situation that is largely ignored by federal and state agricultural economists, who continue to rely almost solely on honey and wax sales as the yardstick for beekeeping economic activity.

It needs to be remembered 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 particular operations.

While colony income from pollination rental is a critical statistic, so therefore is the annual cost to maintain a colony of honey bees. Responses to this question on the survey have been varied widely, largely from a misunderstanding of what was being asked. However, several commercial beekeepers who have over the years maintained excellent cost accounting records, did respond with numbers that are very reasonable relative to today's economic pressures. The average annual cost of colony maintenance computed from these data is \$114.85.

During the past decade many thousands of colonies of honey bees have been lost due to the presence of parasitic mites. The losses have been most severe for the wild honey bee population and from within the hobbyist ranks. Commercial beekeepers, while experiencing heavy colony mortalities, have, by and large, responded by increasing their colony numbers to meet future pollination contractual agreements. Due to increased colony losses, an economic situation has been created whereby every living colony of honey bees now possesses a greater potential economic value. Commercial beekeepers have taken advantage of this opportunity.

I wish to thank all those beekeepers in Oregon and Washington who took the time to participate in the survey, which has over the past thirteen years, generated the most accurate assessment of commercial pollination known in the US.

(cont. on page 5)

(cont. from page 4)

SUMMARY INFORMATION – 1998

A total of 16 **commercial** beekeepers returned survey forms:

The average per colony pollination rental fee (for all beekeepers, for all crops including California almonds) was:

\$ 29.65

The average commercial colony was placed in **2.8** pollination sets in 1998, with an average rental fee of **\$29.65** for an average per hive rental income of **\$83.**

The average commercial bee operation maintained **1,153** colonies and grossed **\$95,700** in pollination rental income for 1998.

* * * * *

A total of 12 **semi-commercial** beekeepers returned survey forms:

The average per colony pollination rental fee was:

\$32.85

The average semi-commercial colony was placed in **0.94** pollination sets in 1998, with an average rental fee of \$32.85 for an average per hive rental income of \$30.90.

The average semi-commercial operation maintained 115 colonies and grossed \$3,550 in pollination rental income for 1998.



Summer Picnic Site Announced

The Tillamook County Beekeepers graciously offered to host the annual Summer Picnic on Saturday, August 21st. Even if it's hot in the Valley it will be cool at the Coast! Mark your calendars now. Watch for more details in the next issue of *The Bee Line*, or call Bob Allen at 503-322-3819.

Northwest Beekeeping

May - Crops in bloom producing nectar and/or pollen: Maple, clover, fruit trees, meadowfoam.

- Don't let colony stores get below 15 lbs. or three full frames of honey. Continue feeding as in April if foundation is being drawn or colonies are small.
- Supply water.
- Examine colonies every ten days. Lift off the supers, tilt up the second story and look for queen cells along the bottom of the brood comb. **IF you find** only eggs and larvae in the queen cells and the hive is crowded with bees, remove all cells --- top and bottom. Put the hive body containing mostly worker eggs or larvae on the bottom board, and the other containing mostly sealed brood on top. Add supers to provide 10-18 empty full-depth combs, or their equivalent. IF you find sealed or ripe queen cells, or possibly hatched ones, divide the colony. **NOTE:** queen mating is always dependent on decent mating weather and the supply of drones this time of year. IF you find eggs and no attempt to rear queens, and the hive is full of bees, examine the supers and add more to provide 10 to 18 empty combs or their equivalent.
- If the bees seem reluctant to work in the supers through a queen excluder, reverse the two hive bodies. This causes them to rearrange their stores and they will have to move through the excluder. Some colonies need training to go through the excluder.
- Continue to be on the lookout for American and European Foulbrood.
- Remove and extract the supers containing well ripened honey.

Thank you to Portland Beekeeper Association members Stephanie Barnes, David Gage, Rosemary Marshall, Ernie McCormack and Bill Ruhl, for Almanac review and suggestions, 1996.

Farmer's Market Guidelines

Page 6 The Bee Line May 1999

Minimum Requirements for Food Safety

The publication entitled "Farmer's Markets Guidelines" was published by the Oregon Dept. of Agriculture in March, 1999. It is printed free of charge and copies may be obtained by writing to the ODA, 635 Capitol Street NE, Salem, OR 97301-2532. It can also be found on the ODA website: http://www.oda.state.or.us/. As promised, it is reprinted here for your reference.

Guidelines for Operation: Below are guidelines for the operation of a Farmer's Market. These are minimum requirements that must be met in order to assure a minimum level of food safety. The Food Safety Division will perform inspections for compliance with these guidelines.

Products: Processed and baked products shall come from appropriately licensed sources. These would include establishments with food, meat or bakery licensed by the Oregon Dept. of Agriculture, food service licenses from the Oregon Health Division or County Health Departments, or food establishment licenses from other states. Furthermore, meat products must be prepackaged and come from USDA meat products establishments. No licenses are required for fresh fruits and vegetables.

Food processing is defined as: cooking, baking, heating, drying (drying includes drying of herbs), mixing, grinding, churning, separating, extracting, cutting (cutting does not include the harvesting of leaf greens for sale as produce), freezing or otherwise manufacturing a food or changing the physical characteristics of a food, and the packaging, canning or otherwise enclosing of such food in a container, but does not mean the sorting, cleaning or water-rinsing of vegetables.

Food Protection: All potentially hazardous foods must be stored, displayed and offered for sale packaged and refrigerated at or below 45 degrees F. With the exception of sampling, handling (cutting, dispensing, etc.) of potentially hazardous foods will not be allowed. This does not apply to vendors who are licensed as a temporary restaurant by the County Health Department.

Potentially hazardous food means any food that consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacea, or other ingredients, including synthetic

ingredients in a form capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms, but does not include food which has a pH level of 4.6 or below or a water activity (Aw) value of 0.85 or less.

Non-potentially hazardous foods other than fresh produce must be sold packaged or from covered bulk containers.

Fresh fruits and vegetables may be displayed in open air. All food items must be stored off the ground.

Sampling: Sampling is allowed provided the following conditions are met:

- 1. Hand washing. Each vendor that prepares samples at the sales location must have portable hand wash facilities at the sample preparation site. Minimum requirements would include a container of water which contains an adequate supply of water which flows freely from a tap or spigot. The spigot must be a type which will stay in an open position without being held so both hands can be washed at once. The facilities also must include a catch bucket for the water, soap and single service towels. Hands must be washed whenever the sampler uses the restroom, any time the hands become soiled, or upon return to the work station after leaving it for any reason. Hands must be washed at the sampling station in addition to using the hand wash facilities at the toilet facilities. This double washing requirement is consistent with hand wash requirements in all other food establishments. Hand sanitizers and moist towelettes may be used but are not permitted as a substitute for these hand washing requirements.
- 2. Equipment and Utensils. Equipment and utensils must be easily cleanable and in good conditions. Materials must be impervious and free of cracks and crevices. Smooth hardwood is acceptable for cutting boards. When not in use, utensils must be stored covered or in a sanitizing solution. Tableware used by customers for sampling product must be single service.
- 3. Wiping cloths. Wiping cloths used for wiping food contact surface must be stored in a (cont. on page 7)

(cont. from page 6)

sanitizing solution consisting or an approved sanitizer at an acceptable concentration. Household bleach may be used at a concentration of one tablespoon per gallon (100 parts per million). Sanitizer concentration should be checked throughout the day with a paper test strip.

4. Sample protection. Unwrapped sample must be covered to protect them from insects, dust, etc., when they are not being actively sampled by customers. Samples of potentially hazardous foods that are prepared in advance must be kept refrigerated (45 degrees F) while in storage. Potentially hazardous food samples must be discarded after two hours out of refrigeration.

Animals: Vendor animals must be kept a minimum of 20 feet from any food handling, display or storage. Customer animals are allowed, but it is recommended that the market require that animals be kept on a leash.

Toilet Facilities: The market must have toilet facilities conveniently located to the market. These facilities must have a portable hand wash facility as described in the sampling requirements and clean, cleanable portable lavatories. Permanent facilities which exceed these requirements are acceptable.

Grey Water: The market must provide a receptacle for the waste water generated by the hand washing and equipment washing if approved plumbing is not available for this purpose. Waste water generated by hand washing and equipment washing must be disposed of in an approved manner.

CALENDAR OF EVENTS

Mar. 29-June 4 Backyard Beekeeping, Lane Community College, Eugene. Call Chuck Hunt at 541-607-0106

May 21 Deadline for The Bee Line

Aug. 21 Annual Summer Picnic, Tillamook County. Details to be announced.

Sept.12-18 Apimondia, Vancouver BC

For further information visit web site: http://www.apimondia99.ca

Annual Bee Field Day ReportBy Ray Varner

The Field Day held at George and Susan Hansen's place in Colton was a big success, with sunny weather and many new members.

Participants formed into groups and each group was assigned a session. After each session the groups rotated so that by the end of the day everyone had attended all the sessions. The instructors covered a variety of topics. Dr. Mike Burgett covered bee diseases and medication. Dr. Lynn Royce demonstrated the proper application of Check Mite strips, including the paperwork required, and how to sample bees for testing. George Hansen discussed grading hives for pollination, while Bill Ruhl gave demonstrations on splitting hives. Torey Johnson covered evaluating your hives and conditioning.

The Portland Beekeepers hosted the Plant Sale, while Ernie McCormack hosted an equipment display with how-to instructions. Ruhl Bee Supply donated a hive of bees for a raffle. Forty-five tickets were sold and the hive went to John Holderness.

After the event the OSBA Board members held a meeting to discuss the Fall Conference, the Summer Picnic and miscellaneous business.

Thanks to George and Susan Hansen for hosting this annual event.



Dr. Mike Burgett works without gloves or veil



George Hansen discusses grading hives for pollination



Torey Johnson demonstrating hive evaluation



Dr. Lynn Royce answers medication questions

Deadline Dates for Apimondia Rapidly Approaching

Apimondia '99, "quite simply, the best beekeeping meeting ever held," will take place this Sept. 12-18 in Vancouver, BC. Registering before June 1st will save you money and guarantee your participation in this major international congress.

Apimondia '99, the 36th Congress of the International Federation of Beekeepers Association, will be a fantastic event. Preparations for the congress are nearly completed, and already more than 200 speakers have confirmed their participation. ApiExpo '99, the largest beekeeping trade show of its kind, has already attracted commitments from 70 displayers representing 25 countries. The site of the congress, the Vancouver Trade and Convention Centre, offers and award-winning facility in downtown Vancouver, a city recognized internationally for tourist opportunities. You do not want to miss Apimondia '99!

The second circular for the congress is now available. It provides details and forms for convention registration, hotel reservations, submitted presentations, contest entries, and pre- and post-conference tours. The 2nd Circular can be obtained from the congress website: www.apimondia99.ca. Forms also can be obtained by sending your name and address to: Apimondia '99, c/o Venue West Conference Services, #645 – 375 Water Street, Vancouver, BC, Canada V6B 5C6, or by email to: congress@venuewest.com.

Approaching deadline dates are:

Early registration: June 1 Hotel reservations June 1 Contests June 1

Pre- and post-

Conference tours July 1

Please note that congress registration is required before submitted papers and contest entries can be accepted.

Act now! Take steps to participate in the best beekeeping congress ever held, and take advantage of early registration discounts before June 1st.

Who's Who in the OSBA ResourceGuide

OFFICERS

President

Torey Johnson 26707 NE Robinson Rd. Camas, WA 98607 360-833-8817

Vice President

Barton Snyder 4628 SE 49th Ave. Portland, OR 97221 503-245-4524

E-mail: NewLeif@aol.com

Secretary/Treasurer

Phyllis Shoemake 1874 Winchester NW Salem, OR 97304 503-364-8401

<u>REGIONAL REPS</u>

Columbia Basin

Rocky Pisto PO Box 131 Parkdale, OR 97041 541-354-2610

Eastern Oregon

Jan Lohman 77225 Colonel Jordan Road Hermiston, OR 97838 541-567-3209

Metropolitan Area

Chuck Sowers 4390 Lords Lane Lake Oswego, OR 97035 503-636-3127

North Coast

Bob Allen PO Box 434 Garibaldi, OR 97118 503-322-3819

South Coast

Joann Olstrom 3164 Maple Court Reedsport, OR 97467 541-271-4726

Southern Oregon

George Steffensen 1634 Fish Hatchery Road Grants Pass, OR 97527 541-474-4305

E-mail: George@cdsnet.net

Willamette Valley

Ray Varner PO Box 123 Yamhill, OR 97148-0123 503-662-4559 E-mail:RayBee@band1.bandwidth.net

WEB PAGE

http://www.orsba.org (Eff. 2/99) WebKeeper: Bart Snyder 503-245-4524

RESOURCES

Dr. Michael Burgett Dept. of Entomology Cordley Hall 2046 / OSU Corvallis, OR 97331-2907 541-737-4896 Fax 541-737-3643

email: burgettm@bcc.orst.edu

Dr. Lynn Royce Assistant/Associate Dept. of Entomology Cordley Hall 2051 / OSU Corvallis, OR 97331-2907 541-737-5520

Jim Cramer

Oregon Dept. of Agriculture 635 Capitol Street NE Salem, OR 97310-0110 503-986-4620 Fax 503-986-4737 www.oda.state.or.us/oda.html

<u>REGIONAL BRANCH</u> ASSOCIATIONS

Coos County

Meets 7:30 pm third Friday (except December) Coquille Annex, Coquille Pres: Wade Weathersby 541-756-3378 VP: Don Barney 541-267-5945

Sec./Treas.: Toni Wyatt-Kirkeby

Klamath County

Inactive at the present time

Lane County

Meets 7:30 pm second Tuesday
Pacific Cascade Credit Union
1155 Chambers St., Eugene
Pres: Chuck Hunt 541-607-0106
V Ps: Gene Garner 541-746-5972
Denny Jessup 541-687-0912
Treasurer: Frank Svejcar 541-688-9153

Portland Area

Meets 7 pm second Thursday Clear Creek Mutual Telephone Co. 18238 S. Fischers Mill Rd., Oregon City

Pres: Jim Allison 503-663-1058 VP.: Denise Dickens 503-655-7848

Sec.: Paul Hardzinski 503-631-3927

Treas.: Charlie Snider 503-829-9169

Southern Oregon

Meets 7:30 pm first Monday S.O. Research & Extension Center 569 Hanley Rd., Central Point President: Stan Kee 541-664-3238 VP: John Campbell 541-664-4867 Sec.: George Steffensen 541-474-4305

Tillamook County

Meets 7 pm first Thursday Forestry Building 4909 Third Street, Tillamook President: Bob Allen 541-322-3819 VP: Doug Taylor 541-842-4245 Sec./Treas.: Wayne Auble

Tualatin Valley

Meets 7:30 pm fourth Friday OSU Extension Office, 18640 SW Walker Rd., Beaverton

Pres.: Roy MacMillan 503-628-0277 VP: Bob Ward 503-324-8123 Sec.: Mary Moss 503-357-4782 Treas.: Jerry Schwanke 503-357-9284

Willamette Valley Meets 7:30 pm fourth Monday

Rm. 112, Building 50 Chemeketa Community College, Salem Pres: Richard Farrier 541-327-2673 VP: Ray Varner 503-662-4559 Sec.: Ron Bennett 503-838-2328 Treas: Fritz Skirvin 503-581-9372

Check your Mailing Label

In order to stay within our operating budget while providing the best publication possible, expiration dates on mailing labels will be monitored and *The Bee Line* cannot be mailed to memberships 60 days past the date code. As an additional service, a membership and publications form will be printed on page 11 each month. Note additional savings are available when ordering magazines through OSBA.

Research Contributions

To make tax-deductible contributions for honeybee research at OSU, make your check payable to Agriculture Research Foundation (ARF) and send it to Dr. Royce at OSU (see her address on page 10).

For those of you who want to contribute to OSBA above the \$15 membership dues, please note a new line item on the form below. Your contribution can be earmarked for the Research or General Fund (specify your choice). The Executive Board wants to hold the line on increasing dues across the board but recognizes that some members would like to make one-time or ongoing contributions. Thank you for your support!

Membership and Publications

Membership in the Oregon State Beekeepers Association is open to anyone who has an interest in bees and beekeeping. You do not need to own bees or reside in Oregon to join. OSBA membership is \$15 per person and includes a vote in OSBA elections, discounts on other bee related publications, ten issues of *The Bee Line*, and more. Foreign membership is \$23.

Name				
Address:				
City/State/Zip				
Telephone()	Local Group			
Additional Voluntary Contribut	ion: \$ Please	apply to Research / C	General Fund (circ	cle one).
Start your savings now! Get a d	discount on the following sub	scriptions through the	e OSBA:	
American Bee Journal	1 yr. \$14.44	2 yrs. \$27.3	8	3 yrs. \$38.96
Bee Culture	1 yr. \$12.75	2 yrs. \$24.75		•
The Speedy Bee	1 yr. \$13.25	2 yrs. \$25.25		
Make checks payable to OSBA			Shoemake	
		1874 V	Winchester NW	

Salem, OR 97304

Classified Ads

Classified advertising rates per issue: 30 words, per issue: OSBA members, \$2.00, non-members \$3.00. Copy and payment must be received by editor no later than the 15th of the month prior to publication.

WANTED: Northwest produced honey in 55 gallon drums. Also looking for vetch, snowberry and fireweed honey. Call Bee's Knees Honey at (503) 225-0755 or (503) 640-5757.

FOR SALE: 55 gallon honey drums \$6 to \$10 based on grade and condition. Call Bee's Knees Honey (503) 225-0755 or 503-640-5757.

NUCS: Five frame, \$32.50 w/frame exchange, minimum orders of 50. \$35.50 no exchange. Orders under 50, call for details. 541-840-8119.

FOR SALE: 200-217 used Black Plastic Western Feeders \$1.85 each. Call 503-835-5300

FOR SALE: 100 shallow supers, 50 drawm 50 wired with foundation ready for hives, mostly new, clean, new paint. \$15 each. Misc. foundation, etc. 1982 Ford one-tone 12 foot bed \$3,700 or best offer. High Country Honey Farm. Call 541-882-8409.

FOR SALE: 400 four and five frame nuc boxes w/new frames \$10 each; 300 colonies of bees with inside feeders on 4/way pallets; 250 gallon stainless steel milk tank used for blending medicated syrup, water jacketed with pump. Call 503-225-0755

The Bee Line

Newsletter of the Oregon State Beekeepers Association Diane Varner, Editor P.O Box 123 Yamhill, OR 97148-0123

Address Service Requested