

INLAND BEE MAIL

Monthly newsletter of the Inland Empire Beekeepers Association

Volume 9, Issue 2

February 2004

President's Corner

-Ted Swenson, IEBA President

Well, I survived my first meeting. I'm not sure how but overall I had fun. I'm looking forward to the February meeting. The "Agenda" for the meeting will be in the Inland Beemail and if you receive it by email you will have it almost a week before the snail mail version gets to your mailbox.

The Beekeeping Class began January 9th and will run for 10 weeks. Jim Miller and his worker bees have done another great job. For the first class, Frank Merickel brought his 'walking sticks' which were great hits. Lots of learning going on. It is very encouraging to see the huge number of young folks in this year's class.



wasba.org

Bob Arnold will be passing around a survey at the beginning of our meeting. The survey is an effort to get everyone's input into the training program for this year. Tell us what you would like to see, what might bore you to death, and then select the top ten. Bob will do the tabulation and then tell us what we get

to talk about this year.

Our thanks need to go out to Frank Seiler for his outstanding work on the Washington State Beekeepers Association web site. The Internet address is: www.wasba.org. Go to that site and you will see some gorgeous photos and good information about the beekeeping organizations throughout the state. The site is work in progress and promises to be outstanding.

New to our schedule is the WSBA June Picnic. Join Dr. Steve Sheppard and his staff in this 2-day program. Last year was the first time this event was held as a 2-day short course, and was well received. This year the event will be held on June 4th and 5th 2004, and will feature an excellent program including queen rearing, hive management, pest & disease control, and of course research currently being conducted.

Don't forget to clean out the bottoms of your hives again this month. February and March are when the bees are at their weakest and most likely to succumb to disease or starvation. Check their weight and be ready to emergency feed.

See ya Friday the 13th. ☹

Inside this issue:

<i>Hive Care Calendar</i>	2
<i>Tally Ho from Georgia!</i>	
<i>NHB Marketing Kits</i>	3
<i>IEBA People Classifieds</i>	
<i>Assembling Equipment</i>	4
<i>Bee Genome</i>	
<i>2004 Bee Class</i>	5
<i>IEBA Schedule</i>	6
<i>WSBA Annual Meeting Reminders</i>	
<i>Starving Bees</i>	7
<i>Butterfly Flight</i>	
<i>Pesticides & Bees</i>	9
<i>Honeybees & Coffee</i>	
<i>February Agenda Collections</i>	
<i>Bottom Board</i>	10

Minutes of January 2004 Meeting

-Linda Carney, Secretary



Our new President Ted Swenson called the first meeting of 2004 to order.

President Swenson declared that he was completely prepared and held up his copy of *Roberts Rules of Order*. The members laughed and were prepared for a new format.

The minutes were read and sang and approved.

Bob Adsit gave the Treasurer's report. We have \$7,185.84 in savings and another \$1054.48 in checking.

The Joy in Beekeeping Trust Fund report was not given. Laura Shulenburg was unable to make the meeting. President Swenson reminded everyone that the nominations are due tonight. The winner of the \$250.00 grant will be announced at the February meeting.

The next orders of business were the **fair re-**

ports.

Bob Adsit for the **Spokane Fair** said that he had received a card in the mail indicating major construction in the food court area. He is sure that it will have no effect on our booth area. The construction is scheduled to be done by Sept. Jack Knox stated there was nothing to report on the **North Idaho Fair**.

Jim Miller reported there were 45 people for the **bee class**. A good turnout.

Jerry Tate, President of the WSBA said they had a meeting with the State Dept of Agriculture on bee registration. The State is not in favor of doing away with the registration because a lot of counties and cities require registration to have bees. The WSBA may be able to use the money it has collected for research. This will be worked

(Continued on page 2)

(January Minutes Continued from page 1)

out with the State Dept of Agriculture. The expenses for the WSBA are very small for the year-somewhere between \$400 and 500. There is about \$55,000 in the USDA accounts. Jerry told us much of the money does come from out of state beekeepers as they bring bees in for pollination. Jerry said that he had registration forms with him and they are also available on the web.

President Swenson has added The Four Corners Bee Report. This will allow the members in the different areas to share what is happening in their area.

North—Bob Arnold’s bees are out and had a good cleansing flight. “Really messed up the yard,” he said. All the hives are alive. The temperature got to 16 below 0 and all seem to be all right. The Italians will have more dead bees than Carniolans.

South – John Pierce echoed the same observation about his bees in Spangle. All are alive and the Italians are dying off faster than Carniolans. “Haven’t lost any hives as of last week.”

East—Jack Knox said out of 4 hives 2 were moving around. Jack suggested a new tool to hear the activity of your hive and to determine where the bees location inside the hive. Get a stethoscope!

West- Jim Miller has not checked his hives yet.

President Swenson told us it hit 26 below where he lives and he spend most of a day moving away the snow from the hive entrances. He uses a screened bottom board. Ted also showed us a great new tool. It was a tension band for a chain link fence that he had bent to make a curved hook at one end. He goes through the entrance and scoops out the dead bees. “Don’t twist it or start banging around in there or you’ll get a surprise.”

Old Business

Please pay your dues tonight for the IEBA .

Convention report - Jim Miller said that he has ¾ of speakers lines up. The only costs so far are some airplane tickets. He asked Frank Seiler to report on the speakers. Frank said that he has tentatively confirmed Dr. Thomas Rinderer, a researcher in the Russian bee projects. He is with USDA out of Baton Rouge. The other two are Dr. Nick Calderone, and Dr. Jeff Pettis, entymologists at Cornell. He is also speaking with an individual out of Minnesota that deals with cold climate management but that person is not confirmed. He will probably have an agenda set up by next meeting. Jim Miller says that they are still working on costs per individual and for a couple. Ted Swenson has mailed

(Continued on page 3)



Time to get out those tools

**Hive Care :
February**

The Bees. The queen, still cozy in the cluster, will begin to lay a few more eggs each day. It is still "females only" in the hive. Workers will take cleansing flights on mild days. The bees may consume up to 25 pounds of honey this month.

The Beekeeper. There is not too much to do this month. Read. Attend bee club meetings, and get your equipment ready for spring. Come up with a game plan for the year. There are a few timely articles on buying and making equipment in this and next month’s issue. Keep those entrances free of snow and check weights to make sure there is enough feed. See the *Starving Bees* article elsewhere in this issue for more information.☺

-adapted from www.backyardbeekeepers.com



Tally Ho! From Halfway Around The World

Here is an e-mail from our recently departed WSU Ag Extension Specialist, John Fouts:

Happy New Year to all my good friends & family!!! New Year here sounded like a war zone until after 2:00 a.m. Big fireworks without restrictions. All day today too.

Well, I've been here in the Republic of Georgia for about 6 weeks now. Last week (Mon-Fri over Christmas, except no Christmas in Muslim Turkey), five of us went about 150 km (95 miles) into Turkey looking for farm equipment. Didn't find any, but found out how much farther we need to go. I'll be heading back as soon as I get my office set up.

We located a 3 story, 4 bedroom, 3 bath, 3 car garage house for an office & place for me to live in Kutaisi in Western Georgia. It should work well for when tdys come & others visit.

My Mahindra car is almost assembled. We saw it on Tuesday about half done. it is Indian made to Peugeot specifications & assembled in Georgia. 2.5 litre diesel, 4WD. It's kind of like a 4

door Ford bronco.

I'm in the process of setting up about 100 hectares (about 250 acres) of plots, mostly alfalfa with some soybeans. another tdy & I are setting up a couple of beef crossbred - cow/calf management demo projects.

We are also working with some universities & high schools on applied/practical American English. Mostly agricultural terminology & agri-business & production practices. We'll utilize power point presentations to maximize the verbal exposure.

Let me know if you want me to add anyone else to this list. send me their e-mail.☺
Take care & keep in touch.
Tally ho the fox!
John

John D.Fouts
USDA-Georgia Ag Quality Improvement Project
jfouts@usda.ge
www.usda.ge



(January Minutes Continued from page 2)

letters out for vendors. He asked if we know of anyone who would be interested in setting up a display to let him know so he could send him or her a letter. There is no charge for a vendor to set up. Give him names and addresses. Roger Carney had nothing to report regarding donations for the auction. Jim Miller announced that his son has volunteered to make some items with leather. One item is a leather covered toilet seat and cover!! Lovely pillowcases sewn by Jenine Miller were donated tonight for the auction.

New Business

Inland Beemail — Frank Seiler did an outstanding job according to President Swenson and the other members present. President Swenson wants to inform all members, "By getting your *Beemail* online it is in color and you can save just what you want. So sign up for the E-mail.' If there is a change of an e-mail address please only give it to Collette Lehinger, our Treasurer, or to Frank Seiler, our Newsletter Editor, for privacy. The members present did like the minutes with the complete Treasurer's Report being in the *Beemail*. Also, John Pierce wants to know if anyone is having trouble with getting the *Beemail* downloaded from the website.

There was a discussion on setting up an

agenda for the meetings. However, no one thought it necessary to have a paper copy handed out at the meetings. Most present thought it should be in the *Beemail* and also on the web site. Members could know in advance what will be discussed at the upcoming meetings.

Chris Fischer said that it is time to get the cookbooks going. She has done research and has found a very good company and at a reasonable price. We can do a book for around \$2.50 and can sell for around \$7.00. Chris and Linda are looking for a commitment of how many to order. How much is the Association willing to pay? After lots of questions it was suggested that Chris get a sample to show at the February meeting. The members can then look at the suggested cookbook and then decide. John Pierce said that there is an area on the website that recipes could be added. He will talk to Chris about that idea later.

President Swenson described himself as a "budget maniac". He told us that the money we have available to us, around \$8000, is pretty well committed. He estimates \$8200 in commitments. He will present a complete budget and commitment breakdown at the next meeting.

A program on requeening with nucs featuring Bob Arnold will be presented after the adjournment of the meeting. The meeting was adjourned. ☼

Marketing Kit Now Available

Effective honey marketing requires more than just hanging up a sign. It involves knowing your customer, compelling packaging, efficient distribution and much more. Learn how you can best market honey with the NHB's comprehensive kit. Priced for only \$10 to cover shipping and handling, the kit includes up-to-date trend information, business resource listings and pages and pages of honey marketing ideas, samples and how-to tips. ☼

More information at www.nhb.org

Classified Ads

Looking for used eight frame and Ross Round equipment — Frank Seiler (509) 226-2382

BEEKEEPERS order your package bees for April 17, 2004 delivery. Contact Tate's Honey Farm, 509-924-6669 or tacon105@icehouse.net.

BEEBOXES BY LEE
Woodenware, standard or custom orders, IPM bottom boards, Hive top feders, etc, select lumber. —Lee Birchtold (208) 687-1300

Miller's Homestead
Jim and Jenine Miller
Cheney, WA
1-509-299-9085

Providers of
-Package Bees
-Natural honey
-Cut comb
-Creamed honey
-Custom Honey extraction
-Plastic containers
Web: millershomestead.com
Time to order packages!

IEBA PEOPLE

President

Ted Swenson
(509) 238-6489
tedandbarb@icehouse.net

Vice President

Joe Jovanovich
509-448-2493
joecoug@earthlink.net

Treasurer

Colette Lehinger
509-924-1001
blehinger@aol.com

Secretary

Linda Carney
509-448-0417
tlclimo@yahoo.com

Newsletter Editor

Frank Seiler
509-226-2382
seilerbees@att.net

Spokane County Fair Chairman

Bob Adsit
509-489-0730
Bvadsit@sisna.com

Spokane County Fair Asst Chair WSU County Extension Liaison

Jerry Miller
509-838-6347

North Idaho State Fair Chairman

Jack Knox
208-773-5452
pjkk@aol.com

Web Master

John Pierce
509-455-4110
jpierce@vinsdevie.com

WSBA at Large Delegate, Technical Advisory Program, & IEBA Bee Class Instructor

Jim Miller
509-299-9085
jandj@cet.com

IEBA Program Chair & WSBA Area 6 Delegate

Bob Arnold
509-276-2399
sar3140@aol.com

Joy in Beekeeping

Laura Shulenbarger (Chair)
Linda Carney
Ted Swenson

IEBA Website

www.inlandbeemail.com

WSBA Website

www.wasba.org



Assembling Equipment —Bob Arnold

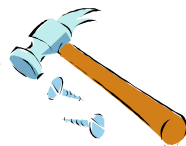
Hive equipment is subjected to very challenging environmental conditions that accelerate the deterioration of the wood and fasteners. The varying temperature and wetness of the outside of the wood with the inside kept humid and warm by the bees makes for a most difficult environment for wood. The equipment will fall apart within a few years with fasteners loosening up and rusting off and wood rotting at attachment points with the equipment warping and coming apart. With some good choices on assembly fasteners and frequent maintenance hive woodenware can be assembled to last many years. With bad choices often you will see your expensive woodenware falling apart in 3 years.

The wood frames that provide the support for the honeycombs must be assembled to withstand the forces required to remove them from the boxes without them being pulled apart. The frames must be assembled to be square and true to the designed shape. This is best done by assembling the frame in some kind of jig that keeps the frame in its designed shape. Many jigs have been explained in the beekeeping literature.

Both nails and staples will work fine for fastening the frames together. Staple guns are preferred as they provide more holding power than nails and can be driven much faster reducing assembly time. Use cement coated

galvanized 1.5-inch staples for the frames. Put two staples in each end of the top bar and one staple in each end of the bottom bar. I have used glue in the both the top and bottom bar joints but usually it takes too much time. I will have some staples that pull through the bottom bar wood but very seldom does a top bar come apart.

For those with a few hives, staple guns may not make sense and nails will work just fine. I like to use a 5d cement coated box nail for the frame. Drive two nails in each of the top bar ends and one in each end of the bottom bar. These nails can be purchased at bee supply houses and sometimes at the local hardware stores. Having the cement coating is essential without which the top bars will almost surely pull off after the box has been fill tight during a good honey flow or after a dry year with lots of propolis being plastered all over the frames. A nail placed in the end bars to the top bar will also help but is not essential with the cement-coated nails. Glue at all of the joints is desirable but not essential. Use Titebond II available at most hardware stores—this glue lasts longer than the wood and it is not expensive. The glue is a small additional time and for a small beekeeper easy to do providing additional insurance at maintaining integrity of the frame over the years.

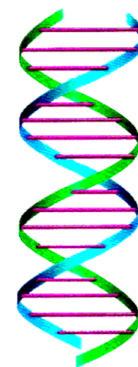


The installation of the foundation has been the most difficult part of assembling the frame. However, with the new snap in beeswax coated plastic foundation this has become an easy task requiring dexterity of the hand rather than knowledge and skill at wiring the frame. I heartily recommend using the snap in beeswax coated plastic foundation that is available at most bee supply companies.

I have wired many frames and still like making my frames that way. However, it simply takes too much time and much more care until it is fully drawn out. If the honey flow is poor the foundation can be only partly drawn out and needs to be removed from the hive. If it is left in the hive it can easily be irreversibly damaged by heat, dropping it in cold weather or by the bees themselves chewing it up at the corners. It may be drawn out and repaired but usually is not the best comb. The plastic based foundation will survive better often withstanding several years of poor honey flows before it gets fully drawn out to a fine comb.

The boxes should all be made from pine. I have tried plywood and it works poorly compared to pine. Plywood is heavier and does not weather as well as pine. I have assembled nucs out of 1/2" CDX scraps from house construction. It always seems to be coming apart.

Scientists with USDA's Agricultural Research Service are exploiting an initial draft of the honey bee genome announced earlier this month by the Baylor College of Medicine and U.S. National Institutes of Health, which co-funded the mapping project with ARS.



Scientists Tap Bee Genome Map for Improved Traits

WASHINGTON, February 3, 2004--Breeding a better honey bee is the goal of U.S. Department of Agriculture scientists who are using recently created genomic data to speed their search for disease resistance and other traits.

The scientists' aim is to secure the honey bee's role as the chief insect pollinator of more than 90 different crops, including almonds, blueberries, melons and alfalfa. Determining the position and order of genes residing on the insect's DNA--about one tenth the size of the human genome--provides bee researchers with a shortcut to traits that can otherwise be difficult to identify.

"This research puts the honey bee center stage as the first agricultural animal that's been fully sequenced," said Joseph Jen, USDA Undersecretary for Research, Education and Economics. "As an organism whose social order rivals our own in many ways, the honey bee will serve as a natural system for further agricultural studies, including such areas as social behavior, cognition and immune system function."

ARS researchers Katherine Aronstein at Weslaco, Texas, and Jay Evans at Beltsville, Md., two co-authors of the proposal to sequence honey bees, are especially interested in defining the responses of bees to a range of diseases. Their long-term goal is to characterize genes that are key in the honey bee immune response, then use data from these genes to improve both bee breeding and management.

ARS also conducts bee research at its Carl Hayden Bee Research Center at Tucson, Ariz., and its Honey Bee Breeding, Genetics and Physiology Research

(Continued on page 5)

Assembling Equipment Galvanized cement coated staples

continued

The corner joints for the boxes should be the box joint that you commonly see used. These hold the box together the best. Rabbet joints on boxes will work if the box is nailed tightly to a bottom board but will loosen



up and be a pain for your supers and deep bodies. I use the rabbet joints on the nuc boxes as they are nailed and glued together and to the bottom board. These work quite well and never come apart.

Use a 7d box cement coated nail for assembly of the boxes. The boxes generally do not need to have drilled holes for the nails. The one nail that goes through the frame rest rabbet should have a drilled hole, as it will sometimes split. I have used galvanized nails at one time (western Oregon) but they kept coming out of the box. The cement coated nails will usually hold until the wood rots then will start coming out. The heads, if painted properly, will often not rust as the paint will stay on the nail head quite well. Sometimes I will have boxes that are destroyed with rot and the cement coated nails still have no rust on the painted side of the nail head!

Galvanized cement coated staples are excellent for assembling boxes as they are fast and hold very well. I use a 2" cement coated galvanized staple. If you can, adjust the staple gun to drive the staple just to the surface tightening the wood but not crushing the wood. When the staple drives well below the surface it is hard to get paint to protect the broken wood fibers in the recessed area of the staple. Both the staples and nails hold so well in the box joints that if you make a mistake it is impossible to un-assemble a box without doing big damage to the wood. I have never used glue in box joints only in rabbet joints.

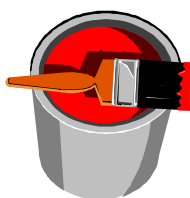
Tops and bottoms assembled from old growth cedar or redwood are the best. They are light and will last a century. I have some redwood tops that I bought from a California beekeeper which are of unknown age. I have replaced the pine cleats twice in the last ten years and the redwood is just fine. However, old growth cedar and redwood are expensive and pine will work but not last as long.

Tops and bottoms should be assembled using the longest cement coated box nails possible. The same two varieties 5d and 7d cement coated box are what I have used. For the migratory type tops and bottoms I used 7d or staples and lots of glue (Titebond II). (No I don't work for Titebond!) The glue is essential as tops and

bottoms are notorious for slowly coming apart. I will bring some examples of tops that have rotted apart leaving only the glue joint!

Now for the impossible problem---- PAINTING #@%^&!!! I really don't have good ideas here. It seems all of the paint I have been using doesn't last like it used to. What I have been doing is putting on a good undercoat and then a semi-gloss water based acrylic paint. I have been seeing paint come off in 2 to 5 years. I sand it off down to well-adhered paint or wood and redo with the same combination. Recently my son-in-law, who is a painter, said I should spend the most on the primer, which should be an oil-based primer and then use the water-based acrylic on top of it. So that is what is next.

Take your time assembling your equipment, as it will pay dividends in many years of use. Make all of your equipment the same and standardize on proven sizes. ☺



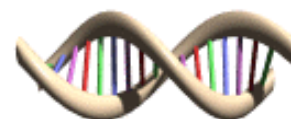
(Bee Genome Continued from page 4)
Unit at Baton Rouge, La., which also is involved in studies of the germplasm and genetics of honey bees. Enhanced knowledge of the honey bee genome will be of value to all aspects of the agency's bee research.

"Currently, we know of a handful of honey bee genes that are activated in response to disease," said Kevin Hackett, who leads the ARS National Program for Bees and Pollination. "We're also now discovering how the products of these genes are involved with keeping bees healthy."

According to Hackett, other possible research avenues include identifying genetic markers to expedite bee breeding efforts, preserving honey bee germplasm and fine-tuning the honey bee's nutrition and pollination effectiveness, such as through genome-driven studies of the bee's sense of smell.

More information about the honey bee genome project is available at:
http://www.genome.gov/Pages/Research/Sequencing/SeqProposals/HoneyBee_Genome.pdf

ARS is USDA's chief in-house scientific research agency. ☺



News from the 2004 Bee Class—Jim Miller

We have now completed five weeks of class with 32 students working towards the certification program. Frank Merickel, again, was outstanding with the bees and walking sticks. Along came Jack Knox with his vast knowledge of flowers and how honey bees work them. Bob Arnold did a wonderful job talking about swarming and how to try and control the honey bees. And the people keep coming. Take time on a Friday night and come and meet the class. You are always welcome. ☺



Podacanthus typhon. Photo: Mr M Warburton

Schedule of Events:

January 9, 2004	IEBA Meeting	Organizational Meeting Bee Class begins!
February 13, 2004	IEBA Meeting	What to do with those weak hives in the fall-Nuc wintering
March 6, 2004	WSBA Meeting in Ellensburg, 10:00 AM at the Cattlemen's Club	
March 12, 2004	IEBA Meeting	TBA
April 9, 2004	IEBA Meeting	Package Bees, feeders, Nuc's
May 14, 2004	IEBA Meeting	Queen rearing and management
June (tba) 2004	WSBA Meeting at WSU, Spring Short Course	
June 11, 2004	IEBA Meeting	Comb Honey, old combs and foundation
July 9, 2004	IEBA Meeting	Fall requeening watching for bad queens
August (tba) 2004	IEBA Meeting	Summer Picnic
August 25-29, 2004	North Idaho State Fair in Coeur D'Alene	
Sept. 9, 2004	IEBA Meeting	Fair Grounds on Thursday night
Sept. 10-19, 2004	Spokane Interstate Fair	
October 8, 2004	IEBA Meeting	Packing hives for winter
October 14- 16, 2004	WSBA State Convention	Will be held in Spokane (see box on right)
November 14, 2004	IEBA Meeting	Thanksgiving catered meal RSVP required Dinner at 6:30 pm
December 12, 2003	IEBA Meeting	Pot Luck Christmas dinner Election of Officers

WSBA 2004 Annual Meeting

October 14 - 16

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

- **Registration** — Collette Lehinger
509-924-1001
- **Thursday Night Reception** — Wine tasting hosted by John Pierce and Katuska Kohut of Vins de Vie
- **Suppliers Booths**— Ted Swenson
(509) 238-6489
- **Friday Night Auction** — Roger Carney 509-448-0417
- **Advertisement** — Open

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

- **Friday Morning** — Research, Queen Breeding, Carniolan & Russian Breeding Programs
- **Friday Afternoon** — WSU research, marketing for small beekeepers, cold climate management
- **Saturday Morning** — Integrated Pest Management (IPM) implementation, practical beekeeping methods, Ask the Experts
- **Watch for a more detailed program in next month's issue of The Inland Beemail!**

Plan Now to Attend!

Reminders:

Washington State Beekeepers Registrations are now available at www.inlandbeemail.com. Registration is a legal requirement for all beekeepers in Washington State and benefits research programs in this state. Registration fees are due April 1st.

EPA registration continues and may be mandatory for some beekeepers that are involved in the food industry. To learn more, visit the National Honey Board at www.nhb.org.

The Washington State Beekeepers Association is now online at www.wasba.org. A monthly newsletter is also published by them and can be viewed online. Also, consider becoming a full member and enjoy the benefits of this statewide organization. ☺



Doubletree Hotel

STARVING BEES!

—David L. Green, www.pollinator.com

A common mistake for inexperienced beekeepers is to assume, too soon, that the bees have made it through the winter. The sight of spring flowers and bees visiting them, makes the keeper think the bees will now feed themselves.

most flowers to yield nectar. (*There are exceptions to this, such as brassicas. If you can have some canola, or collards that overwinter and bloom early, these are prized flowers because they can actually freeze and still produce nectar within a couple hours.*)



Image copyright 2002, by David L. Green

Most of the bees of this once powerful hive have died and fallen to the bottom of the hive, some are here quivering. Most of the brood is uncovered and dead. The queen cannot be found, and is presumed dead.

At the same time food requirements have increased exponentially, as the bees are raising large quantities of brood for the future field force, to bring in the spring nectar flow. It is very easy for a hive at this time to outrun its reserve food supply. Just a few cloudy, rainy, or cold days can mean sudden starvation for the hives of an inattentive beekeeper.

This affliction most commonly affects the strongest and best hives. It is a sad sight to see a power-

Sadly this is not always true.

Cold nights limit the hours bees can work. They cannot start until it warms up, sometimes in late morning. Plus it may frost and actually kill the blossoms, so bees can get no benefit from them. Overcast skies prevent photosynthesis, and reduce nectar production. Oftentimes the first real nectar flow is quite awhile after the first spring flowers appear. It generally takes *sustained* warm weather and plenty of sunshine for

ful hive die or be devastated by starvation, just before they could have turned around and begun building food reserves.

Here in coastal South Carolina, we see a flush of spring bloom, beginning in early March. But I've never seen the real spring flow until the end of March in the earliest years, and with late frosts, it may be the tenth of April or later. In your area the dates may be different, but the principle is the same. Find out

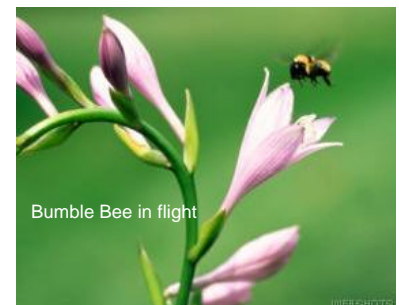
Butterfly Flight

For years scientists have been attempting to understand what makes butterflies the masters of manoeuvrability at low speed—able to hover and fly backwards or sideways with little effort,” says *The Independent* of London. Now researchers at Oxford University believe they have finally found the insect’s secret. Using a specially designed wind tunnel and wisps of smoke to reveal airflow, they observed red admiral butterflies in flight. As the insects flew to and from artificial flowers in the wind tunnel they were monitored by high speed digital cameras that recorded the airflow around



their wings. The researchers discovered that “the fluttering of butterflies is not a random, erratic wandering, but results from the mastery of a wide array of aerodynamic mechanisms.” Scientists hope to use this knowledge to build remote controlled aircraft with a wingspan of just a few inches. Fitted with a camera, these could be flown into confined spaces as winged observers. ☺

Source: *Awake*
January 8, 2004, P. 28



Bumble Bee in flight

IMBESHOTS



Image copyright 2002, by David L. Green
*Often the last thing a bee does before
 expiring is to crawl into a cell.*

from experienced local beekeepers when the *real* spring flow commences.

At this time of year, never assume! Hives that were heavy a month before may now be feather light. Check, check, check!

A hive that begins to starve will suck the body fluids from the brood, in the attempt to save the colony.

Even if they survive, the colony has lost its spring flush of growth. The "cow" has aborted its calf" (the spring divide you could have made) and may have also lost its ability to bring in a spring honey crop. The queen may be damaged (or dead) and need replacement ASAP. Brood that appears undamaged may actually be dead, because the bees did not have the energy (or population) to

keep it warm; it may be chilled.

You can get an idea of a hive's food reserves by hefting the back of the hive, but this is somewhat subjective and must be based on quite a little experience. You can also pop the top and look down between the frames. You should be able to see capped honey on some of the frames. In evaluating the food re-

serves NEVER count nectar/honey that isn't capped, because it can disappear in a day or so.

If you have hives with no capped honey, feed, feed, feed.

And be quick about it. You can feed syrup or frames of honey that have been saved for spring feed. But do it! Bees that you find quivering can sometimes be revived, depending on how badly they have been affected, by dusting them with powdered sugar, or drizzling syrup over them.

Weakened and starving bees may not get nectar, because they don't have enough sugar reserves to power their wing muscles. A wise old beekeeper once told me, "If the bees FEEL prosperous, they will BEE prosperous." Don't let the spring build up falter for even a day.

Sometimes the tail end of winter turns into a day by day race for the bees, to see if they can hold on until the real nectar flow gets going. I've seen wild hives that put out tremendous flight on a nice day in early March, be completely dead March 20, just a week or so before they could have made it, here in coastal South Carolina.

One day, after a warm shower, the sun will shine and the bees will be jamming nectar in every open cell, preventing the queen from laying eggs.. The next day, they begin making swarm cells. It can literally turn from famine to feast overnight, and the beekeeper is now dealing with another problem - swarm season. ☹️



Image copyright 2002, by David L. Green
*Some of the brood has been chewed and sucked of body
 fluids in an attempt for the adults to survive.*

New Institute for Study of Pesticides and Bees

-source: Canadian Honey Council

Drs. Jerry Bromenshank, Colin Henderson and Dan Mayer have formed the North American Institute for the Study of Pesticides and Bees at the University of Montana in Missoula, MT.

Together they have over 80 years experience dealing with the effects of pesticides and other environmental fac-

tors on bees. They are planning a symposium on bees and pesticides in conjunction with the Western Apiculture Society meeting in Missoula, Montana 11-14 July, 2004.

They conduct both laboratory and field research on the effects of pesticides on bees and conduct our research under Good Labora-

tory Practices (GLP) or non-GLP depending on the circumstances. Their laboratory and research facilities employ state of the art technology and equipment. Also, they do field research at many different locations in North America and have and can conduct research in other countries. ☼

Honeybees stop for coffee

—story by BBC News 7/12/2002

Farmer's friend: The bee is nature's pollinator

Honeybees can help boost coffee harvests by more than 50%, scientists have discovered.

The findings are unexpected because coffee plants were thought to be self-pollinating.

It could explain why coffee yields have fallen in some areas of

Africa and Indonesia.

Intensive farming has been blamed for destroying natural habitats, where pollinating insects are found.

The discovery was made by a US scientist studying the effects of non-native African honeybees on coffee plantations in Panama.

'Valuable pollinators'

The plantations contained the shrub *Coffea arabica*, which produces 70% of the world's coffee.

As a self-pollinating

plant, growers had always thought that bees and other insects did not make a difference.

But David Roubik of the Smithsonian Tropical Research Institute has found that honey bees can help pollination and boost crop yields.

He revealed his findings in the journal *Nature*.

Dr Roubik said: "These findings, together with world coffee harvest statistics and results from field



What's in your collection?

Starting in the March 2004 issue of the Inland Beemail, we will feature beekeeping related collections of our local members. Perhaps these will inspire you to look for some of the unique things that only a beekeeper could really appreciate.

If you have a collection you'd like to have featured, please contact the editor, Frank Seiler.

FEBRUARY MEETING AGENDA

—Ted Swenson

Welcome!

Reports:

- ❖ The Secretary's Report
- ❖ The Treasurer's Report
- ❖ Joy in Beekeeping Report
- ❖ Fair Reports
 - ❖ Spokane Fair
 - ❖ North Idaho Fair
- ❖ IEBA Bee Class Report
- ❖ WSBA Report
- ❖ Four Corner Bee Reports

Old Business:

- ◆ IEBA Membership Dues
- ◆ WSBA Conference 2004
- ◆ Budget
- ◆ IEBA Cook Book

New Business:

- ♣ IEBA Charter
 - ♣ End of meeting and beginning of each month's "Program".
- Programs – Bob Arnold ☼



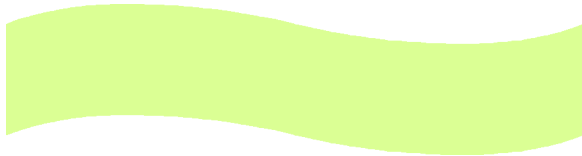
Inland Empire
Beekeepers
Association

INLAND BEEMAIL

Frank Seiler, Editor
PO Box 214
Newman Lake
WA 99025

Phone/Fax: (509) 226-2382
email: seilerbees@att.net

Send To:



Next Meeting:
February 13th, 2004

6:00 pm Bee Class
7:00 pm IEBA
business meeting

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. 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. ☺

Bottom Board!

First off, apologies to those who got missed or got late beemails last month. Hopefully we got the bugs ironed out this month. Feedback on the first issue of the year was very positive, but it seems that the letter size paper format is preferred.

I want to comment this month on a point that was driven home to me in a conversation with a coworker who, in his spare time, enjoys working with and breeding race horses. He talked about a recent trip to events related to his passion, and lamented that, because he was not part of the elite circle of owners and breeders, he was not able to converse with leaders in the field or partake in some of the events offered.

Thinking about this particular conversation, I realize how fortunate beekeepers are. At association and educational meetings there is a wide variety of people: construction workers, engineers, commercial beekeepers, or apicultural professors with doctorates in entomology, yet they are all interested in being better beekeepers. That comraderie is, I think, very unique to this industry, and we should cherish it.

I do not know of too many other professions where there is such a common ground between the hobbyist, the commercial industry, and the

- Frank Seiler, Newsletter Editor

researcher. How many other endeavors can you think of where the hobbyist can interact with researchers from around the nation and the world, and have meaningful conversations?

In that sense, we are a fortunate bunch. Let's make sure it stays that way. Some states have completely done away with apicultural studies at their universities. As Jack Knox and I look around for speakers for the 2004 WSBA convention, we find that budget cuts are also hurting many university and USDA programs.

The most important thing that we can do is show our support and enthusiasm for the programs that are out there and make them better. Come June, I am sure we will enjoy another fine event at WSU in Pullman. Get involved with the fairs, the school outreach program, and the WSBA convention to be held in Spokane this fall. Or reach a little further and become certified as a Journeyman Beekeeper this year.

And, all the while, cherish the fact that you are a beekeeper. ☺

