



INLAND BEEEMAIL

Monthly newsletter of the Inland Empire Beekeepers Association

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Presidents
Corner:

Presidents Corner:

This month's meeting will be a pot-luck turkey dinner. We will start at 6:30 (as discussed at our last meeting). We are still working on the program but don't worry entertainment will be provided. We have one smoked turkey and one traditional turkey provided by members of the association (me and Linda). The association will provide drinks, condiments, plates and honey ice cream. Everyone else please bring a side or dessert.

I am still working on a guest speaker from WSU. Otherwise, October seems to have been a slow and uneventful month. Hope to see everyone at the meeting.

Inland Empire Beekeepers Association

Agenda

11/13/09

Welcome!

Reports:

The Secretary's Report - Linda
The Treasurer's Report - Julie
Education Report – Joan (registration progress)
Fair Reports –
Four Corner Bee Reports – All!!
First Year Beekeeper Questions - Darren

Old Business:

IEBA Charter/Constitution Update – Skip
Trailer Purchase - Pending
Fair Banner Purchase - Pending
Honey Straw Purchase – Pending
New bee yard location - Searching

New Business:

Christmas Pot Luck
Journeyman Class Registration
Officer Election next month. Election Wip: Roger-Carney?

Meeting Adjourned

IEBA - Meeting Minutes September

October 9, 2009

President Swenson called our October meeting to order.

The first item of business is the official meeting time. There has been some questioning of the time the meetings are to start. By vote it was agreed that the formal meeting shall start for members at 7:00 p.m.. Social time will be before the meeting starts. The building usually is open by 6pm. Now we can get back to the idea of having time to see and visit with other beekeepers that we have not seen for a month and catch up.

When asked if the Secretary would present the **minutes** from the last meeting, Linda stated that there was an error made in her September minutes. She printed 9 cases of creamed honey instead of the actual 6. President Swenson asked for a motion to accept the minutes with the correction to 6. *The motion to accept the corrected minutes was accepted.

The Treasurer, Julie Watts, reported \$1,886.58 in savings and \$15,901.95 in checking. Another \$304.00 is to be deposited. The **Treasurer's report** was accepted as presented.

Vice President Daren Mumau asked if there were any 1st year questions. There were a few comments made but no actual questions.

The Fair Reports-

A suggestion was made by Kelly McSheehey to use a covered trailer to store the Fair supplies so the supplies can be moved more easily. * A motion was passed for President Swenson to start investigating enclosed trailers for \$3000 or less.

After much discussion, *a motion was made for President Swenson to check on purchasing a banner to be added to our Inland Empire Beekeepers Association Banner for no more that \$200. The additional banner shall read "Non Profit – For Education and Research".

The monies earned this year by the Fairs were greater than last year, in part because the costs were less this year. The honey harvested from our North Yard was used in the bottling this year, thus reducing our costs.

One of the members asked questions regarding an IEBA Library. Several people at the meeting believed the Extension Office upstairs had several books and information available to the public. However, a member had asked and was told there was no information available. Linda Carney volunteered to look into the matter and give a report at our Thanksgiving meeting.

President Swenson said we have 5 1/2 pails of honey remaining from our 2009 supply. 3 gallons of honey will be used for yard rent, 1 gallon for the accountant, and 1 gallon to be given to Rick Sherman for ice-cream. The remaining four 5 gallon pails shall be shipped out to be put into straws. There is an estimate that we will have somewhere between 7-10 cases of straws. Once the number of honey straws for distribution to classes and other events is determined, the over run will be available for sale to members in case quantities.

If anyone is willing to teach classes please contact President Ted Swenson.

Our greatly anticipated Thanksgiving Meeting will be the 2nd Friday of November. This year that will be –oh yes, Friday the 13th. The Association will provide flatware, plates, beverages, a smoked turkey, and a traditionally baked turkey. It has taken a year to burn off those calories so now we can start again at 0. Those attending should bring a main dish, dessert, salad, or a side dish. Remember, this meeting is for the *whole* family!! Please come and enjoy with family and lots of friends.

*A motion was passed to make advertising in the Bee Mail free to members while a non-member may advertise in the Bee Mail for \$10 and will receive a free year's membership in the IEBA.

*A motion was passed for the editor of the Bee Mail to review an article and if it appears to him to be controversial or negative he will submit it to the officers of the Association.

A suggestion was made for plastic bags with the IEBA logo to be used at the Fairs. There will be an investigation as the costs and options.

It was also suggested that a fact sheet be prepared to answer the many questions that are asked at the Fair. Where are we? What do we do? What is the website? When are the classes? This can be discussed further at another meeting. But, the idea met with great approval at this meeting.

President Swenson adjourned our meeting and extended invitations to our Thanksgiving Meeting next month.

The Bovard Rack

It converts a standard bottom board into a Killion slatted bottom board so the queen will lay in the lower brood chamber.

CHARLES J. KOOVER

Altadena, Calif. GLEANINGS IN BEE CULTURE - June, 1968

To the late Dr. C. C. Miller belongs the credit of realizing that bees need more room under the bottom bars. Sound as it was, the idea was never accepted by the beekeeping industry. He made two-inch-deep bottom boards and used them as long as he kept bees. Soon he discovered that bees build comb underneath the bottom bars, so the idea of a slatted rack under the frames was conceived. This served the purpose very well.

Carl E. Killion, one of his successors in comb honey production, discovered the principle of the four-inch-wide solid board instead of slats near the entrance. This was a most important improvement and it did away with bees chewing the combs along the bottom bars.

Still the deep bottom board and rack did not become the accepted standard of the industry. The reasons are easy to see. It takes two special pieces of equipment. The rack is fragile and is time-consuming to make. Furthermore, spacers have to be attached to prevent the bees from propolizing it to the bottom board.

In a moment of ingenious thinking, Richard F. Bovard of Honolulu, Hawaii, has eliminated all these objections and has created the ideal entrance to the hive without changing in any way the equipment now in use. He has come up with the idea of a two-inch-deep frame of the same dimensions as the hive body, 16-1/4 x 20 inches. In this

are fitted the four-inch-wide board and a number of 3/4-inch-wide slats. Proper space of 5/16th inch is maintained between bottom bars and slats and between the slats themselves. That's all there is to it. It is simplicity itself. It fits under the brood chamber on top of the bottom board. It is strong and asks no favors. It can be easily attached to the brood chamber and bottom board for migratory purposes. The Western beekeeper with his standard 3/8th inch entrance can use it and so can the Eastern beekeeper with his choice of a 3/8th or 7/8th inch entrance. This rack provides a single wide entrance clear across the front of the hive instead of three separate entrances as with the Miller rack. It protects the combs four inches back from the front entrance against robbers, wax moths and winds. There is nothing to be propolized onto the bottom board. And it is free from any objections, even the most critical beekeeper might raise. It adds but little weight to the hive, three pounds to be exact.

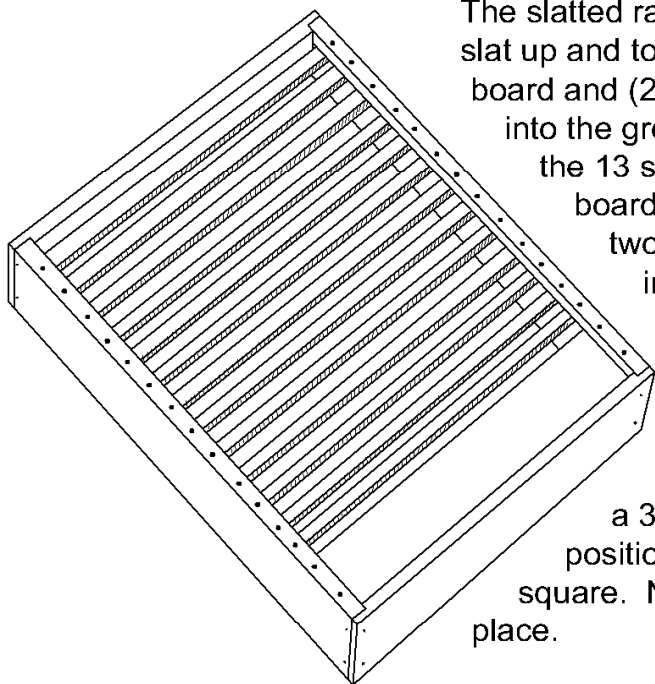
Here is a piece of equipment that should be universally accepted, just as the inner cover and telescope cover are part of a hive. It is easy to manufacture and simple in its assembly. It can be sold in the flat unassembled or factory assembled. It is hoped that hive manufacturers will add it to their line of bee supplies.

Beekeepers are notoriously slow in accepting new ideas, they still live in the horse and buggy days as far as their bee equipment goes, yet for their personal comfort they expect the latest gimmicks in their automobiles and trucks.

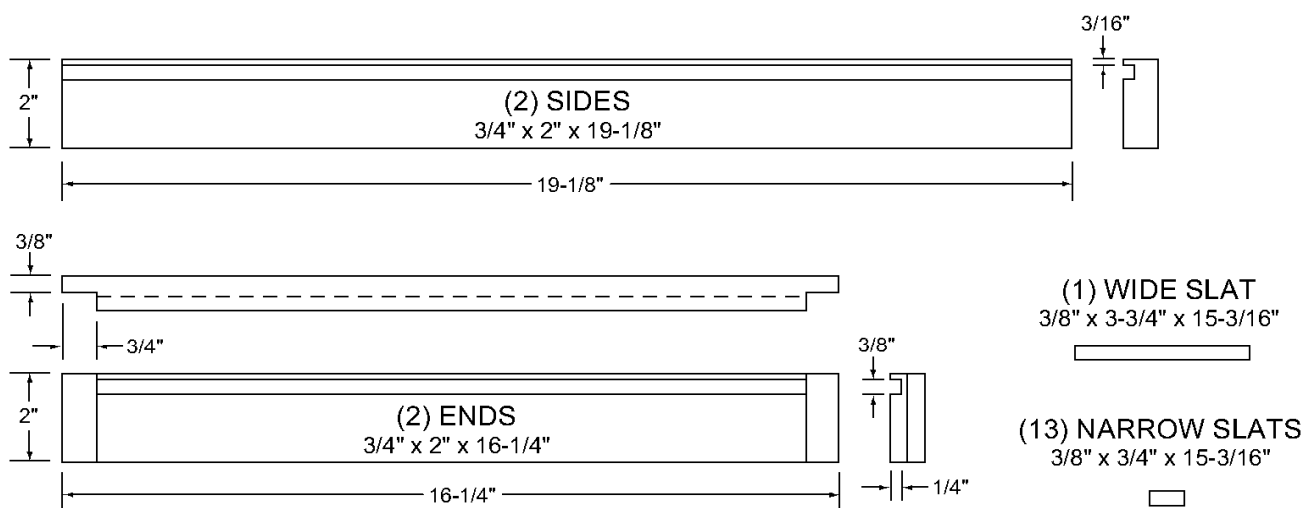
This-easy-to-use slatted rack ends once and for all poor ventilation and excess moisture. It is up to the beekeepers now to discover for themselves a whole new phase in beekeeping.

SLATTED BOTTOM RACK

FOR LANGSTROTH BEE HIVE



The slatted rack sits on the bottom board with the wide slat up and to the front of the hive. Nail and glue (1) end board and (2) side boards together. Place the wide slat into the groove and slide it into the end board. Slide the 13 slats into place down the groove in the side boards. Nail and glue the 2nd end board to the two side boards. At this point, all the slats are in the groove and need to be spaced. Using a wooden spacer that's 3/8" thick, start at the wide slat (making sure it's seated in the groove of the end board) and slide the spacers between it and all the small slats to get them evenly spaced. Once you have a 3/8" gap between all the slats, mark their position with a pencil. Make sure the rack is square. Nail all the slats with 1-1/4" nails to hold in place.



Colony Collapse Disorder, Parts I & II

By: [Ross Conrad](#)

CCD, a sign of things to come.

Courtesy Bee Culture

Part One

When I'm asked why I am so passionate about keeping bees without using chemicals, I have to reply that while I have long been wary of the impacts that chemicals can have on bees, I think chemical contaminants may be playing a larger role in the increase in honey bee die offs seen in recent years than has been acknowledged up until now. As a result it is my opinion that while we may see a decline in CCD reports (primarily from efforts to increase the overall health of our honey bee populations), we are not likely to see CCD totally go away anytime soon.

I used to believe, like many today, in the current thinking regarding CCD: that it has multiple causes from disease and mite pressures, to chemicals, environmental and dietary stress. However there has been one small detail about this theory that has been bothering me. That detail that has been nagging me in the back of my mind for some time, is the one characteristic of CCD that tends to be overlooked when discussing the cause of colony collapse and typically appears way at the bottom of the list of CCD symptoms: The notable delay in robbing by other bees and slower than normal invasion of the collapsed hive by common pests such as wax moths, small hive beetles (SHB), wasps, and hornets.¹ As far as I can tell, this symptom differentiates the current mass die off from previous large scale bee losses of the past.

While I admit it is theoretically possible that honey bee diseases may have an impact on hive scavengers, I am not aware of any honey bee diseases that also effect other insect species though research is ongoing in this area. While it is likely that we may eventually discover that honey bee diseases may effect other types of native bees in some instances, the ability of such diseases to jump from bees to moths or beetles seems very unlikely to me. Even a clearly recognizable disease such as American Foulbrood with its notorious foul smell is not enough to deter other bees, wax moths, or beetles. Now I know there are those that will disagree with me, but I find it doubtful that we would be seeing this symptomatic delay in scavenging in such a variety of species if a honey bee disease were the driving force behind CCD.

By the same token, there have been no studies or reports to date of honey bee parasites, such as *Varroa* and Tracheal mites, deterring moths and beetles from feasting on the remains of a dead or weakened colony. In addition, environmental or dietary stress that is not obvious to the beekeeper, has not been shown

to be a deterrent to moths and beetles. While the interaction between diseases, mites, dietary and environmental stress is believed to be implicated in CCD, it is hard to see how any of these factors combined would cause a delay in scavenging when none do so alone. This is not to say that they don't have a role to play, and are not the cause of many colony losses, but by themselves and taken together these causes of death are not able to explain the lack of moth and beetle activity that has been observed.

There is however, one potential candidate for the cause of CCD that is currently being evaluated and could potentially explain the symptom of delayed scavenging: toxic chemical contamination. Unlike the other suspects, chemicals have already proven themselves capable of repelling bees as anyone who has used a fume board to harvest honey can testify. As a result, it is much more likely that chemicals are also the factor that repels wax moths and SHB.

Our sea of toxic chemicals

Research at Penn State University in 2007 identified 46 different pesticides and their breakdown products in samples of bee pollen, with as many as 17 pesticides in a single sample.² Such toxic compounds found in the hive can potentially come from many sources including industrial pollution, toxins emitted from the use of consumer goods (including automobiles), agricultural chemicals, genetically engineered organisms, and chemicals that beekeepers use in and around the hive. To help regulate such chemicals the U.S. Congress created the Environmental Protection Agency (EPA). Unfortunately, the EPA's efforts to protect the public and the environment from harmful chemical contamination have been a dismal failure overall. Now I don't want to sound like I am criticizing the EPA. As I will explain, it really isn't the agency's fault that its founding charter to protect human and environmental health from potentially harmful chemicals has not even come close to being met. Let me outline a few of the many reasons why I believe this is the case.

When the EPA was created in 1970 and sanctioned with the task of regulating chemicals, all the chemicals that were already used in commerce up to that time were grandfathered in. Additionally, since the EPA is given very limited personnel and financial resources, the agency ends up relying on the chemical manufacturers for the majority of the scientific data that is used to evaluate the safety of the regulated toxins.

When chemicals are evaluated for toxicity, they are studied in isolation. Little thought is given to the chemical's break down products which can prove to be more toxic and longer lasting than the original chemical itself, such as in the case of Imidacloprid Olefin, which is produced as the neonicotinoid, Imi-

(Continued on page 6)

(Continued from page 5)

dacloprid. Once in use and released into the environment, chemicals, and their breakdown products, will combine with other chemicals already in the environment to form new compounds. The synergistic effects of some of these combinations have proven themselves to be a thousand times more toxic than either compound on its own.

Recent research into endocrine-disrupting chemicals (the kind often used as pesticides), reveals that the timing of exposure combines with the amount of exposure to produce a chemical's effect.³ Thus, a certain dose might be very toxic to an organism in its developmental stage, while not having any detrimental effects on the organism once it has matured, or vice-versa. To make matters worse, in some cases low doses of a chemical can be more damaging than higher doses. These new understandings of chemical toxicity have proven wrong Paracelsus's 450-year-old maxim, 'The dose makes the poison.' Today we know that often the timing makes the poison⁴ and that sometimes less is actually worse.⁵

Add to this the many studies that now show that a cocktail of 'insignificant' doses of several chemicals each acting on their own can combine to have significant results. In other words, exposure to very low concentrations of several chemicals at the same time can cause biological effects that none of the chemicals would have on their own.⁶ Thus when a living organism is exposed to a mixture of chemicals, every component contributes to the overall effect, no matter how minute their concentration.

Is meaningful chemical regulation actually possible?

All of this makes the task of toxicity testing so complicated that realistically no chemical is going to ever be thoroughly tested for safety either for humans or bees, before being manufactured and marketed. To do so we first would need to know which biological tissues or functions the chemical affects, in what ways, at what potencies, and whether vulnerable populations will be exposed to other chemicals that affect the same tissues or biological functions. Then we would have to test groups of chemicals in combinations at low and high doses, and several doses in between. We would then have to determine whether the creature being studied (mouse, human, honey bee, or whatever) is impacted by this combination of chemicals at one particular stage of life or another. In humans we know for example that during gestation in the womb, exposure to certain chemicals during one particular week can produce effects not seen when exposure occurs during a different week.

However, none of this testing takes into account the potential synergistic effects of the multiple compounds that already exist in the environment. For example, suppose we wanted to test the synergistic

actions of just 1,000 toxic chemicals in unique combinations of five chemicals each. A little mathematics indicates that we would have to test over eight trillion groups of chemicals. Even if we could test the wildly optimistic number of a million combinations each year, it would take us over 8,000 years to finish the task. When we consider that we are presently putting hundreds of new chemicals into commercial channels each year, and we (and our bees) have the potential to come into contact with tens of thousands of man-made chemicals daily, we begin to understand the enormity of such a task.

Even if we stopped producing and releasing new chemicals into the environment today, there are tens of thousands of toxic chemicals currently in use, and a clear understanding of the complexities and expense involved in proper and thorough toxicity testing is unlikely to happen. At this point you might be asking yourself, how on earth did this situation come about? How could we have managed to allow the impacts of our various economic activities to add up to a world so damaged that the Earth's natural capacity for self-renewal is being exceeded and permanent degradation has become evident? And more importantly, where might we begin in our efforts to fix this mess? I will attempt to begin to answer these questions on these pages next month in part two.

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WSBA Website

www.wasba.org

Hive Care :

October/ November

The Bees.

It's the end of the season and the weather will not allow any more manipulation of the bee hives. While some flight will still be observed, for the most part, the bees are settling down into their winter cluster.

The Beekeeper.

The season has come to an end, and there are probably some loose ends still to tie up in the beeyard. If you are feeding light colonies, continue to give them warm sugar syrup (2:1). Watch the timing of your medications and remove them as directed. Warm days have drawn to an end, so any hive manipulation will likely have to wait for a real warm spell or spring.

Be sure to have an upper entrance and adequate ventilation for the hive. Condensation dripping on the cluster is deadly. Some beekeepers use an absorbing layer of straw above the inner cover to wick up moisture.

And, like most of us, you probably have some honey to package and the next season to look ahead to.





**Inland Empire
Beekeepers
Association**

**Next Meeting:
Friday November 13th**

The Inland Empire Beekeepers Association (IEBA) meets the 2nd Friday of every month at the Spokane County Ag Extension office by the County Fairgrounds, at 222 N. Havana. Social time at 6:30 PM and the meeting starts at 7:00 PM. The association is affiliated with the Washington State Beekeepers Association (WSBA). IEBA membership dues are \$5.00 for an individual or \$10.00 for the entire family. This includes your receiving the *Inland Beemail*, which is published by the association every month.

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IEBA

November birthdays

10th - Dennis O'Barr
26th - Al Dwinell

November anniversaries

2nd - Rick & Crystal Sherman
7th - Ky & Barry Lehinger
23rd - Steve & Peggy Abbott

Best wishes, dear beekeepers

Let's update the Birthday and Anniversary lists. If you are a registered IEBA member please send your name /spouse's name/b-day/anniversary dates to joan1422@msn.com so that we can celebrate you and your special day!

Beekeeping Calendar - Bob Arnold

November

Add capped honey frames to hives that are light. Hives that have too few bees should be combined with stronger hives. Colonies can be moved to winter locations early in November if desired. Once they are clustered it is best to leave them alone but for compelling reasons can still be moved at some loss of bees. Store all comb in cold to kill overwintering of wax worm larvae. Clean up all extracting equipment.