

The Bee Line

Newsletter of the Oregon State Beekeepers Association

Volume 36, Number 6

August 2011



David C. Lytle

IN THIS ISSUE...

2010 Pollination Survey	1
President's Message	2
Queen Business	2
Removing Honey	3
OSBA Resources	4
Regional News	5
Keeping Bees	7
Question of the Month	8
Visit to a Bee Yard	12
Value-Added Grants	12
Come to the Fair!	12
Magazine Subscriptions	13
OSBA Membership Form	15

Image above: This bee yard mess may differ in scale from the recent loss of 400 hives tipped from a truck in Idaho or the pallets of bees stolen in Florida or the barrels of honey swiped in California, but it is nonetheless a *loss*. To find out *who done it*, see page 12. As the season begins to wind down, may all bees regain ground shifted by the vagaries of weather, treatments gone awry, and visits from critters, large and small.

PACIFIC NORTHWEST HONEY BEE POLLINATION ECONOMICS SURVEY 2010

Michael Burgett

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 proved 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 Pacific Northwest. The report for 2010 represents 25 years of summarizing the general state of PNW pollination economics. This is the longest-running examination of pollination economics for any region in the United States.

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 the world of commercial crop pollination.

The USDA National Agricultural Statistical Service estimates that there are 92,000 production honey bee colonies in the Pacific Northwest (Oregon and Washington). With these numbers, there are some interesting hypothetical calculations that can be made. For instance, if all growers of crops that require or benefit from managed honey bee pollination in the Pacific Northwest were to rent two colonies for each acre of crop that relies on and/or benefits from bee pollination (ca. 350,000 acres), the resulting pollination requirement would utilize 700,000 colony rentals. If we multiply the hypothetical rentals by the 2010 average colony rental fee (\$70⁸⁵), it results in a potential pollination rental income of nearly \$50 million for PNW beekeepers. If we add to this the estimated 2010 California almond pollination income available to PNW commercial beekeepers (\$25 million), we end up with a potential gross pollination rental income of \$75 million. Another way to look at this is by asking the question, "How much pollination income, under optimized conditions, should have been produced from one commercial PNW honey bee colony in the year 2010?" For 2010, that figure is approximately \$815 per colony. This is obviously unattainable, if for no other reason than the impossibility of one colony being sequentially utilized in all of the necessary cropping systems required to produce such a hypothetical per colony income.

Comparing the hypothetical PNW rental income (\$50 million) to the farm-gate value of the crops pollinated in the Pacific Northwest (\$2.75 billion) shows that the money spent by growers to ensure adequate pollination is about 1.8 percent of the total crop value. This is an impressive illustration of

Continued on page 9

MESSAGE FROM THE PRESIDENT

When life hands you lemons, make lemonade! Well, the Quick Strips didn't work so well for us, but as a trade-off the colonies were smaller when we requeened so our queen acceptance is much better than usual. We learned that we can pull the bees down smaller and have greater requeening success. Also, the year-old queens were much easier to find!! My son has worked construction for the past fifteen years and loves it, but, given present economic conditions, he was laid off from his job and is now working with us in the bees. He has made friends with the crew and has added a new dimension to our operation—and Mom gets to see him every day. How cool is that!

The Oregon State Beekeepers Association with the help of Dr. Ramesh Sagili submitted a grant proposal to the Specialty Crop Block Grant Program for help supporting honey bee education and our now-being-developed Oregon Master Beekeeper Program. We were notified this month that our proposal was accepted and we will be able to add more education and professionalism to our project. The funds should be available in the late fall of 2011. Our plan is to launch the Master Beekeeper Program at the conference in November.

The dollars available for spending at the university level are scarce. We are so lucky to have Dr. Sagili available to us for extension and research, but he needs support and we need to dig deeper so that programs can continue at the OSU Honey Bee Lab. Sample jars will be given out again this year so that our honey bees can be analyzed for Varroa mite loads, Nosema, and tracheal mites. Please do your part by taking your samples in a timely manner and returning them to OSU for testing. Let's continue to make this program a success.

Finally, we have sunshine and no wind in eastern Oregon, and the bees are very happy to be able to do their work. Our bees are in melons in eastern Oregon and in vegetable seeds in Central Oregon, with a few scattered for a honey crop. The melons are finally growing, as is our garden. With life's lemons and a little honey, *wa la—lemonade*.

All is good,
Jan

Note: The title of the grant proposal is *Promoting Sustainable Apiculture by Training and Education and Enhancing Pollination Efficiency of Honeybees in Specialty Crops*. More on this in upcoming issues.

QUEEN BUSINESS

Jan Lohman

In early 2011, there was a lot of information moving around the Internet and consequently around the honey bee industry concerning buying queen bees for our operations. Some facts were decorated with many bits of misinformation, so I began thinking of going to the "horse's mouth" to dispel the misinformation and educate all of us about the current happenings in the queen breeder business. I asked several of our queen breeders to sound in with their opinions on what is happening in the industry. Several have written articles that have been published in the newsletter, and others will follow. This is a response from Pat Heitkam, who sent along some well-thought-out information I would like to share with you.

Pat notes that there are many things that contribute to demand for queens and shortages of queens. Queen breeders all have felt the impact of the weather this year. Hawaii has had more challenges raising queens because of the drought in 2010 and the new influx of mites and the small hive beetle, but that is a temporary situation. Beekeepers now know the value of new young queens, so more beekeepers have intensified their requeening programs. There are also more hobbyist beekeepers coming into the market by purchasing nucs, and that trend has continued to grow during the past several years.

In addition, there are changes in the costs of raising honey bees as well as raising queen bees. Almond growers are paying more for their colonies and are demanding not just an adequate colony but a strong colony in February. Equipment costs, treatment costs, fuel costs, and employee costs are major factors as well.

Among the possible mitigations to help with the continued high demand for queens, Pat lists: queen breeders expand, requeen with cells, buy queens later in the year when demand is not at its peak, keep nucs in reserve to requeen with, plan ahead for the following year, and be willing to pay a fair price for a good product. He adds, "We were blessed thirty plus years ago to start working with some of the best queen producers in the world, and they were generous with their help. I believe most beekeepers can raise queens, but we hope you can make better use of your time in pollinating and making honey. Sue Cobey offers classes in queen rearing at UC Davis if you would like to give it a try."

REMOVING HONEY

Dewey Caron

Well, are your bees storing some surplus honey now that the weather finally came around in western Oregon? Better late than never! How are you going to rob your bees? Here is a summary of options:

Bounce and Brush the Bees: For small-scale (recreational/hobbyist) beekeepers and for harvesting individual frames, the bounce-and-brush method is the cheapest and easiest technique. Frames are individually removed, examined to ensure three-fourths of the cells are capped, and then either they are shaken in the air above or within the super itself or the top bars are bounced forcefully (without breaking the frames) on the ground in front of the colony entrance; then, the remaining bees are brushed from both sides. The cleaned frame is placed in an extra empty with cover and the process repeated until the super or all harvestable frames are cleaned of bees. A few bees might be left clinging or adults might enter the collection box, so bounce and brush often means a few stragglers will be carried from the apiary. Bee brushes cost \$4.00–\$5.00. Even being careful, you might break a few frames, thus necessitating frame repairs or replacement, especially with heavy bouncing. Also, this method might lead to robbing behavior. But it is fast and effective.

Repel the Bees: Since we have become so "chemical minded," beekeepers might elect to use a bee repellent to remove entire supers. There are two types of repellent chemicals on the market, natural oils and butyric anhydride (Honey Robber®, Bee-Go®). Butyric-anhydride products are technically not to be used in proximity with food for human consumption and are

shipped/stored as a hazardous material. Opened bottles of these repellents need be stored away from other bee equipment, and you should absolutely avoid spilling any of the material on your bee clothing/boots or within your vehicle or any other place where you plan to breathe. Among natural products, Fischers Bee-Quick®, the first and oldest of the natural, pleasant-smelling repellents, is approved both for harvest of Certified Organic and Naturally Grown Honey. Bee Dun® and a comparable product sold by Brushy Mountain Bee Supply, Natural Honey Harvester®, both of which I have never used, sell for about \$15 a pint. Bee-Go, Honey Robber, and the natural repellents are used with a fume (acid) board and work well when strong sunlight volatilizes the chemical material. Supers can be cleaned of bees within a few minutes under ideal conditions.

Show the Bees the Door: Northern-area beekeepers find bee escapes efficient, inexpensive devices for getting bees out of supers. They are designed to be placed beneath honey-filled supers so the adult bees leave a super, pass through a one-way device, and cannot reenter. Bee escapes are very effective when nights are colder, resulting in adult bee chilling and the need to help warm brood below the supers. They do not work if there is any brood in the supers, as the adults do not normally abandon their brood. **Caution:** If there is any entry to the supers, robber bees may find entry and harvest the honey before you do.

GloryBee Beekeeping Supplies

GloryBee carries a wide selection of beekeeping supplies for everyone from the hobbyist beekeeper to the professional. Shop with us online or request our FREE 108-page catalog today.

Equipment • Tools • Containers
Books • Gifts • HoneyStix
Royal Jelly • Bee Pollen • Propolis
Family Owned & Operated Since 1975

www.GloryBeeFoods.com • (800) 456-7923



COMA APIARIES

Don and Erin Coma
8057 Bass Pond Road
Millville, CA 96062
ph 530 547 5773

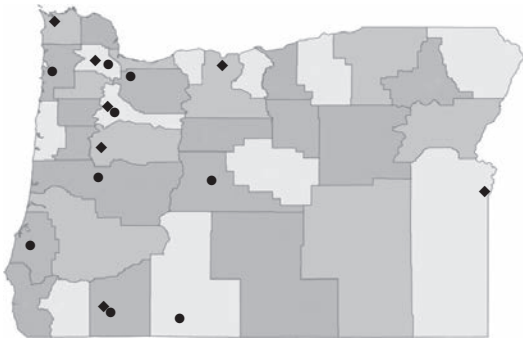


Italian queens Packages Nucs

www.damoc.com

small orders welcome

Oregon State Beekeepers Association EXECUTIVE BOARD AND RESOURCES



Southern Oregon: Floyd Pawlowski
415 Pompadour Dr, Ashland; 541.482.4797
fmpawlowski@ashlandwireless.net

North Willamette Valley: Harry Vanderpool
7128 Skyline Rd S, Salem; 503.399.3675
shallotman@yahoo.com

South Willamette Valley: Jason Rowan
80881 Turkey Run Rd, Creswell 97426
541.942.6479; beetanical@q.com

OSBA OFFICERS

President: Jan Lohman
77225 Colonel Jordan Rd, Hermiston OR 97838
541.567.3209; 541.980.0304 (cell)
vazzafarms@yahoo.com

Vice President: Paul Andersen
19255 SW Prospect St, Aloha OR 97007
503.649.5089; 503.332.5410 (cell)
paulande@easystreet.net

Secretary: Carolyn Breece
743 NW 18th St, Corvallis OR 97330
541.207.3668; 541.224.2859 (cell)
carolyn_breece@yahoo.com

Treasurer: Paul Kowash
5959 SW Taylors Ferry Rd, Portland OR 97219
503.452.2664; 503.367.5242 (cell)
paulkowash@aol.com

Past President: Chuck Sowers
26730 S Hwy 170, Canby OR 97013
503.266.1740; sowers@canby.com

OSBA REGIONAL REPRESENTATIVES

North Coast: Terry Fullan
39450 Northfork Rd, Nehalem 97131
503.368.7160; tfullan@nehalem.tel.net

South Coast: Open

Columbia Basin: Bill Edwards
5040 Lost Lake Rd, Hood River 97031
541.354.2223

Eastern Oregon: Jordan Dimock
2635 Mitchell Butte Rd, Nyssa 97913
541.372.2726

Portland Metro: Bev Koch
20495 S Geiger Rd, Oregon City 97045
503.655.7447; johnbev@aracnet.com

OSBA REGIONAL ASSOCIATIONS

Central Oregon Beekeepers
Meets 6:30 PM, third Tuesday
63211 Service Rd, Suite 130, Bend
President: Dennis Gallagher; 541.389.4776
For information, please contact John Connelly
johncobka@gmail.com

Coos County Beekeepers
Meets 6:30 PM, third Saturday (except December)
Ohlsen Baxter Bldg, 631 Alder St, Myrtle Point
President: Shigeo Oku; 541.396.4016
Vice President: John Gardner; 541.572.3847
Secretary: Bobbi Gardner; 541.572.3847
Treasurer: Jane Oku; 541.396.4016
jane_oku@hotmail.com

Klamath Basin Beekeepers
Meets 9:00 AM, last Saturday (except Nov/Dec)
OSU Extension, 3328 Vandenberg Rd, Klamath Falls
President: Tom Chester; 541.850.8384
klamathbeekeepers@gmail.com
Vice President: Jim Smith; 541.892.5888
Secretary: Donna Schmerbach; 541.891.3066
Treasurer: Ed Geise; 541.892.6016

Lane County Beekeepers
Meets 7:30 PM, third Tuesday, Trinity United
Methodist Church, 440 Maxwell Rd, Eugene
President: Judy Scher; 541.344.2114
judy_scher@catdreams.com
Vice President: Rita Ostrofsky; 541.685.2875
Secretary: Barbara Bajec; 541.767.9086
Treasurer: Nancy Ograin; 541.935.7065
woodrt@pacinfo.com
Website: www.lcbaor.org

Portland Metro Beekeepers
Meets 7:00 PM, second Thursday, Clackamas Comm
College, Clairmont Hall, Room 118, Oregon City
President: Nancy McFarlane; 503.260.3930
nancymariemcfarlane@yahoo.com
Vice President: John Keeley; 503.632.3682
keeley81@bctonline.com

Secretary: Bernard Newland; 503.656.6621
berternew@yahoo.com
Treasurer: Rex McIntire; 503.720.7958
remcintire_5@msn.com

Southern Oregon Beekeepers

Meets 7:30 PM, first Monday, Southern Oregon
Res & Ext Ctr, 569 Hanley Rd, Central Point
President: John Jacob; 541.582.BEES
john@oldsolenterprises.com
Vice President: Floyd Pawlowski
415 Pompadour Dr, Ashland; 541.482.4797
Secretary: Michele Bashaw; hapistitch@earthlink.net
Treasurer: Ron Padgett; Padgett25@frontiernet.net

Tillamook County Beekeepers

Meets 7:00 PM, second Tuesday, Art Space
Hwy 101 & 5th St, Bay City
President: Bob Allen; 503.322.3819

Tualatin Valley Beekeepers

Meets 7:30 PM, last Wednesday
OSU Ext, #1400, 18640 SW Walker Rd, Beaverton
President: Kevin Beckman; 503.539.5996
kevin_beckman2@msn.com
Vice President: Herb Brasington; 503.701.4180
herb@hwbsystems.com
Secretary-Treasurer: Jerry Maasdam
503.648.7906; jmaasdam@mac.com

Willamette Valley Beekeepers

Meets 7:00 PM, fourth Monday, Chemeketa
Community College, Building 34, Room A, Salem
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: Patricia Swenson; pkswenson@gmail.com

COMMITTEES

Agriculture Liaison: Harry Vanderpool; 503.399.3675

Fairs and Exhibits: Marjie Ehry; 503.434.1894

NW Apiculture Fund for Honey Bee Research, Extension, and Education: Kenny Williams; 541.456.2631

Nominations: Chuck Sowers; 503.266.1740

Public Relations: Paul Andersen; 503.332.5410

HONEY BEE RESEARCH

Dr. Dewey Caron
302.353.9914 (April–October)
carond@hort.oregonstate.edu

Dr. Lynn Royce
541.929.5337; mitebee@peak.org

Dr. Ramesh Sagili
541.737.5460; sagilir@hort.oregonstate.edu

REGIONAL NEWS

Regional Representatives

Portland Metro

June was a bit wet and cool, but the blackberries are bloomin', bees are buzzin', and the sun is shinin' now! Still a few swarm calls going around and there's talk of a repeat of last year's extraction timing. Who knows what the weather will do. —*Bev Koch*

South Willamette Valley

The sun has finally shown his face, and the heat is on in what seem to be the final hours. Here in the south valley, it felt like we had to fight for a day with the temperatures high enough to forage. I hope all went well for the bees in your apiary. Reported starvation in the *apis kingdom* was spread equally over hobbyist and commercial outfits, so I hope you were on top of it. Time to start getting the extraction room cleaned up and the yard organized in preparation for the next phase of the beekeeping year. Stay cool and hope for high temperatures to let the nectar flow.

—*Jason Rowan*

Regional Associations

Lane County Beekeepers

The Lane County group had its annual field day on Saturday, June 18, at Dr. Lynn Royce's farm. Hive demonstrations were conducted by Ken Ograin, Kenny Williams, and Morris Ostrofsky. The drizzly weather politely stopped before we went into the hives. It resumed only after we ate lunch and were treated to Lynn's earth-oven-baked pizza. As a bonus, some of us saw two bumblebee boxes hidden in the back of the farm and a swarm of honey bees in one of Lynn's sheds.

Kenny Williams (far left in photo) shares his ways with bees during the recent Lane County field day at Lynn Royce's.



On June 26, we hosted a booth at the KLCC Garden Tour event. The beautiful day brought many interested people to the booth to ask about honey bees and to buy honey and books. People who staffed the booth also had a lot of fun "bee" talk with one another, an added benefit to volunteering!

The Bee Line

On June 21, Morris Ostrofsky gave a very informative talk on reading frames. Our July meeting will feature a talk by Ken Ograin on extracting honey and processing beeswax.
—Judy Scher

Portland Metro Beekeepers

President Nancy McFarlane announced that our yearly bee day had a record number of people attending this year, many of them signing up on the day itself. During open discussion, one member with forty hives noted a lack of honey production this year. Collecting swarms this time of year? Consider joining small swarms with another hive. Paul Hardzinski warned rural beekeepers to beware of honey production from large fields of tansy ragwort (*Senecio jacobaea*) as this honey can be toxic to humans.

Our July speaker was Peter Morrison of Lamson Bee Acres, who talked about honey extraction. Regarding using queen excluders separating your honey supers, he said that they will keep the pollen-bearing workers out of the supers as well as the queen. Yellow jackets can rob the hive of honey and kill your bees, so use entrance reducers if wasps are strong. People with many hives often use a leaf blower to push bees off the frames. If you only have a few hives, use a brush. Jim Mellis learned from Helga Moll to use goose feather

wings dipped in a Clorox solution, then lightly dried between hives to avoid any contamination.

Peter believes the horizontal extractors create more bubbles and may not take out as much honey as vertical extractors; however, any centrifugal extractor will do a better job than any other method. Many are surprised at how much honey they get. Jim warned not to wait too long in the late season for bees to cap honey. They may never do it and may eventually rob. Instead, shake the frame and, if honey doesn't flow freely off, go ahead and harvest it. Next month's meeting is our annual potluck picnic on Saturday, August 13, 11 AM to 2 PM, at the Molalla State Park near the Canby ferry. Everyone is welcome. Bring a potluck dish, dishes/utensils, and enjoy! The club will supply cold drinks.
—Paul Jarrett

Tillamook County Beekeepers

We held our July meeting with a good showing of members. Topics which we covered were methods of extracting honey, glassware, and foraging opportunities for our bees. Everyone agreed that there has been an abundance of blackberries this year on the coast. Lala and Artie Pierce shared photos of their travels to South Dakota, where they visited a commercial beekeeping

Guarantee Your Order... Call Today!

Olivarez Honey Bees, Inc.
Pollination • Package Bees • Queens

FRESH Queens

OUTSTANDING QUALITIES
Hygienic Behavior • Brood Rearing
Honey Production • Gentle Bees

TOLL FREE (877) 865-0298

VISA MasterCard

www.ohbees.com

Big Island Queens
A Division of Olivarez Honey Bees, Inc.

OH is Proud to Announce...

OHB

Premium Quality Queens
Produced in the Heart of
Northern California
Since 1963

Italian New World Carniolan Minnesota Hygienic

CALIFORNIA (530) 865-0298

HAWAII (808) 328-9249

operation. An added treat, Trisha Kauffman shared some 1930s vintage bee equipment given to her by some Canadian friends—very interesting hive body with an integral entry on the front as well as an old galvanized extractor.

Bob Allen and Jim Fanjoy volunteered to rescue some bees inside a farm building up the Trask River. Club members often perform this service to foster goodwill toward bees and local beekeepers. Our next scheduled meeting is for August 9. —*Terry Fullan*

Willamette Valley Beekeepers

Dewey Caron recently summarized the results of his 2011 overwinter bee loss survey. Almost the same number of members participated and colony losses were slightly higher, at 36 percent, last year. Nationally, losses were about 30 percent. Photos of our Bee Day are posted on our site: www.templeofbees.com. Ken Vial notes that top bar hives are easy to make and economical. For \$21 or less—a 1 x 12 x 12-foot piece of lumber plus some 1 x 2s and one-eighth-inch plywood are all that is needed. Our annual picnic will be Sunday, July 24, 12:30 PM at Steve Coffman’s place near Dallas. The group will provide fried and baked chicken, soft drinks, bottled water, eating-ware, and coffee/tea. Bring a potluck item to share and fold-up/roll-up chairs. We will have a short business meeting and speaker, beekeeping items on display—including a top bar hive and an opportunity to observe/help in assembling one, and likely a silent auction. Also bring your questions.

Adapted from: June 2011 *WVBA newsletter*

KEEPING BEES IN AUGUST

Todd Balsiger

August is a difficult time to work bees—it is hot and the bees have a strong inclination to rob. But there are vital

tasks to be done that will greatly increase the odds for winter survival.

- ❖ Remove all supers and configure colonies into winter configuration (generally two deeps) regardless of how populous you think the colony is! It is okay if the bees lap out the front. It is also possible to make nucs out of these extra bees. Food for thought...
- ❖ Treat for Varroa—the earlier the better—preferably before mid month. Our goal is to raise a healthy crop of winter bees, so be sure the treatment does not too adversely impact the bees themselves.
- ❖ Treat for foulbroods by dusting colonies at intervals. Follow the directions.
- ❖ Inspect weak colonies and find out why they’re in that condition. Often these colonies are queenless. At this point, options are to requeen with nucs, combine with queenright hives, or shake the bees out and share the frames with other colonies. A side note: storing frames laden with pollen over winter usually does not work.
- ❖ Another possibility for a weakened colony is disease, and American foulbrood is the one disease that we really need to watch out for. AFB colonies will collapse and be robbed out, and thereby spread the disease. Don’t discount the importance of treating colonies for foulbroods. If you do find AFB, burning the affected colonies is the most practical solution.
- ❖ Try to minimize robbing behavior. For example, work hives earlier in the morning, limit the amount of time in a bee yard, and don’t leave goodies out to tempt the bees.
- ❖ Extract as soon as possible after removing supers. Wax moths are very active at this time of year and will quickly find brood and pollen in supers. Wax moths and their larvae are a nuisance during extraction—best to avoid them altogether.
- ❖ Provide water continuously if the bees don’t have access to it.

Adapted from: August 2010 *Bee Line*

Snow Peak Apiaries
 Custom Wood Shop
 All types of supers, including 8-frame,
 Cedar top and bottom boards; Frames—all styles
 Custom cut to fit your operation
Franz & Audrey Yordy

541.451.3752 34769 E Lacombe Dr
 Toll free 1.877.530.5882 Lebanon OR 97355

 *Everything for the Beekeeper*

Call our branch offices: Jeff in Fresno or John in Chico for fast courteous service. *Free Full Color Catalog*

PO Box 2837 2765 South Golden State Blvd. Fresno, CA 93745 Phone (559) 495-0230 Fax (559) 495-0232 Toll Free 1-877-432-3268	  	15 C Valley Court Chico, CA 95973 Phone (530) 893-0921 Fax (530) 893-0922 Toll Free 1-877-332-3268 Website: www.dadant.com
--	---	--

QUESTION OF THE MONTH ? ?

Question ?

We have three hives. One is a new nuc with a Hawaiian queen which is going great guns. We have one super on it. Another is strong and is a carryover from last year. We have one super on it. We combined two weak hives for our third. We just looked at the weak hive and they might have three frames of brood on two deeps. We didn't find a queen. The larvae seem to be singles. We thought maybe it was just workers laying, but we saw a bee hatching out. We aren't sure what to do. Should we requeen (we understand queens are in short supply) or let the bees develop their own? Last year, at the suggestion of a fellow beekeeper in Harney County, we added a frame of brood from a strong hive to our weak hive and it worked. There are more bees in the weak hive than when we combined the two. Our honey flow does not come on in this region until August and September when the rabbit brush blooms. Any advice would be helpful.

Responses

Ramesh Sagili: Further action depends on how long this colony was queenless and how many bees (strength of colony) you currently have in the hive. If there are larvae in the hive and the queen is lost,

then usually you will see some emergency queen cells in the hive. Do you see any of those queen cells? You said there are three frames of bees on two deeps. Do you mean three frames in each box or just three frames in total? Just three frames in total may not be a viable population even if you requeen the hive. Getting a new queen this time of the year is not a problem, and, as far as I know, queens are not in short supply.

Dewey Caron: It seems like your third colony is a weak colony that is likely to take considerable bee management time and may, whatever is done, never progress beyond a weak colony. Requeening with a purchased queen (local, if available—although you report good success with a Hawaiian queen) is the riskiest and most expensive option. Allowing the workers to rear their own queen with a transfer of a “mixed” brood frame selected from the best of your other two colonies is also a good option for trying to rejuvenate the weak combined colony. With the late nectar flow in your area, the now-weak colony might have a chance to become strong enough to overwinter, but is not likely to store any surplus for harvest. Assuming the colony is otherwise healthy, a third option is to do nothing. If queenless, the colony might requeen itself if it still has a “decent” existing adult population; if queenright, it might finally “take off” this season and right itself. Feeding a stimulatory sugar syrup would be of benefit, but avoid spilling syrup or leaking sugar containers, which could start robbing in the apiary.

2 Frame Plastic Extractor
 HH-130

FREE SHIPPING!!*

~~\$199.95~~
Sale Price!
\$159.95
Delivered!
 Sale price effective Aug. 1-31, 2011

Available Option
 HH-161 17" Metal Stand.....\$49.95

MANN LAKE
 WE KNOW BEES
 An Employee Owned Company

800-880-7694
 www.mannlakeltd.com


*On Most Orders Of \$100 Or More.
 Lower 48 States Only. Prices & Shipping Offer
 Subject To Change Without Notice.





2011 Oregon State Beekeepers
 Seaside Convention Center in Seaside
 November 17, 18, and 19



Join us at the beautiful Or

 Registration starts A
 For more information, go to

Pollination Survey—Continued from page 1

what a remarkable bargain pollination rental is to the at-large commercial agricultural industry of the Pacific Northwest.

The 2010 pollination survey continues to illustrate the critical reliance of PNW beekeepers on income generated from colony rentals. For 2010, the average commercial beekeeper reported receiving 73 percent of his or her annual operating gross from pollination rental, which is a slight increase from the 2009 crop year. This percentage shows the dominance of pollination rental income to a PNW beekeeper’s financial health.

Recent increases in the average pollination rental fee have been strongly influenced by the 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 were willing to pay for pollination; this continued into the 2009 pollination season, where the average almond pollination fee was \$150²⁵. For 2010, the average fee paid for almond pollination was \$137²⁰, which is the first decrease seen in five years; however, almonds are still, by far and away, the highest rental crop for PNW beekeepers. Almond pollination is a target crop for nearly all commercial beekeepers in the Pacific Northwest and represents the beginning of the annual pollination season.

For 2010, the average pollination rental fee, computed from commercial colony rentals on all crops reported (including almonds), was \$70⁸⁵. This is a 21 percent decrease from the average pollination fee paid in 2009 (\$89⁹⁰) (see Table 1). This decrease is strongly influenced by the corresponding decrease in the average fee for almond pollination in 2010. Table 2 provides the average rental fee by crop and a comparison to the average fee received in 2009. For Table 2, only crops where at least three commercial beekeepers reported rentals are listed.

During the past ten years, the average pollination rental fee has increased from \$33⁶⁵ (2001) to \$70⁸⁵ (2010), an increase of 210 percent. While dramatic gains in pollination fees have occurred, it needs to be stressed that honey bee colony rental was for many decades an underpaid service to the agricultural industry at large. 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. Figure 1 depicts the average pollination fee paid since the beginning of the PNW pollination survey in 1986.

Within the Pacific Northwest, tree fruit (apples, pears, and sweet cherries) has been and remains the dominant crop type for pollination income. In 2010, the combination of apples, pears, and sweet cherries accounted for 40 percent of all reported rentals and 21 percent 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 27 percent of all rentals and 52 percent of all rental income in the 2010 survey (see Table 3). Almonds have consistently produced a high average pollination fee and for the past five years have displayed remarkable fee increases compared to the 2005 average fee of \$79⁴⁰: for 2006, \$129²⁰; for 2007, \$137³⁵; for 2008, \$148¹⁵; and for 2009, \$150³⁰.

In 2010, the combination of California almonds and PNW tree fruit accounted for 67 percent of all rentals and 79 percent of all

TABLE 1. Average pollination fee, 2001– 2010.

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
33.65	\$36.40	\$36.45	\$38.65	\$51.30	\$73.85	\$70.65	\$81.15	\$89.90	\$70.85

Conference

ide, Oregon

9



regon Coast!

ugust 1

: www.orsba.org

**2011 Western Apicultural Conference
September 12 - 15, 2011**

Hapuna Beach Prince Hotel, Big Island, Hawaii

Registration: CONFERENCE REGISTRATION FORMS MUST BE RECEIVED, WITH PAYMENT, NO LATER THAN **AUGUST 10TH.**

Accommodations: The WAS Conference rate at the Hapuna Beach Prince Hotel is \$159 per night (+ tax & gratuities), buffet breakfast included. Available through conference time.

Conference registration and hotel booking forms available from

WAS treasurer Jim Bach, PO Box 397, Selah WA 98942 USA, phone 509-573-4245 or email jcbach@fairpoint.net



For more information, visit the WAS website at http://groups.ucanr.org/WAS/Conference_Information or contact one of the following:
Jenny Bach 808-640-0278 jennaloha@hotmail.com
Cary Dizon 808-966-7421 cpd@dfarm.us

pollination income, which illustrates the dominance and importance of these crops for a commercial PNW beekeeper (see Table 3). All other PNW cropping systems that utilize honey bee pollination contributed 21 percent of the beekeeper’s gross pollination income in 2010.

In terms of acreage, apples are the largest crop grown in the Pacific Northwest (almost 200,000 acres), and this is reflected by the large number of reported rentals (23.5 percent of all rentals and 16 percent of the total reported rental income).

The average PNW commercial honey bee colony was rented 2.1 times in 2010, and this includes California almonds. This is a slight increase from 2009. This statistic had been trending downwards since 1999, when the average number of rentals per colony was 2.8. Does this actually reflect the real-world situation? Are PNW

commercial beekeepers concentrating on almonds and tree fruit (which historically provide the major sources of pollination income) and reducing the number of colonies involved in minor crop pollination? Following almond pollination, are colonies being shifted away from pollination to concentrate on honey production? At this time, our data are not able to provide reasonable answers to these questions.

For the 2010 pollination season, an average rental fee of \$70⁸⁵, combined with an average of 2.1 pollination rentals per colony, results in an annual per colony pollination income of \$148⁸⁰. Table 4 displays the data concerning the trends of ever-larger individual operations and the increasing per colony income derived from pollination. With the “average” commercial operation running 3,284 colonies, a hypothetical 2010 gross pollination income for the “average” commercial beekeeping operation in the Pacific Northwest was \$488,660.

The combined colony numbers from those commercial beekeepers who responded to the 2010 survey (59,948 colonies), represent about 65 percent of the USDA’s estimate of commercial colony numbers in Oregon and Washington. Therefore, if we divide the total reported pollination income of the survey respondents (\$8,885,774) by a factor of 0.65, we have a ballpark estimate of the pollination income generated by commercial beekeeping in the Pacific Northwest in 2010, i.e., a regional pollination income of approximately \$13.5 million. This is far more than the “estimates” assigned to the bee industry by agricultural economists, who, for reasons unexplained, usually do not even include pollination rental income in their evaluation of beekeeping economics. Pollination income in the Pacific Northwest 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. This disparity between pollination income and combined honey/wax sales has increased dramatically, especially in the past few years, concurrent with the impressive rise in pollination rental fees.

The 2010 survey once again asked commercial beekeepers to report the total number of full-time or full-time equivalent employees working for their operations. An interesting way to look at this question concerning the average number of full-time employees

TABLE 2. 2010 average pollination fees as reported by 18 commercial beekeeping operations.

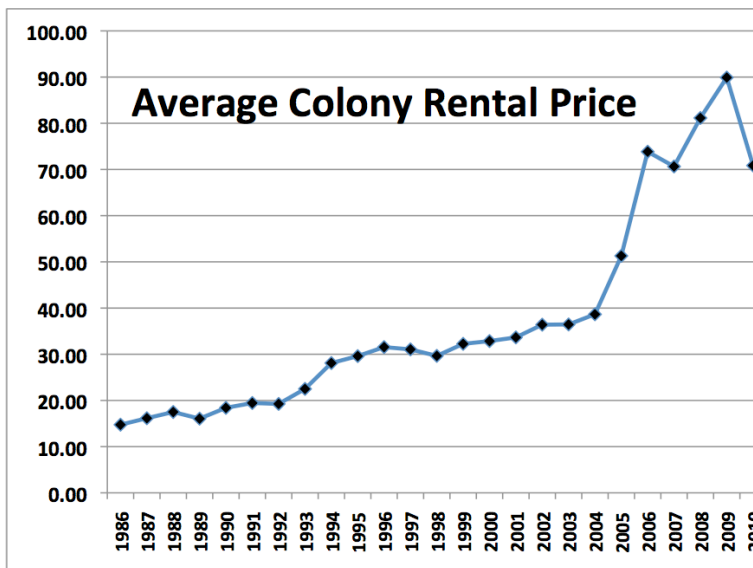
CROP	NUMBER OF RENTALS	AVERAGE FEE	FEE +/- ¹
PEARS	6,239	\$45 ⁹⁰	-10.7%
CHERRIES	14,546	\$46 ⁸⁰	-9.1%
APPLES	29,433	\$49 ⁰⁰	-1.5%
BERRIES ²	5,734	\$32 ²⁵	-16.0%
BLUEBERRIES	11,488	\$39 ⁶⁰	-6.8%
VEGETABLE SEED	7,345	\$55 ⁷⁵	+3.7%
CLOVER SEED ³	4,027	\$44 ²⁰	-4.3%
SQUASH/PUMPKIN	2,392	\$48 ⁹⁰	+3.4%
MEADOWFOAM	4,910	\$45 ²⁵	0%
ALMONDS	33,738	\$137 ²⁰	-8.7%
Average Pollination Fee = \$70⁸⁵			

¹Percentage change from 2009.

²Includes blackberries, raspberries, Marion berries, and Logan berries.

³Includes red and white clover as grown for seed.

FIGURE 1. PNW average pollination fee for all crops, including almonds: 1986–2010.



is to ask, “What is the colony equivalent?”—meaning, how many colonies are necessary in order to hire one full-time employee? That figure was very close to 1,500 colonies per employee in 2004 and 2005. The reported “colony equivalent” for 2010 is 960 colonies, which is little changed from the 2009 “colony equivalent” of 996 colonies. Lower colony equivalent numbers suggest that colonies are receiving more intensive management, which ultimately means healthier colonies.

While colony income from pollination rental is a critical statistic, so therefore is the annual cost to maintain a healthy colony of honey bees. Numerous commercial beekeepers, who have over the years maintained accurate cost-accounting records, have reported colony maintenance costs that are very reasonable relative to today’s economy. The average annual colony maintenance cost was \$157 per colony for the year 2010. The range in individual responses was from a high of \$220 per colony to a low of \$110 per colony. This wide range suggests that beekeepers should try to be more precise in calculating their operational costs. If you can’t answer the question of your operating cost on a per-colony basis, you should reconsider adjusting your operational accounting system.

For 2010, the average colony maintenance cost is once again higher than the average per-colony pollination income. From the 2010 survey data, pollination income was \$148⁸⁰ per colony and the colony maintenance cost was \$157, a difference of \$8²⁰ per colony. This illustrates that the net operational profit needs to be generated by sources of income outside of pollination rental—most frequently, honey production.

In interpreting the average pollination fee for an individual crop (Table 2), it is important to recognize that the reliability of the “average” is strongly influenced by the number of reported rentals. The “average” for almonds should be considered very realistic because of the large number of beekeepers and rentals reported for this crop, and such is also the case for tree fruit in the Pacific Northwest. For this year’s survey report, pollination rental averages for crops with fewer than three beekeepers

TABLE 4. Average colony numbers, average rental fee per colony, and average annual rental income per colony for a hypothetical commercial beekeeping operation in the Pacific Northwest, 1992–2010.

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	\$97 ⁵⁰
1997	1,504	\$31 ⁰⁵	\$92 ²⁰
1998	1,153	\$29 ⁶⁵	\$83 ⁰⁰
1999	2,058	\$32 ²⁵	\$89 ³⁰
2000	2,055	\$32 ⁸⁵	\$77 ⁴⁰
2001	3,168	\$33 ⁶⁵	\$64 ⁶⁰
2002	4,255	\$36 ⁴⁰	\$63 ⁷⁵
2003	2,612	\$36 ⁴⁵	\$86 ⁴⁰
2004	3,555	\$38 ⁶⁵	74 ⁶⁰
2005	2,055	\$51 ³⁰	\$112 ⁸⁵
2006	3,855	\$73 ⁸⁵	\$151 ¹⁰
2007	3,091	\$70 ⁶⁵	\$176 ⁶⁰
2008	4,800	\$81 ¹⁵	\$154 ²⁰
2009	5,140	\$89 ⁹⁰	\$164 ⁵⁰
2010	3,284	\$70⁸⁵	\$148⁸⁰

reporting have been excluded from Table 2, but these low-reported crops have been included for computing the average pollination fee for all reported rentals.

It is important to remember that the data presented here represent the pollination rental situation of a hypothetical “average” commercial beekeeper in the Pacific Northwest. For individual beekeepers, the survey results are most useful as benchmarks against which they should compare their individual operations. Let it be stressed 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.

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 25 years, has generated the most accurate assessment of commercial pollination known in the United States. It has been an illuminating and rewarding activity to track the pollination economic conditions of the Pacific Northwest for the past quarter decade. Over the years, feedback received from the beekeeping industry suggests that this work has been of assistance to PNW beekeepers in their pollination management, and I wish them all ever-improving fortune in the coming years.

TABLE 3. Pollination rentals and income by crop type as reported by 18 PNW commercial beekeepers in 2010.

Crop	Number of Rentals	Percentage of Total Rentals	Rental Income	Percentage of Total Rental Income
TREE FRUIT	50,218	40.0	\$2,408,221	27.1
ALMONDS	33,738	26.9	\$4,628,560	52.1
ALL OTHER CROPS	41,417	33.1	\$1,848,992	20.8
TOTAL	125,373		\$8,885,774	

MARAUDERS IN THE BEE YARD

Lynn Royce

We have lots of work to do these days. It is time to get rid of some old equipment, reduce the number of bee entrances, take care with the extra tasks to winterize bee homes. We bring new boxes, bottom boards, and tops to the apiary, and then transfer each colony, frame by frame, into the new equipment. They all look so pretty and fresh. Our nucs also got new equipment—about twelve singles, and we marked the newly mated queens in these young colonies. This yard is located in open space within forest. A small stream runs by a few yards away. There's lots of great bee pasture on every side of the yard.

We were running short on time this day, so we stacked the old boxes containing a few frames that had a bit of nectar or honey in the corners near the gate to be picked up later. With the established colonies is a single that we gave a frame of brood with queen cells from a colony with a failed or lost queen. Nearby is the tallest colony I have ever had, now standing about one medium above my head. A day goes by, and we finally get back to check colonies and pick up the equipment.

As I walk into the yard [see photo, page 1], I realize that the little single next to the tall colony is on the ground with all frames missing; only the lonesome bottom board remains on the stand. Instantly, my mind thinks *bear*. But the established colonies are all in tact as if nothing were amiss. I look up at the rest of the yard

where the singles are and, sure enough, all are topsy turvy, with frames scattered and torn up. But *bear*? No. A bear would have taken the big colonies, too; that is where the most honey and brood are contained. As we walk among the destroyed colonies and pick up pieces, we find little clusters of bees and a queen here and there—what little was missed by the marauders. I cannot picture skunks doing this. They scratch at the entrances of colonies and delight in eating the bees, but I have never known them to get pushy. Coons, on the other hand, have taken great delight in pushing potted plants into the fish pond and eating the fish. I can see them having a great time tipping over boxes and wrestling over frames. It is then that we find a tell-tale muddy footprint on an upturned lid.

VALUE-ADDED GRANTS

Proposals for Value-Added Producer Grant projects are due by August 29. This competitive grant program helps producers develop farm-related businesses that add value to basic agricultural products through branding, processing, product differentiation, labeling and certification, and marketing. Grants may be used to develop business plans and feasibility studies (including marketing plans) needed to establish viable marketing opportunities for value-added products or for working capital to operate a value-added business venture or alliance. The USDA estimates it will make about 250 awards, expected to be announced by the end of November 2011. For information and to apply, visit: www.rurdev.usda.gov/BCP_VAPG_Grants.html.

BEES AT THE OREGON STATE FAIR August 26 through September 5

Marjie Ehry

The Oregon State Fair is an opportunity for us to reach about 8,000 people per day as they visit the OSBA Bee Booth. Displays include live bees and varieties of Oregon honey along with information and handouts about beekeeping and state and local associations. The main focus is education, particularly the value of the honey bee through pollination and food production. Teresa Bryson, the 2011 American Honey Queen, will work the booth, give cooking demonstrations, and speak to fair-goers from August 30 until September 5. **We need at least two beekeepers per shift each day for the booth.** Shifts will run 10 AM–2 PM, 2 PM–6 PM, and 6 PM–10 PM. In addition to the fun during the shift, those working the booth will be able to both park free and get in free. To sign up, please call me at 503.864.2138 or email marjehry@hotmail.com.



Honey and
Crop Pollination

George and Susan Hansen
30576 Oswalt Rd
Colton, Oregon 97017



(503) 824-2265
www.foothillshoney.com

SUBSCRIPTIONS

Please use the forms provided here, with current pricing information, to subscribe to magazines at the discounted rates offered to OSBA members. Take care to renew subscriptions before they expire to avoid lapses in subscriptions.

AMERICAN BEE JOURNAL		ASSOCIATION MEMBER SUBSCRIPTION	
New Subscriptions and Renewals for OSBA Members during August 2011 ^{SAVE 25%}			
Association _____	Secretary's Name _____		
Subscriber's Name _____	Address _____		
Address _____	City _____		
City _____	State, Zip _____		
State, Zip _____	Phone _____		
Phone _____	U.S. <input type="checkbox"/> 1 Yr. - \$19.50	<input type="checkbox"/> 2 Yr. - \$37.00	<input type="checkbox"/> 3 Yr. - \$52.15
<input type="checkbox"/> NEW <input type="checkbox"/> RENEWAL	Canada <input type="checkbox"/> 1 Yr. - \$33.50	<input type="checkbox"/> 2 Yr. - \$65.00	<input type="checkbox"/> 3 Yr. - \$94.15
(PRICES GOOD THROUGH DEC. 31, 2011)	Foreign <input type="checkbox"/> 1 Yr. - \$41.50	<input type="checkbox"/> 2 Yr. - \$81.00	<input type="checkbox"/> 3 Yr. - \$118.15
Return white copy to: American Bee Journal, 51 S. 2nd St., Hamilton, IL 62341		Retain yellow copy for your records.	

ROOT™ PUBLICATIONS	ASSOCIATION MEMBER SUBSCRIPTION	
	<i>Bee Culture Magazine</i>	
New Subscriptions and Renewals for OSBA Members during August 2011		
Please Print Clearly	Association _____	Secretary's Name _____
Subscriber's Name _____	Address _____	
Address _____	City _____	
City _____	State, Zip _____	
State, Zip _____	Comments _____	
Phone # _____	For Office Use Only Acct. # _____	
<input type="checkbox"/> NEW <input type="checkbox"/> RENEWAL <input type="checkbox"/> 1 Yr. - \$21.00 <input type="checkbox"/> 2 Yr. - \$38.00	Canada – add \$15.00 per year All other foreign add \$20/year	
Return white copy to: Bee Culture, Subscription Dept., P.O. Box 706, Medina, OH 44258		
Please discard any other forms. Use only this form. Prices subject to change without notice.		

	Association Member Subscription Form	
Please check one: <input type="checkbox"/> New <input type="checkbox"/> Renewal of expired subscription <input type="checkbox"/> Extension of current subscription		
For New Subscriptions, Extensions, and Renewals for OSBA Members during August 2011		
Name _____	Special Subscription Rates: <input type="checkbox"/> \$13.25 for 1 year <input type="checkbox"/> \$25.25 for 2 years <input type="checkbox"/> \$34.00 for 3 years <small>Canada & Mexico add \$3.00 per year for postage</small>	
Company _____		
Address _____		
City/State/Zip _____		
I am a member of (assn. name) <u>Oregon State Beekeepers Association</u>		
Mail this form with remittance to: The Speedy Bee P.O. Box 998 • Jcsup, GA 31598-0998		<small>Allow 4 to 6 weeks for subscription order to be processed.</small> For credit card orders, send number, expiration date and signature on back of this form. 

Washington State Beekeepers Association Conference, October 27–29, Federal Way, Washington.

"Breeder and Shipper of Northern California Italian Queens"

Wooten's Golden Queens, Inc.

"BEST TO THE BEST"

2011 Price List For Italian Queens

Queens	Spring-Summer
1 to 9	\$22.00
10 to 24	\$19.75
25 to 49	\$18.50
50 or more	\$18.00

Our Beekeeping Family prides ourselves in continually improving our best breeder queens and drone populations. We constantly are verifying our uniformed brood patterns, strong hygienic traits, disease and Varroa Mite resistance and the best springtime clusters for the almond pollination. With over 20,000 colonies, our family's mission is to make the better always the BEST!

Phone: 530-549-3555
Toll Free: 888-565-8439
11189 Deschutes Road
Palo Cedro, CA 96073
www.wootensgoldenqueens.com



PENDELL APIARIES

- Italian Queens
- Almond Pollination

Frank & Sheri Pendell



2040 Fouts Spring Rd
 P.O. Box 40
 Stonyford, CA 95979

Ph: (530) 963-3062
 Fax: (530) 963-3063
fpendell@stonyford.com

OSBA WEBSITE: www.orsba.org

Webmaster: Herb Brasington

503.648.9118; webmaster@orsba.org



HONEY POLLINATION

LEONID ZAYTSEV
 17496 SE HEMRICK RD
 BORING OR 97009

FAX (503) 558-8222
 CELL (503) 804-5044
WWW.BEEWAYHONEY.COM

Airports in Germany have long hosted apiaries, and O'Hare International is the first in the United States to make way for honey bees. Bees may soon live at Midway, too, and hive products sold through airport food service programs and kiosks. *Why not bees at PDX?*



RUHL BEE SUPPLY

Biggest Beekeeping Store in the Northwest

- Full Line Beekeeping Supplies**
- Northwest Hive Kits**
- On-Site Manufacturing**
- Beekeepers on Staff**
- Comprehensive Classes**
- Consulting & Support**
- Worldwide Shipping**
- Hobbyist to Commercial**
- Local Raw Honey & Beeswax**

www.ruhlbeesupply.com
 17845 SE 82nd Drive
 Gladstone, Oregon 97027
 503 657 5399



Oregon State Beekeepers Association Membership and Renewal Form

The **Oregon State Beekeepers Association** is a nonprofit organization representing and supporting all who have an interest in honey bees and beekeeping. Membership 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 the ongoing work of the organization on behalf of the honey bee and beekeeping, a vote in OSBA elections, discounts on publications, and an annual subscription to *The Bee Line*. For new memberships and renewals, send check made payable to OSBA with this completed form to: **Paul Kowash, 5959 SW Taylors Ferry Rd, Portland OR 97219**

Name: _____ **New** ___ **Renewing** ___

Additional name(s) for added memberships at the same address:

Mailing address: _____

City/State/Zip: _____

Telephone number: _____ **e-mail address:** _____

Contact information: The OSBA respects the privacy of members. Please check if you do not want your contact information included in a membership directory sent to OSBA members only: **Do not include contact information** _____

Please also check if you want to share only a portion of your contact information:

Share only mailing address _____ **phone number(s)** _____ **email address** _____

Local group, if member: _____

Membership: \$25 per person (\$34 per person outside the US) \$ _____

Voluntary contribution(s):

General Fund \$ _____

Research Fund \$ _____

Total amount enclosed: \$ _____

Thank you!

Bee Culture

THE MAGAZINE OF AMERICAN BEEKEEPING

Don't Miss Even One Exciting Issue of *Bee Culture* Magazine filled with everything you want to know about:

- Bees • Beekeeping • Beekeepers •
- How-To's • Honey Report • Profiles • Recipes •
- Funny Stories • Research • Something For Everybody •

Take Advantage of This Association Discount!

Send check to: **Bee Culture Magazine**
623 W. Liberty, Medina, OH 44256 or call
800-289-7668, Ext. 3220 with credit card

HEITKAMS' HONEY BEES

PAT, RUSSELL & CRAIG HEITKAM
4700 FIRST AVENUE • ORLAND, CA 95963
BUS. 530-865-9562 • FAX 530-865-7839
Email: heitkamsbees@hughes.net

Queens, Bees, Honey & Pollination

The Bee Line
Newsletter of the Oregon State Beekeepers Association
4207 SE Woodstock Blvd Ste 517
Portland OR 97206

Address Service Requested

NONPROFIT ORG US POSTAGE PAID PORTLAND OR PERMIT NO. 2358

Note: For new memberships and to renew, see form on page 15.

Celebrate National Honey Bee Day: August 20, 2011!

For information, visit: www.nationalhoneybeeday.com.



The Bee Line

The Bee Line is the official publication of the Oregon State Beekeepers Association. Annual subscriptions to the newsletter are included with membership in OSBA.

Please send news about your bees and your experiences in keeping them, as well as your corrections, comments, questions, photographs and stories (both from “old” times and “new”), interviews, recipes, and points of view to: Rosanna Mattingly, *The Bee Line*, 4207 SE Woodstock Blvd Ste 517, Portland OR 97206; email: osba.newsletter@gmail.com.

The next issue to be printed will be the September 2011 issue. The deadline for submitting copy is August 10.
Thank you!

Advertising Costs

Per Issue

Business Ads

Business card	\$10.00
Quarter page	\$25.00
Half page	\$50.00
Full page	\$100.00

Classified Ads (30 words)

Members	\$3.00
Nonmembers	\$5.00