

February 2010

w.a.s. journal
The Journal of the Western Apiculture Society of North America



WAS President Dr. Dewey Caron

Oregon beekeepers are working hard to insure an OUTSTANDING 2010 WAS conference. The location is the RED LION HOTEL in Oregon's Capital city of Salem. Salem is very conveniently located in The Willamette Valley, about halfway between Portland and Eugene. It is also just a tic from the 45th parallel – halfway between the equator and North Pole.

The conference will be August 30-Sept 2. Our preliminary program is in this issue – there may be a few changes in our final offering – see the WAS website for any changes/updates. The program offers something for every beekeeper with interesting speakers and topics.

Our conference will start Monday August 30th with a wine & cheese reception followed by a meeting of the local Willamette Valley Bee Association (WVBA) who will

Message from the President

co-sponsor Sue Cobey of UC Davis as one of the WAS speakers. Their Monday night meeting is free to all who care to attend. Conference meetings will be held in the spacious Jefferson I&II room on the first floor meeting area of the Red Lion Hotel, adjacent to where the wine and cheese will take place. Hotel parking is free for hotel registrants and visitors to WAS events.

Tuesday August 31st will be OREGON DAY. The morning will highlight bees and bee research in Oregon. The vendor area will open Tuesday giving everyone an opportunity to meet and talk with friends and vendors. Tuesday afternoon will be a "free" time for visiting Oregon. You might want to visit the art-deco State Capital building with its beautiful murals inside the central rotunda or Museum of Art on the beautiful tree-filled campus of Willamette University across the street. Alternately you might wish to visit the Oregon State Fair. The hotel has a free shuttle to the gate – if you drive (less than a mile from hotel) parking is free. You can purchase a discount entry ticket in advance by visiting the state fair website once they begin to post 2010 fair materials -- google Oregon State Fair for this information.

Wednesday September 1 will feature a morning field trip. Stops will include OSU for a look at their bee program under Dr Ramesh Sagili and emeritus Professor Mike Burgett (no stranger to WAS – he served as President the last 3 times it has been held in Oregon, all in Corvallis in 1985, 1992, and 2001). A commercial beekeeping honey handling facility will also be included on the trip and perhaps one other stop. Lunch will be in the Waterfront Park in Salem where you can have a free ride on Salem's famous Carousel with 42 hand crafted wooden horses plus 2 "Oregon Trail" wagons

Wednesday's program will be URBAN BEEKEEPING DAY. Those not going on the tour can take the 4-hour Beekeeping Short Course offered by Larry Connor, national

Visit the WAS website at groups.ucanr.org/WAS/

Western Apicultural Society of North America

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Each state/province in Western North America is entitled to elect one Director to the governing board of the Society. Directors meet before and after each general meeting and set policy and guidelines for the operation of the business of the Society. Throughout the year, they serve as the liaison between the Society officers and the members in their respective states/provinces. They are responsible for recruiting new members, keeping track of state/provincial concerns and advising the membership of their activities through this Journal.

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beekeeping expert. Wednesday afternoon program will include a variety of speakers, featuring some of the best WAS beekeepers and bee professionals. The talk topics will be oriented around urban/backyard beekeeping.

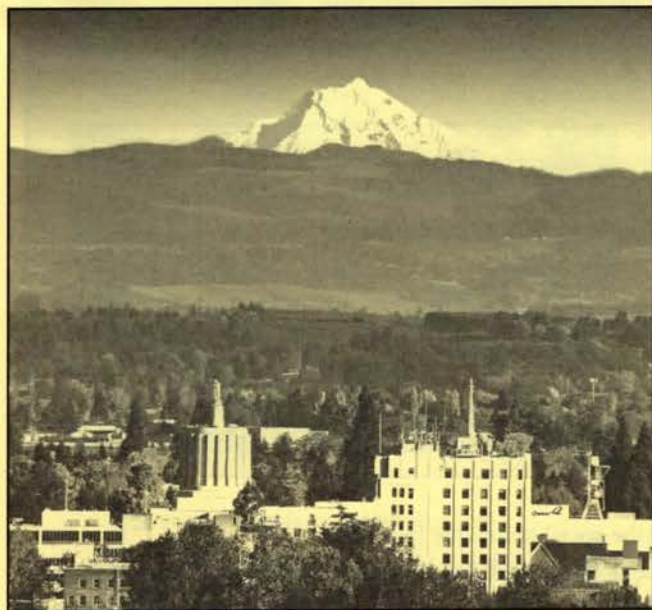
Thursday September 2 will be a full day of BEES and BEEKEEPING. Morning and afternoon lectures and workshops will feature the usual great line up of bee experts – from seasoned beekeepers to researchers to bee industry specialists. There will be ample break time and a delicious buffet lunch with ample discussion time to meet fellow beekeepers and visit our vendors.

Our concluding 2010 WAS event will be the Awards banquet Thursday evening. We normally award two especially deserving individuals with our Thurber and Outstanding Service to Beekeeping awards. Look too for Worker and Drone Awards from the President and maybe a "surprise" or two. It will be held at the Red Lion Hotel's award winning restaurant.

SALEM – THINGS TO DO AND SEE

Salem, a city of about 150,000, hosts the 30th Annual Meeting of WAS Aug 30th to Sept 2nd, 2010. Salem, founded in 1841 by Methodist missionaries, is Oregon's Capital. The Capital Building, built in 1938 has depression-era deco art and four types of marble included in its Modern Greek architecture. Inside, the soaring rotunda has murals depicting historic events such as Lewis & Clark expedition and depictions of Oregon's agricultural abundance. Across the street is the beautiful tree-lined campus of Willamette University, established only a year after the city itself. Government buildings and campus are at the edge of the historic downtown area of Salem that extends to the Willamette River.

On the campus of Willamette University is the Hallie Ford Museum of Art. Just blocks away is Mission Hill Museum where 14 historic buildings have been gathered which you can visit as a tour or by your self – be sure to see the 1889 Thomas Kay Woolen Mill where you can see the west's only power generating water turbine. The Jason Lee home of Salem's founder, is one of this Museum's other buildings. The city's oldest historic district (a National Registry of Historic places listing) is adjacent to the museum. A few blocks further, bordering the river, is Riverfront park with a carousel of 42 hand-carved wooden horses and two Oregon trail wagons. And across the street a museum you will want to see, if you ever had an erector set, is the A.C. Gilbert Discovery Museum, for young and old alike.



Mount Jefferson stands guard over Salem.

Ron Cooper photo

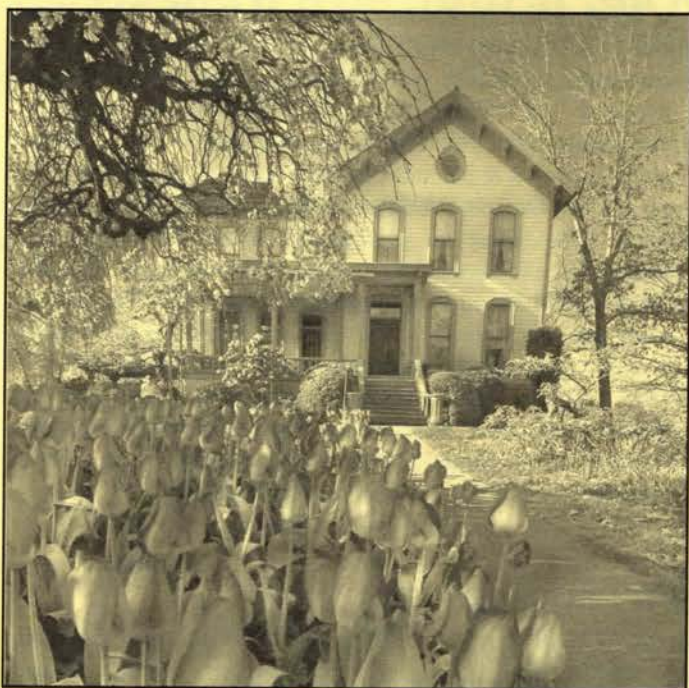
WAS will enjoy the convenience of The Red Lion Hotel, just off I 5 in downtown Salem. The hotel has 148 rooms and conference registrants will receive upgraded rooms of either 2 queen or 1 king bed, cable, microwave, and mini-refrigerator. The Hotel has a host of features such as indoor pool, restaurant & bar and exercise room. WAS attendees will get the hot Oregon Breakfast (a \$5.00 value) free of charge. Room rates during our conference will be \$89.00 plus 10% Salem city tax. Room block will be held until August 9 – after which it will be on first come-first serve basis. To view the hotel see the website <http://www.red-lion-hotel-salem.com/>. To make your reservation contact them via telephone 503 370-7888 (toll free 1-800-248-6273). If for some reason you wish a different location, there are 5 hotels within walking distance – Shiloh Inns offers a convenient package (See website www.shiloinns.com) and ask for the WAS rate.

Additional museums you might take in include Bush Pasture Park. It includes the 1878 Bush families Victorian home; Asahel Bush was a banker and publisher. The park grounds include an extensive rose garden where you are sure to find something in bloom during WAS. Adjacent to the Bush park is Deepwood estate, a fine example of Queen Anne architecture where an early 1930s design of a formal English garden was created by Lorda Schryver, the PNW's first woman-owned landscape architecture firm.

The historic downtown features much architecture from the turn of the century. The streets are broad and tree-lined with ample on-street parking. The shops and restaurants are numerous and varied (no box stores thank you). AND DON'T FORGET - - OREGON HAS NO SALES TAX -- for that must-have purchase you find downtown. Information on Salem museums, downtown and other things to do and see in Salem can be found on the travel Salem website <http://>

And during WAS is Oregon State Fair. Something for everyone with lots to see and do, the fair becomes a giant playground with rides and distractions in the evening. See the State Fair website for details on special fair events during WAS. The Red Lion hotel will shuttle you to the fairgrounds for free.

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Bush house, Salem. Ron Cooper photo

Getting to Salem

The RED LION Hotel is just off I-5 (Market Street exit # 256). You might consider stopping at one of Oregon's bee dealers on your trip in or out of Oregon. If coming from north or I-84 from East, Ruhl Bee Supply is off the Gladstone exit (exit #11) of I-205 just south of downtown Portland and north of Willamette River. This is a family owned bee supply company that has been in business for over 100 years (see website www.ruhlbeesupply.com). If you are coming toward Salem from California up I-5 then be sure to include a stop to Glory Bee Supply (website www.glorybee.com) in Eugene. Both suppliers will also be present at WAS and are both generous sponsors of our conference.

If you plan to fly, Portland airport (PDX) is about 1 hour away. A shuttle service (Hut transportation) runs every 2 hours from the airport to Red Lion Hotel and back to the airport with only one intermediate stop. Alaska, American, United, US Airways and a number of carriers offer service to PDX.

Registration information

We have been working hard to keep your registration fee low this year. A number of the local bee associations and the Oregon State Beekeepers Association have generously agreed to co-sponsor our program speakers and breaks. Oregon's two large bee supply dealers are also helping sponsor us this year as are a number of individuals. The registration fee will be the lowest of the past several years. Meal events will be priced separately as at past conferences and our social Monday evening will be a cash bar, as will the social before the banquet.

We ask that you pre-register by August 9th but we will accommodate later registrations for a slight additional charge. If for any reason you need to cancel we will refund your registration fee so we recommend you register before the deadline without penalty. A complete registration form will be included in the next WAS Journal.

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Outdoors Oregon

Oregon is well known as an outdoors state – people get out to enjoy the environment more than most other states according to some statistic. While at WAS you might think of fishing – the close by North Fork of the Santiam River is world famous for trout and steelhead – or just rafting away a lazy afternoon. Detroit Lakes is 400 ft deep and 9 miles long and but an hour away in the Cascades. Silver Falls State Park, east of Salem in Silverton, is Oregon's largest state park. It features a picturesque canyon with 10 walking-accessible waterfalls – south falls has a 177 ft drop; you can walk on a paved trail completely around it for a 360 ° perspective.

Birding opportunities abound in and around Salem. The Willamette river flows through the city; Basket Slough and Ankeny, two national wildlife refuges are 20 minutes from the Hotel on opposite sides of the city; both boast an over 200 bird species inventory that include nesting eagles. There are pleasant walking trails within the city of Salem that get "wild" or you can take a hike in the Cascades where 7 volcanic peaks, still with snow mantels, are to varying degrees accessible, including Mt Jefferson, visible from the city itself. Opal Creek includes old-growth forests and Breitenbush has hot springs.

Whether it is museums or outdoors you like, from the ocean coast, the coastal range mountains, the Willamette valley (Salem elevation = 171 ft) or the higher elevation peaks of the Cascades – all are close and convenient to the Red Lion Hotel in beautiful, historic Salem Oregon. The hardest part will be leaving time for WAS Aug 30th to Sept 2nd.

To get started on planning your Oregon adventure visit the website of Travel Salem <http://www.travelsalem.com/>. They will gladly send informative brochures for Salem as well as other areas in Oregon.



State Capital Building

WAS 2010 PRELIMINARY PROGRAM

Red Lion Inn, Salem, Oregon, 30 August to 2 September, 2010

Monday night - WELCOME (30th Aug 2010)

5:30-7:00 WELCOME reception (cash bar)

7:00-8:15 WAS/WVBA WELCOME Speaker SUE COBEY, UC Davis - Why we need better bees.

Tuesday - OREGON DAY (31 Aug 2010)

8:30- 9:15 Mike Burgett, Emeritus OSU- Those other Asian Honey Bees

9:15 Mike Weber, COSI, OR - Producing Quality Seeds Need Quality Bees

10:00 Sonny Ramaswamy - Dean, College of Agricultural Sciences - Welcome address

10:15 BREAK

10:45 Sue Cobey, UC Davis - Progress on Breeding Superior Bees

11:45 Mace Vaughan, Xerces Society - Conservation of habitat for bees

LUNCH & PM FREE - VISIT: STATE FAIR, STATE CAPITAL, bBeach or mountains

Wednesday- URBAN/BACKYARDERS DAY (1 Sept 2010)

AM Bee/site visits OSU, Commercial Beekeeper, +1 more? Lunch in Salem Riverfront Park at Carousel OR

8:30-12:00 ALTERNATIVE: Advanced Beginner-Intermediate level SHORT COURSE by Larry Connor

1:30 Harry Vanderpool, Salem, OR - Nuc Management for year-round hive management

2:15 Eric Mussen, UC Davis - Hints for Successful Backyard Beekeeping

3:00 BREAK

3:30 What's new in the industry - 5 minute PROMOTIONALS from vendors

3:45 Kim Flottum, Bee Culture Magazine - L.L. Langstroth: Why we still celebrate his contributions

4:15 Ann Harman, VA - Value added beekeeping

EVENING- 7:30 Kim Flottum - Producing varietal and artisan honey

Thursday - BEES & BEEKEEPING DAY (2 Sept 2010)

8:30 Sujaya Rao, OSU. Training the next generation of pollination biologists

9:15 Chris Heintz, Project Apis m. - Why almonds rule: Beekeeper management practices

10:15 Break

10:45 Gordon Wardell, Paramount Farming Company, CA - Almond pollination

11:30 -12:15 Diana Sammataro, USDA Tucson - Research roundup from Tucson USDA lab

LUNCH - Buy buffet or venture outside hotel

MINI- workshops in vendor room (Connor, Harman, J. Brisson)

PM - 3 speaker slots

1:30 Tim Lawrence, WSU - Human dimensions of CCD and its impact on the honey bee

2:15 Mark Pitcher, Victoria, BC - Economics of keeping bees

BREAK

Mini Promotionals from our vendors

3:45-4:30 Ramesh Sagili, OSU - Honey bee Research Program at Oregon State University

EVENING - Awards banquet & cash bar

Beekeepers' Calendar

Feb 20: NEW BRUNSWICK BEEKEEPERS ASSOCIATION ANNUAL MEETING, Charlotte Room, Department of Agriculture & Aquaculture, Fredericton, New Brunswick, Canada.

Feb 27: COLLOQUE EN APICULTURE, Quebec (Canada) Beekeepers 2010 meeting. Info www.craaq.qc.ca.

Mar 5 - 6: 104th MANITOBA BEEKEEPERS CONVENTION, Keystone Centre, Brandon, Manitoba Canada. Info www.manitobabee.org/

Mar 5 - 7: 3RD ORGANIC BEEKEEPERS CONFERENCE, YMCA Triangle Y Ranch Camp and Retreat Center, Oracle, Arizona. Formation of an American Organic Beekeepers Association. Info [groups.yahoo.com/ group/organicbeekeepers/](http://groups.yahoo.com/group/organicbeekeepers/) or contact Dee Lusby 520-398-2474 evenings.

Mar 13 - 14: BRITISH COLUMBIA BEEKEEPERS ASSOCIATION SEMI-ANNUAL MEETING, Kamloops, BC, Canada. Info Ian Farber 250-579-8518 or ian_farber@telus.net.

Mar 30: WORLD APITHERAPY DAY, Holiday Inn Hotel, Passau, Germany. Info www.worldapitherapyday.org/

April 10 - 11 (tentative): GLORYBEE FOODS BEE WEEKEND, Eugene, Oregon. Pick up pre-ordered bees, see package installation demonstration with Dick Turanski. See ad page 17 for phone number.

May 17 - 20: CONGRESS ON APICULTURE AND APITHERAPY, in conjunction with the 15th All-Russian beekeepers meeting, Moscow, Russia. Info dashevsky@grainfood.ru or igrfop@grainfood.ru.

June 21 - 27: FIRST NATIONAL POLLINATOR WEEK, sponsored by the North American Pollinator Protection Campaign and the Pollinator Partnership. Info www.pollinator.org.

July 24 - 28: INTERNATIONAL CONFERENCE ON POLLINATOR BIOLOGY, HEALTH & POLICY, Center for Pollinator Research

Aug 2 - 6: EASTERN APICULTURAL SOCIETY CONFERENCE, Boone, North Carolina. Info www.easternapiculture.org/

Aug 27 - 29: FIRST WORLD ORGANIC BEEKEEPING CONFERENCE, Sunny Beach, Black Sea Coast, Bulgaria. Info www.beehexagon.net/en/organic or info@bee-hexagon.net.

Aug 30 - Sept 2: WESTERN APICULTURAL SOCIETY CONFERENCE, Red Lion Inn, Salem, Oregon. Info groups.ucanr.org/WAS/index

Sept 28 - Oct 2: APIMEDICA AND APIQUALITY INTERNATIONAL FORUM 2010, Slovenia. Info www.apimedica.org and www.apiquality.

Oct 1 - 31: HONEY MONTH IN CANADA!

Oct 22 - 23: BRITISH COLUMBIA HONEY PRODUCERS ANNUAL MEETING, Cranbrook BC, Canada. Info www.bcbeekeepers.com.

Nov 5 - 14: ROYAL AGRICULTURAL WINTER FAIR (& Honey Show), Toronto, Ontario, Canada. Info www.royalfair.org.

Nov 24 - 27: CANADIAN WESTERN AGRIBITION (& Honey Show), Regina, Saskatchewan, Canada. Info www.agribition.com.

Dec 2 - 4: JOINT WASHINGTON AND OREGON STATE BEEKEEPERS ASSOCIATION ANNUAL MEETING, Seaside, Oregon. Info www.wasba.org.

Jan 4 - 8, 2011: JOINT AMERICAN BEEKEEPING FEDERATION & AMERICAN HONEY PRODUCERS ASSOCIATION ANNUAL MEETINGS, Galveston, Texas. Info www.abfnet.org and www.americanhoneyproducers.org.

For more Beekeepers' Calendar of Events items, visit
www.my.calendars.net/bee_culture

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What Bees Should I Have?

Dr. Larry Connor, Wicwas Press, Kalamazoo MI

I am writing this from a campground in South-Central Florida, the week after the ABF meeting in Orlando. This is an area south of Lake Placid described by ecologists as "wet prairie" meaning that when the wet season arrives in the summer, it is quite possible to be standing in water. Think of it as a transition area to the Everglades. Don't walk your little yippy dog too close to the pond where the 'gater feeds. The campground is set up in an oak hammock, with towering water oaks festooned with Spanish moss providing a respite from the hot Florida sun. This month has not been that, quite the opposite actually, with a prolonged cold spell that turned much of the landscape into a shade of brown or grey.

A great horned owl woke me in the night as I slept. Or perhaps it was answering my undirected snore. The sound echoed around the trees and the strong single "who" was followed by a more rapid call, answered by another owl, some distance away. There are bears in this area, and panther too. I was lucky enough to see one years ago when I ran the Genetic Systems, Inc., bee breeding program in LaBelle, about 30 miles, and we had apiary sites just a few miles away. It was a young male with spotting, and a long, long tail.

The bee-breeding program is the one started by Dadant & Sons, Inc. with Dr. Bud Cale Jr. They produced two breeding stocks, the Starline and Midnite hybrids. In LaBelle we produced two others, the Cale 876 and the Cale 235, both produced by instrumental insemination. That part of the program ended in 1980.

Since Cale had been trained by Iowa corn geneticists, he used the hybrid corn model as the mechanism for the production of Starline and Midnite bees. A number of queens were located and developed into lines by crossing closely related queens to drones of the same bloodline. Repeated crossings produced queens that had genetically "locked-in" certain genetic traits. These queens and their colonies were inbred, but when crossed with other inbred lines via instrumental insemination, the worker bees they produced were hybrid bees, two-line hybrids. The queens grafted from such a queen were also hybrid.

Various two-line hybrid combinations, on both the queen and drone side, were inseminated and the final colonies compared in Illinois for honey production, gentleness, wintering ability, and initially for disease resistance. Later hybrid queens focused mainly on honey production and brood rearing, and the disease resistance was dropped due to the abundance of antibiotics for bees. The resulting four-line hybrid bees were very popular as the Starline and Midnite hybrids.

The Dadant and Genetic Systems operations were responsible for developing the breeder queens and releasing them under cooperative agreement with breeder cooperators. These were queen producers and commercial honey producers who could sell or had need for a large number of highly uniform queens. The breeding plan was amazingly simple. On the first year, the queen producer would graft from the two-line breeder queen sent for this purpose. Since the queen in this cross was herself still inbred, she was often kept in a five frame nucleus or a single deep hive, and frames of brood were added to supplement her reduced egg laying rate. During the first year all of the colonies in the beekeeper's operation were requeened with the Starline or Midnite daughter queens. These queens produced pure Starline drones, regardless of the drones they themselves mated with, due to the haploid-diploid mechanism of sex determination in honey bees.



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In the second year, a second two-line cross breeder queen was sent to the cooperating beekeeper, still operating under agreement. Since this queen was genetically unrelated to the drones produced in the operation, her daughters were able to mate with a large number of highly productive drones and in turn produce a hybrid queen that generated large hives of hybrid bees.

Bud Cale referred to this program as the "Criss-Cross" program, since unrelated queens were shipped every year to mate to the drones in the beekeeper's colony. Cale liked to have all beekeepers in the program on the same side of the cross so that only one type of breeder queen was produced that year and available to the breeders. This prevented, in large part, the possibility of genetic inbreeding if one beekeeper "borrowed" a breeder queen from another Starline or Midnite cooperator.

While I was part of this program we had 13 inbred lines, meaning that some were not used. It cost a lot of money to maintain these lines with their constant need for food, brood, and careful management. A support team was needed for queen production and instrumental insemination.

It was this high cost and the arrival of tracheal and varroa mites that brought the end to the program.

Serious Sideliner Symposium V, Orlando, January 2010

As part of this small-scale beekeeper conference, separate from the main speakers at the American Beekeeping Federation meeting in Orlando, we had a review of the Russian, VSH and Minnesota Hygienic bees. This will help us review the similarities and differences.

Russian bees -- "Dr. Tom Rinderer traveled to Eastern Russia nearly 20 years ago to bring stock back from that region of the world where *Apis mellifera* was exposed to *Apis cerana* colonies where varroa mites have evolved. Beekeeper and queen breeder Carl Webb discussed the Russian program.

The Russian stock was established as a closed population bee breeding program, where 18 beekeepers are responsible for maintaining a one or two of the queen families that make up the program. By a planned rotation of stock exchange, each Russian breeder receives stock from other breeders and uses this as part of their effort to maintain the stock without producing any noticeable level of inbreeding. Selection is essentially completed except for the constant removing any unacceptable traits, so the stock is in a subtle state of improvement.

Webb said that it is not possible to purchase a breeder queen from any of the 18 breeders. Instead a beekeeper must purchase production queens from these beekeepers. It was not clear if any of these people are producing queen cells for sale, something that might limit the nature of the final queen without acceptable drones. While this keeps the economic incentive in place for the 18 cooperating beekeepers, it does eliminate the rapid use of the stock by a large number of beekeepers. The only way to get breeding stock is to become another Russian bee breeder. Of course, a beekeeper could graft from a Russian queen and all of her daughter queens would produce pure Russian drones (if the breeders did their job right).

Varroa Sensitive Hygienic (VSH), formerly called the Suppressed Mite Reproduction (SMR) -- These bees are still maintained by the Baton Rouge Bee Lab and breeder queens are available for purchase from Tom Glenn Apiaries in California. This has made it possible to purchase VSH stock by simply writing a check, getting the queens, and grafting from them.

The selection program was started by Drs. John Harbo and Jeff Harris about twenty years ago. Dr. Roger Hoopingartner at Michigan State University was involved in the initial part of this program. Nearly 100 survivor queens were identified from around the country and brought to Baton Rouge for testing and evaluation. Several queen families are maintained, as explained by Jeff Harris at this program. This means that different breeder types exist and can be used in a criss-cross type bee breeding program, switching from one queen to another every other year.

At first the researchers felt that the bees had the ability to suppress the reproduction of mites, but it has since been shown that these bees are also hygienic. Harris showed an exciting video clip where he introduced a frame of worker brood filled varroa mites into a colony of VSH bees. A bee is seen chewing

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the capping of the cell, and other bees remove and tear apart the worker pupae inside. The strain is able to detect cells with reproducing mites and remove them. This reduces the reproductive rate of the mites. Further, when the mite crawled out of the cell, she immediately jumped onto one of the worker bees. That bee reacted strongly to the mite on her body, and may have triggered a grooming response from one of her sisters, implying that a second resistance mechanism is at work in this strain of bees.

Minnesota Hygienic Bees -- U of MN scientist Gary Reuter discussed the development and status of the Minnesota Hygienic strain of bees. This is perhaps the best known of these selection efforts due to Reuter and Dr. Marla Spivak discussing them at so many meetings. Now the program has been turned over to beekeepers, as in the Russian model, who are responsible for stock maintenance, testing and propagation.

The program started in 1993 when Spivak and Reuter used bees in the University apiary. These bees were primarily Starline bees, so they represented a good strain of bees. These bees were put through a testing program of using liquid nitrogen to kill a circle of brood in a brood frame. Once warmed to air temperature, the killed brood was returned to the hive and checked at 24 and 48 hrs. Then the percentage of brood removal was counted. Non resistant stock had removed little of the brood, but highly resistant stock had removed all of the brood in 24 hrs. With constant selection the entire MN Hygienic stock has over 95% brood removal.

Since the genes in this system are recessive, there must be recessive genes on both sides of the cross. Therefore like the Starline and Russian program, alternative breeders must be used to prevent inbreeding and to promote high levels of mite removal.

Perhaps key to the Minnesota program is the fact that any beekeeper can duplicate this outcome with his or her bees. A few years of selection for general characteristics in conjunction with the liquid nitrogen (or frozen brood) method of testing will produce a result in a very short time period.

Final thought

This is more work than I want to do on a day marked on my calendar "South Florida Vacation". But I think I would like to see several hundred beekeepers try this in 2010:

1. Contact The Tom Glenn Apiaries and explain what you want to do. He is probably a bit better at this than I am!

2. In 2010 obtain either a Minnesota or VSH breeder queen and produce daughter queens for your operation, as well as all your neighbor beekeepers. I am becoming more and more an advocate of production of queen cells and virgin queens that you may want to sell some of these in your county/ surrounding area.

3. In 2011, obtain either the Minnesota or VSH breeder you did not get in 2010, Produce queens from this queen (or several) and let them mate to the 2010 queen's drones.

4. In 2012, repeat 2010 and you have started a criss-cross program. Dr. Bud Cale would be pleased. And I will want you to get up at a future Sideliner Symposium to tell fellow beekeepers what you have done. Deal?

When not slaving at the laptop while on vacation, you can order books from him from his online website www.wicwas.com. That site has a complete list of bee books printed by Wicwas Press. Many of these titles are also available from leading bee supply dealers.

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Introducing WAS 2nd Vice President Antonie Botes



Antonie Botes is a native of South Africa. He was born and raised on a crop farm in the fertile Delmas area. Agriculture was and remains his passion.

He has been serving the industry for more than two decades. With a background and expertise in Mechanical Engineering, he has traveled through all the continents of our globe, working on a wide variety of projects. He immigrated to the USA in 2002 and is currently working full time in the North American Beekeeping Industry. He has helped inspire extensive research and product development regarding *Apis Mellifera*, the honeybee. He has worked with beekeeping operations in seven states -- Arizona, Alabama, California, Hawaii, Indiana, Ohio, and Tennessee -- and across Continents -- Australia and Africa.

Antonie is married to Renette and with their three younger sons live on the Big Island of Hawaii. He is the president of Beehive Hawaii and serves as the current president of the Big Island Beekeeping Association.

Antonie is looking forward to his involvement with WAS, and to welcoming beekeepers to the 2011 WAS conference in Hawaii.

WAS Presidents to date

1978 Norman Gary (California)
1979 Lucien Alexander (Oregon)
1980 Randy Barker (British Columbia)
1981 Charles Duncan (California)
1982 William P. Nye (Utah)
1983 John Edwards (Washington)
1984 Eric Mussen (California)
1985 Mike Burgett (Oregon)
1986 Doug McCutcheon (British Columbia)
1987 Tom Muncey (Nevada)
1988 Dan Mayer (Washington)
1989 Stan Williams (California)
1990 Mark Shelton (California)
1991 William P. Nye (Utah)
1992 Mike Burgett (Oregon)
1993 Mark Winston (British Columbia)
1994 James Bach (Washington)
1995 Eric Mussen (California)
1996 Russell Messing (Hawaii)
1997 Eric Mussen (California)
1998 Eric H. Erickson (Arizona)
1999 Leonard Joy (Nevada)
2000 Fletcher Miller (Alaska)
2001 Mike Burgett (Oregon)
2002 Eric Mussen (California)
2003 Jaquie Bunse (British Columbia)
2004 Jerry Bromenshank (Montana)
2005 Steve Sheppard (Washington)
2006 Adrian Wenner (California)
2007 Diana Sammataro (Arizona)
2008 Mark Pitcher (British Columbia)
2009 Eric Mussen (California)
2010 Dewey Caron (Oregon)

Reminder from the Nominations Chair

At the 2010 WAS Annual Meeting we need nominations for President-elect (who will be the 2012 President), Secretary, and several Directors. Please allow me to review the duties of these positions.

The PRESIDENT-ELECT will serve one year then accede to the PRESIDENCY for one year, then become the IMMEDIATE PAST-PRESIDENT for one year (a 3-year commitment). Duties are : The PRESIDENT-ELECT shall, at the end of his/her term, accede to the Presidency. During his/her term as President-Elect, he/she shall perform the duties of the President in the absence of the President. The President-Elect serves as a member of the Executive Committee (EXCOM).

The SECRETARY shall ensure that accurate and current membership and mailing lists are maintained for the Society, that minutes of membership and board meetings are recorded, that proper notification of scheduled meetings is given, and that the Bylaws, Rules and Regulations of the Society are updated and distributed to the Board of Directors. The Secretary shall also serve as a member of the Rules and Regulations Committee and serves a two-year term.

DIRECTORS shall be elected annually to the Board to serve a term that includes three consecutive annual business meetings. and Section 4: The Board of Directors shall be responsible for the management of the business affairs of the Society.

Obviously, these are very important positions because our elected officers will guide our Society for the next 2-3 years. So consider these nominations carefully, talk to your colleagues and check with anyone you wish to nominate about his/her willingness to serve. Make sure to get their consent to be nominated and that they are WAS members in good standing. Please do your part in serving the Society by forwarding nominations for these important positions.

Send to: Archie Mitchell - contact information on page 2.

10 February 2010

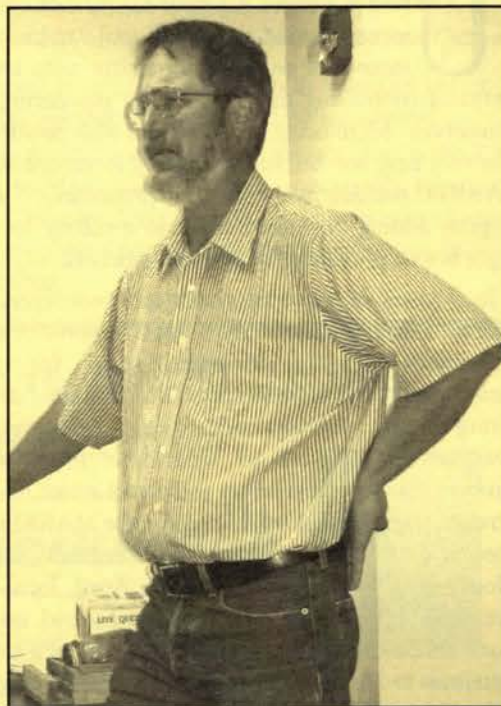
Introducing WAS 1st Vice President Harry Vanderpool

The 2010 WAS Vice President will be Harry Vanderpool. Harry maintains a single-operator bee business in the southern hills of Salem, Oregon. He currently manages 325 colonies. He is Vice President of the Willamette Valley (Salem) Beekeepers Association (WVBA) and is the Willamette Valley representative to the Oregon State Beekeepers Association. Harry has organized Oregon state bee conventions several times and serves as director of the annual beekeeping course for the W.V.B.A at Chemeketa Community College in Salem.

Harry has a mobile operation like all commercial beekeepers. His bee season begins with almond pollination in February in northern California. Once back in Oregon, he splits and builds his bees to pollinate cherries and later meadowfoam, sometimes clover as well. After again splitting and equalizing colonies, he locates his bees so they store blackberry honey, the major flow in western Oregon. His bees finish their annual pollination service in the central Oregon desert in the irrigated parsley/carrot seed around Madras.

August is honey extraction time, so we will find him busy during WAS, but not too busy to serve as advisor and 2nd-in-command for the Salem conference and to address the group on Wednesday. Harry has attended several WAS conferences in the past, most recently at Corvallis in 2001.

Harry and his wife Liz, look forward to welcoming you to the WAS conference in their hometown of Salem, Oregon!

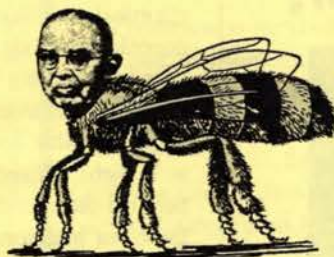


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Powder Sugaring Bees?

By Dewey M. Caron, OSU Affiliate faculty

Using powdered sugar for varroa mite control has been recommended as an IPM tool - to knock mites off a sample of workers to monitor mite levels and as a means of controlling mite buildup by powdering the colonies themselves. Monitoring mite numbers with powdered sugar is a relatively easy and helpful monitoring technique (see tutorial on MAAREC.psu.edu web site for procedure); a new study suggests adding powdered sugar to a colony to control mites might not be providing the perceived benefit.

In 9 years of surveying backyard beekeepers in the mid-Atlantic states, I found only a small number - about 10% of beekeepers - using powdered sugar for colony mite control. Over 50% of beekeepers (who indicated they were monitoring mite levels) said they prefer to use the powdered sugar roll to determine mite levels. The numbers using powder sugar to control mites has been on the increase. (survey results published on the MARREC web site. In a recent comparison survey of 100 Oregon backyarders (who filled out a survey form during April local Association meetings), 65% of the beekeepers who had no over winter losses indicated they used powdered sugar as a control scheme in contrast to 38.5% of beekeepers who did have winter loss (57 of the 100 had a loss; 43 had no loss). Total colony loss rates in 2009 were similar - 25.8% in OR and 24% in DE/MD.



Powder sugar as mite monitoring tool -- here the sugar residue and mites are being poured into a white pan to count a sample of 300 adults from the brood area -- is still useful.

The new study conducted in Florida by Amanda & James Ellis (U Fl) with Gerry Hayes of FL Dept Apiary Inspection compared mite numbers, adult bee numbers and brood area of colonies treated with powdered sugar for mite control to untreated controls. Colonies were dusted every other week for 11 months with 120g of powdered sugar. The year-long study -- surprisingly -- found no differences in adult bee populations or amount of brood between treated and control colonies but also no differences between numbers of mites, numbers of mites prorated to adult bee numbers and no differences in mite numbers per capped brood cell in treated vs untreated colonies.

When a colony is dusted with powdered sugar, a significant initial (24h) mite drop following dusting occurs. Some beekeepers powder their bees several times in spring to knock mite numbers down, perhaps delaying mite buildup so other non-chemical techniques (screen bottoms, drone comb removal, queenless period) can keep numbers low. But this study found year-long dusting by itself provided no overall reduction in mite numbers. The initial report of colony mite control using powder sugar (by Nick Aliano during his PhD studies with Marion Ellis at U Neb) utilized the labor-intensive method of shaking adult bees off their comb and powdering them in a separate box, similar to our monitoring method technique.

The study conclusion: "DUSTING COLONIES WITH POWDERED SUGAR DID NOT SIGNIFICANTLY AFFECT COLONY STRENGTH OR MITE POPULATIONS ...WE DID NOT FIND THIS METHOD OF DUSTING COLONIES WITH POWDERED SUGAR TO EFFECTIVELY CONTROL VARROA MITES." Whether a different method of applying the powdered sugar, such as the newly available powder sugar duster (a converted pesticide applicator from China), would modify the conditions sufficiently to improve overall mite control is unknown. Likewise the spring delay concept has not been tested. It would seem that we should be cautious that powder sugaring bees, although an effective way to monitor for mites, might not provide adequate control.

Read these results and parameters of this study in 2009 Jour Apic. Res & Bee World: Vol 48(#1), page 72-76 .

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12 February 2010

CATCH THE BUZZ....

Monsanto case against alfalfa ban goes to Supreme Court

By Guy Montague-Jones, Food Production Daily.com, and submitted by Bee Culture

The Supreme Court has agreed to review a court order that halted the planting of genetically modified alfalfa made by Monsanto.

In 2007, a federal district court order overturned approval from the Department of Agriculture and halted the planting of Roundup Ready alfalfa pending an environmental impact statement (EIS) from USDA.

Monsanto has fought this decision repeatedly in the courts and is now taking the case to the Supreme Court even though the final EIS report is due for publication next month.

Garrett Kasper, a spokesperson for Monsanto, said the company is continuing the legal battle in order to fight for grower rights and set a legal precedent.

The Center for Food Safety disagrees with this assessment. Andrew Kimbrell, the executive director of the organic lobby group, said Monsanto is pushing the case all the way to the Supreme Court even though the USDA analysis is now complete and the US government has actively opposed further litigation.

This, Kimbrell said: "Underscores the great lengths that Monsanto will go to further its mission of patent control of our food system and selling more pesticides."

Monsanto claims the court case is not about patent control but rather the freedom of growers to choose their products.

Kasper said the court injunction failed to establish that the product posed a "threat of irreparable damage," which he said was necessary to justify a temporary ban.

Citing a case against US Navy about alleged damage to marine life from sonar, the company spokesperson said the Supreme Court has overruled court similar injunctions in the past.

But the Center for Food Safety is confident that the Supreme Court will uphold earlier opinions. "Although we believe a further hearing is unnecessary, we are confident we will again prevail, as the lower courts have already three times determined."

Whether planting Roundup Ready alfalfa will eventually be permitted depends mostly on the conclusions reached in the EIS. Kasper said Monsanto is encouraged by the draft report, which he described as "pretty favorable."

The final report is due for publication in February before a court decides on whether the ban should be maintained.

Alfalfa is the fourth most commonly grown crop in the US, and according to Monsanto, 1 percent is currently Roundup Ready alfalfa. Under the 2007 court injunction farmers already using the GM crop were permitted to continue but any further planting was halted.

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February 2010 13

News from the University of British Columbia proteomics lab ...

Happy New Year everyone!

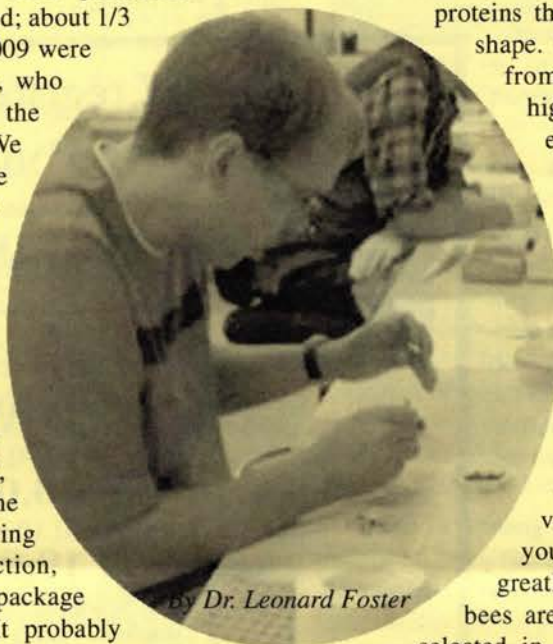
UBC Bee Research update: In the last few months it feels as though our big disease biomarker project has really hit its stride: Frozen capped brood samples from 2009 were transported from Kettle Valley Queens to Beaverlodge and evaluated for the Suppressed Mite Reproduction (SMR) trait by Dr. Abdullah Ibrahim; the UBC proteomic samples from 2008 were completed; about 1/3 of the proteomic samples from 2009 were also completed; Dr. Brian Gross, who many of you met in Victoria at the AGM, started with the project. We do not have all the data in on the SMR trait yet, nor do we have much to say from the 2009 proteomic samples yet so I will focus on the 2008 data and Dr. Gross.

One aspect of the project that we have embarked on was to build an economic model of the beekeeping industry in BC, Canada and the US, including the impact of disease and the varying roles that honey production, pollination contracts and queen/package sales play in various regions. It probably comes as no surprise to most of you that there is only a very poor understanding of the industry as a whole, beyond everyone's anecdotal experience, and the only real measures we have are those data collected by the Ministries of Agriculture and CAPA. Dr. Gross is a graduate of the University of California at Berkeley and I feel we are extremely lucky to have him on-board as he is likely the best person in North America to be doing this. His doctoral studies were devoted to the valuation of pollination services to agriculture in California and so he is familiar with the beekeeping industry, as well as economics.

On the proteomics side there have been many results coming in over the last three months but there is one story in particular that I would like to share. In 2008 we collected, among other tissues, mid-guts from Beaverlodge bees because this organ is important in one mechanism of resistance to AFB; that is, some bees appear to have the ability to retain spores in their mid-gut instead of regurgitating them into honey, thereby preventing them from being passing on to nest-mates. In our analysis of these mid-guts we noticed some very interesting relationships

between certain types of proteins and where the bees originated. Now, all the bees in the study were kept at Beaverlodge but they had been imported there from various places, e.g., Hawaii, California, Chile, New Zealand, Saskatchewan, Ontario, in order to get a wide sampling of different commercial sources of bees.

Remember that individual protein molecules do virtually all of the work in our cells: they are the enzymes that digest food and derive energy from it; they are the structural proteins that give cells, tissues and organs their shape. Interestingly, we find that the farther from the equator bees are raised, the higher their levels of proteins involved in energy production/heat generation. Conversely, the closer to the equator bees were raised, the higher their levels of proteins involved in dealing with environmental stress. More simply, bees from Saskatchewan and Ontario 'looked' more similar to one another than, for instance, bees from Saskatchewan and California. These findings may seem somewhat academic but I think the take-home message is that we have very good evidence to suggest that if you import bees from a climate that is greatly different from your own then those bees are unlikely to perform as well as bees selected in more similar environments. In other words, we have evidence that you should buy local!!!



By Dr. Leonard Foster

A 'vaccine' for Israeli acute paralysis virus?

Most of you probably remember when the first scientific reports on the cause of Colony Collapse Disorder (CCD) came out they were claiming a very strong link between CCD and Israeli acute paralysis virus (IAPV). To everyone's credit they were not claiming that IAPV caused CCD but in virtually every sample diagnosed as CCD the researchers were able to find DNA from IAPV. As more studies have been done in different areas around the world, I think no one believes any longer that IAPV is the cause of CCD; nonetheless, bee viruses are a major problem that we have no effective solution for. Varroa mites carry with them many viruses, including IAPV, and the viruses probably have as big an impact on the bees as the mites themselves, if not larger. In humans, viruses are dealt with by something called the adaptive immune system – white blood cells recognize viruses as foreign and start to make antibodies that selectively recognize the viruses and mark them as foreign.

14 February 2010

Then other white blood cells come along and see those antibodies attached to the viruses and destroy the whole complex, thereby ridding the body of the virus. Certain viruses, like human immunodeficiency virus, which causes AIDS, hide inside the very cells that are supposed to be recognizing them in the first place, but for most viruses, our white blood cells are effective. When we receive a vaccine, such as the recent one for H1N1 flu, we are receiving virus that is damaged to the point that it can no longer cause disease. This stimulates our white blood cells to make antibodies so that if we later get exposed to the real, live H1N1 virus then those antibodies are already there and they can coat the virus so that it is destroyed. Bees have no way to make antibodies they cannot receive a 'vaccine', in the classical sense, but they do have something called innate immunity, although it is not very effective against viruses. However, a Floridian company called Beeologics, together with a university group from Israel and several groups in the US, have recently reported a potentially interesting mechanism to suppress levels of virus in bees (Maori et al. (2009) IAPV, a bee-affecting virus associated with Colony Collapse Disorder can be silenced by dsRNA ingestion. *Insect Molecular Biology*. 18.1:55-60).

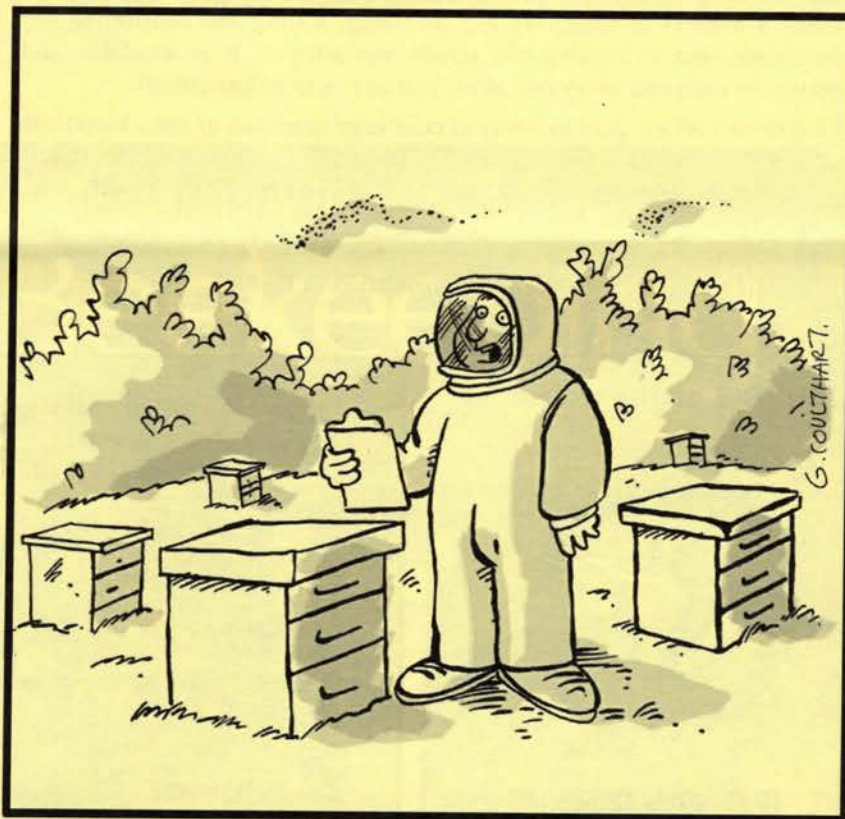
The report used a technology called RNA interference, or RNAi, to essentially interfere with a crucial step in the viral life cycle. Remember that our DNA encodes genes but for those genes to have any effect that code first has to be transcribed into something called RNA and from there it is translated into proteins, which are the molecules that we are studying at UBC. However, if either the DNA to RNA transcription or the RNA to protein translation is disrupted then the gene cannot carry out its function, such as what happens in many human genetic disorders. RNA technology works by tricking cells into destroying the RNA that is made from a specific gene: an RNA molecule that is the mirror image of the RNA molecule transcribed from a gene is put into the cells and then specific enzymes in the cell destroy both the normal and the mirror image RNA, which has the effect of preventing the eventual production of protein from that gene. Viruses have genes as well so what the authors of this study did was to introduce into bees RNA that was a

mirror image of some viral RNA, thereby shutting down some of the viral genes. By doing this they prevent the virus from replicating and going on to cause disease.

The idea to use RNAi to prevent disease is not new, many groups are trying to do it to tackle human diseases as well, but this is the first time it was tried in bees. It is a very interesting approach but I feel that the time when we will see this applied in the field is still far off for a couple of reasons: 1) it is still incredibly expensive, 2) the compounds used are not very stable so how it could be applied in the field is not clear, 3) regulatory approval. In addition, I think it is far from clear that reducing levels of IAPV would have a significant impact on bee health. To this end, Beeologics is developing a system to use RNAi to attack Varroa mites, Nosema and other viruses but so far have not demonstrated that this works.

the barnders

by gord.coulthart



Why is it every time I want to
take inventory they're out to lunch?

Thanks to the Canadian Farm Safety Association

February 2010 15

Celebrating Honey Bee Science with L.L. Langstroth's 200th Birthday

Reprinted in part from the Winter 2009 issue of The Massachusetts Bee

Two hundred years after his birth in 1810, Rev. Lorenzo Lorraine Langstroth, known as "the Father of American Beekeeping", will be honored. Langstroth's discovery of "bee space" and his invention of the movable-frame beehive will be celebrated with a national network of exhibits, workshops and seminars and perhaps a commemorative US postage stamp as well.

Langstroth started with "two stocks of bees in common box hives" while serving as a minister in Andover, Massachusetts in the 1830s. Before long, he was studying beekeeping in depth. He observed his bees and sought to understand their ways in order to build hive boxes which would allow him to better combat the destructive wax moths and collect surplus honey without harming the bees or damaging their wonderful honey comb.

This is the essence of the scientific method. Those that might think that Langstroth was an unlikely scientist would be misunderstanding the role of science in our lives. The scientific method involves experiencing the world in which we live, responding to the curiosity that naturally resides in us, devising a method of observing and recording, testing and confirming our expectations, and evaluating the results we achieve. It is available and important to each and every one of us, just as it was to Langstroth.

Langstroth's efforts gave us a way to raise large quantities of bees, keep them healthy and collect their honey in a truly sustainable way without destroying their home. We all owe him thanks and, the year 2010, his 200th birthday year, is a great time for people across the country to celebrate him in ways that benefit us all. After a mail and email campaign, Eastern beekeepers are awaiting a decision about a commemorative stamp. The US Postal Service Citizen's Advisory Committee was to consider the proposal at their January 2010 meeting and pass on their recommendation to USPS.



L.L. Langstroth 1810 - 1895

TABER'S on the web ...



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16 February 2010

Regional News

Saskatchewan

Alvey Halbgewachs, President Regina Bee Club

In 2009 some of our commercial beekeepers experienced up to 40% losses in the spring. Others lost bees during the spring months. It was a cold spring and summer and many did not anticipate a very productive crop; however, it did warm up, crops were late and most beekeepers managed a slightly below average crop.

November was Canadian Western Agribition and the Regina Bee Club has two full displays, a Trade Show display and an Agriculture Education display (8,000 school students visit the Agri-Ed Show during the week). In addition, the Club holds a Honey Show competition and the banquet is held during the week of the Show to hand out the awards. Pierre the Bear is a great attraction at the Agriculture Education display spending time with the students.

The Saskatchewan Bee Keepers (SBA) 87th Annual Convention was held in December. Speakers at the SBA Conference included Cyril Laforge, Dennis vanEngelsdorp, Dr. Ron Fessenden, Randy Oliver and Rob Currie. The focus of Convention speakers was Varroa mite management, controlling bee viruses and Health and Honey.

At the banquet we celebrated the retirement of John Gruszka, where many friends and colleagues were present to reminisce about their experiences (a little roasting included) with John during his 32 years as Provincial Apiculturist in Saskatchewan.

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February 2010 17

More Regional News ...

New Mexico

Ken Hayes, State President

We're alive and well, and getting some good moisture in the form of both rain and snow at last, after being in a drought since 2006. Some areas have had as much as 36 to 45 inches at a time! So this may be a good honey year for us. Normally we get lots in the mountains, then irrigate out of the Rio Grande, but this is much more widespread.

We have no reports of CCD or colonies dwindling at this point.

The New Mexico State Beekeepers held their annual meeting the second weekend of November, as usual, but will be changing to the end of January in 2011. The reason is that almost all of us are involved in the Christmas craft shows throughout November and December, so taking a weekend out is costly in two directions. This probably isn't the case for commercial beekeepers, but it is for a lot of smaller ones everywhere.

Two issues concern us. One is that the tamarisk (salt cedar) on public land is all being cut. The honey off this tree is superb and our beekeepers are not happy about it. We can keep them on private land but it seems we can't stop the devastation on public land.

The other issue is "pure" honey, though this is now receiving some attention where it is needed. However, by training consumers to shop for local honey, the problem of contaminated Chinese or other foreign honey can be largely avoided. Education is very important, for the public and for ourselves. We hold several education days a year. The last one drew over 200 people and we are having to consider how to keep the numbers at a more workable level. Not complaining about success, mind you.

On February 9th, our association will meet with our state legislature, giving out honey and putting problems in front of them. We find putting a large group of beekeepers in front of them is far more effective than one or two, or writing letters.

Hawaii

Antonie Botes, State President

At a February 9th Big Island Apicultural Association meeting, the vote was unanimous to join fully with WAS, especially considering that the 2011 WAS conference will be held in Hawaii.

A very unexpected early honey flow has been happening in the Hilo area lately, since it is not raining. Kona is dry but the bees there are doing well too.

Five weeks ago, beekeepers met with state senators to ask for funding to continue programs. The Varroa project, working on control options (HI has just got Varroa for the first time) is back on track and has just received a shipment of Miteaway II formic acid strips from Ontario, Canada. State government has

also

announced a new state apiarist is to be appointed immediately. The state department of agriculture is also funding Randy Oliver and Serge Levesque of California to speak on organic/non-organic beekeeping systems. Some friction occurs between the two camps, and also between those who believe local markets should be saturated before exporting queens.

Education is high on the HI list of priorities. Some projects include negotiating with a local zoo to have an observation hive on site, and getting involved with libraries who hold public information events. Local beekeeper Jenny Bach has received \$25,000 in funding for educational programs in Island schools.

California

Archie Mitchell, Director

From February 10 through March 20, most of the commercial beekeepers in California are pollinating the almonds. It has been estimated that the more than 500,000 acres of California almonds require more than 1 million colonies of bees for pollination. Bees are trucked in from all over the United States and have been flown in from Australia to pollinate the almonds because of past shortages in acquiring the necessary numbers of American bees.

The weather here has been typically cold and damp. We are getting lots of rain. This is an excellent indicator for an outstanding honey production year. Those beekeepers who are not pollinating almonds will be gauging the health of their hives. They are looking for solid or spotty brood patterns. Hives that are short on honey will be fed sugar syrup.

Drone brood frames are removed during this month for varroa mite trappings. Mites are widespread on the Central and Southern Coast of California. Some of the Central coastal beekeepers reported that their hives have collected surprising amounts of honey from manzanita and other sources which are blooming. There was one report from a beekeeper just North of Los Angeles in Oxnard, indicating a problem with colony collapse disease.

This Director and one commercial beekeeper on the Central Coast, Jeremy Rose, decided to publicize the plight of bees and beekeepers through a series of free workshops for the public and new beekeepers. A summation of one of the workshops scheduled for the Central Coast is below.

BEEKEEPING SHORT COURSE

The Western Apicultural Society and the California Bee Company will sponsor a two-night short course on beginning beekeeping on Monday and Tuesday, March 15-16, from 6:30 to 8:30 p.m. each evening at the Lompoc or Santa Maria Public Library. Archie Mitchell, Director, Western Apicultural Society (WAS), envisions that workshops and short courses will help educate the public on what can be done to help honeybees survive. Mitchell said this class is not only for new beekeepers. It is designed for anyone with an interest in

18 February 2010

More Regional News ...

honeybees, their plight and what everyone can do to help the bees and beekeepers.

Mitchell explained, "this course is an opportunity for local beekeepers to share their knowledge and experiences with others who are interested in the decline of honey bees and what is being done to save the bees".

Jeremy Rose, President and CEO of the California Bee Company (CBC), will be the guest speaker. He is the author of *Beekeeping in Central and Southern Coastal California*. Rose, a graduate of Cal Poly SLO, started his commercial beekeeping business after several years as a hobby beekeeper. His company serves the local community by offering free swarm removal service for Central Coast cities including Lompoc, Santa Maria, and San Luis Obispo. Anyone interested in learning more about bees and bee keeping is invited to attend.

The course covers a variety of topics including the basics of beekeeping and equipment, how to set up an apiary and what bees and beekeepers need to survive in today's environment. The class will include a honey tasting table. It is free and open to the public. Persons may call (805) 291-3279 for more information or to make reservations for the class.

British Columbia

Ian Farber, Director

The Day of the Honey Bee, May 29, 2010, has been finalized on the provincial level by BCHPA 2nd Vice-President, Allen Garr. An official government proclamation has been created. This recognition of the importance of the honey bee in pollination and agriculture will also take place at the local government level in many jurisdictions in B.C. Hopefully, this recognition by our government will raise public awareness on the value of our honey bees and become an annual event.

Early season losses have varied from mild to severe across the province this winter. In many regions our bees were able to build up good honey stores in the fall. A period of unseasonably cold weather arrived in early December. In contrast, January and early February was very mild providing bees the opportunity for winter cleansing flights in most areas. As a result concerns are that supplemental feeding will be needed this spring. Low winter precipitation in the semi-arid interior and a lack of stored water may negatively impact farmers and their alfalfa crops this summer, which will not be helpful to the bees. The 2009 provincial average honey yield was 63 lbs per colony, down from the long-term average of 71 lbs, due in part to very dry or drought conditions in many areas.

Due to large winter losses some Vancouver Island beekeepers are planning to import packages very early in the beekeeping season with a view to splitting them later in the spring. There will be a strong demand for nucs this season.

There has been an ongoing interest from people wishing to

become beekeepers over the past few years and this trend is continuing. There are a number of beekeeping courses being planned for this spring. The BCHPA has formed a committee to standardize an introductory beekeeping course for the province in order to provide a minimum level of course content. There continues to be a strong consumer demand for a safe, local honey.

The BCHPA is sponsoring three IPM courses this March and May and two queen rearing courses in April and June as a way of providing hands on instruction to novice and seasoned beekeepers alike.

The provincial apiculture branch will be able to continue with free inspection services but at a reduced level. No longer are individual beekeepers assured of inspections on request. Emphasis is now placed on larger scale issues with time being provided for instruction at field days and courses. Budget reductions have affected many areas of government services in BC.

Washington

Jim Bach

The Washington State Beekeepers Association (WSBA) held their 2009 conference jointly with Oregon in Seaside, Oregon. (See the WSBA newsletter on the website www.wasba.org.) The 2010 joint conferences will also be held in Seaside, December 2 - 4.

The newsletter also discusses the Washington State University (WSU) bee research program led by Drs. Steve Sheppard and Tim Lawrence in cooperation with Sue Cobey at the UC Davis, California campus and four students. Included is Dr. Mike Burgett's 2009 Pacific NW Pollination Economics Survey with the trends in Northwest beekeeping data from 1986 to 2009.

The state Apiary Advisory Committee (AAC) will meet jointly with the WSBA Executive Board on February 27 at 10:00 in the Bar 14 Restaurant, Ellensburg. The Director of the WSDA has accepted AAC Chair Eric Olson's invitation to attend. Reports from participants, discussion of the condition of the industry, the WSDA apiary registration fee account and research funding at WSU will be discussed.

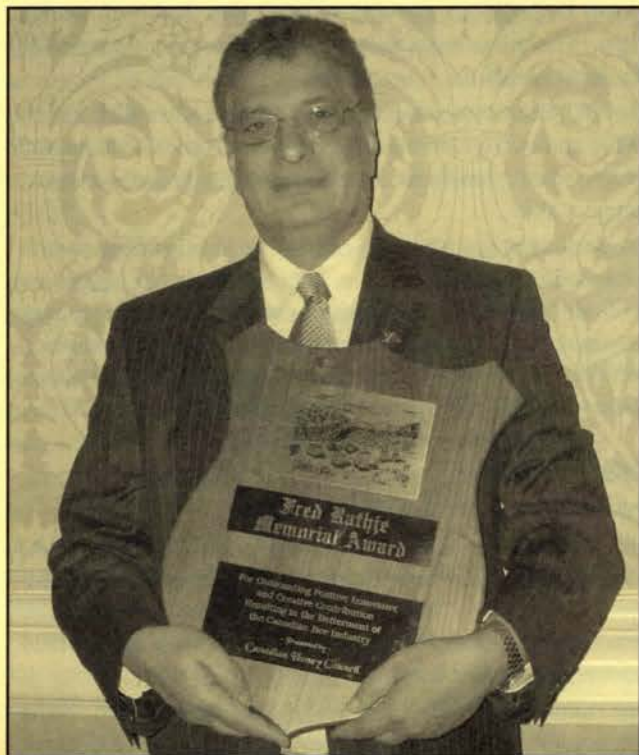
Arizona

Interested in organic beekeeping? The 3rd meeting for an American association of beekeepers into organic beekeeping - interested in clean, sustainable beekeeping with ZERO treatments and getting off the artificial feeds and artificial inbreeding parameter -- will be held in Oracle, Arizona at the YMCA Triangle Y Ranch Camp and Retreat Center 5 - 7 March 2010.

Cost is \$150 which covers meals, accommodation and conference. For general information contact Keith Malone (Alaska) 907-688-0588, and Ramona/Dean at 978-407-3934 or go to <http://groups.yahoo.com/group/organicbeekeepers/>.

Fred Rathje Award for Contributions to Canadian Beekeeping

By Heather Clay, writing in the Canadian Honey Council 'Hivelights'



The Fred Rathje Award is presented annually by the Canadian Honey Council (CHC) to a person who has made a significant, positive contribution for the betterment of the Canadian honey bee industry. At the CHC annual meeting, held this January in Orlando, Florida (in conjunction with the Canadian Association of Professional Apiculturists and the American Beekeeping Federation), Dr. Medhat Nasr received this prestigious award.

Dr. Nasr is a PhD graduate of the University of California, Davis, where he gained experience in commercial beekeeping, queen breeding and instrumental insemination.

His first position after arriving in Canada in 1990 was as a research assistant at the University of Guelph. Three years later, he accepted a position as Tech Transfer Apiculturist for the Ontario Beekeepers' Association. In 2000, he joined the team at Rutgers University in New Jersey as an Assistant Professor in Entomology and began an integrated pest management program for beekeepers in the mid-Atlantic states. He returned to Canada in 2002 to accept the position of Provincial Apiculturist for Alberta.

His passion for apiculture and dedicated research has resulted in approval of formic acid for our industry, recommendations for oxalic acid in the Canadian climate, and the establishment of a successful tech transfer program in Ontario that has become the

envy of other provinces. Medhat won the Award of Excellence for Research and Technology Development from the Ontario Ministry of the Environment in 1998, for development of the Integrated Pest Management (IPM) program. His belief in IPM results in top speakers from the research world being brought to Edmonton, Alberta, each year for an IPM Conference.

In addition to his work with Alberta Agriculture, Medhat is Vice-President of the Canadian Association of Professional Apiculturists, a member of the Canadian Honey Council Hive Health Committee, and works closely with other apiculture research institutes, commercial and hobby beekeepers in Canada and the USA. He was recently awarded the Distinguished Achievement Award by the Alberta Beekeepers Association.

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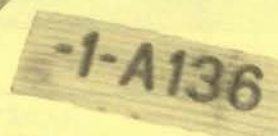


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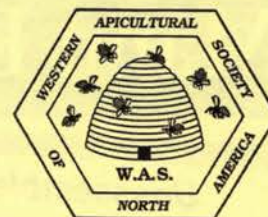


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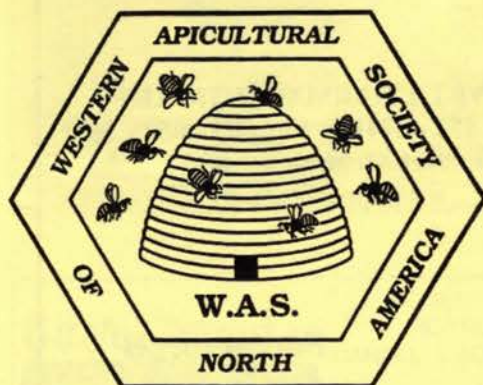


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