

The Bee Cause



Volume 10, Issue 4

April 2013

- Next general meeting is 7:30 Tuesday, **April 9th** at the **River Heights Community Centre, 1370 Grosvenor Ave., Winnipeg.**
- (in room right off main-door)

Speaker: David Ostermann
"Getting Ready for Spring"

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Bee-ing Smart: Regulators Must Distinguish Activists' Bad Dreams From Good Evidence

Important technologies commonly face opposition from various quarters – often from vested interests, societal Chicken Littles or overly precautionary regulators. Examples include vaccination, fluoridation of water, and the genetic engineering of crop plants. Another recent example is the targeting of a relatively new class of insecticides called neonicotinoids that are being blamed in Europe, and increasingly in the United States, for bee keepers' difficulties in keeping their colonies healthy. Anti-pesticide activists have been arguing for years for a ban on neonicotinoids, which are

chemically related to nicotine, although they are an important innovation that can lower the amount of pesticide applied 10- to 20-fold. The products are often applied directly to seeds, which causes the chemical to be contained within the growing plant and protects it from the predation of insect pests. Treating seeds in this way enables farmers to use lower doses of insecticide than spraying. Activists scored a minor "success" in January when the European Food Safety Authority (EFSA) released a report that identified neonicotinoids as a possible cause of a decline in bee populations. But the analysis had obvious flaws. Rather than a comprehensive evaluation of all available research, EFSA cherry-picked the studies and proceeded to their conclusion in spite of an acknowledged gap in not only the data they analyzed but their understanding of it. The process seemed as though those involved in it – who were under intense political pressure to perform a quick risk assessment – began with preconceived notions about their conclusions. Global bee populations have, indeed, struggled in recent years, but although researchers point to a number of possible causes, neonicotinoids are perhaps the *least* likely culprit. The bee protection organization COLOSS (Prevention of honey bee Colony LOSSes) compared surveys of honey bee losses in 2009 and 2010 in Europe with the rates of neonicotinoid application in the

same geographical areas (in a separate survey). They found no correlation. The main suspects for causing bee deaths are viruses and other pests acting in tandem, especially the aptly named *Varroa destructor* mite. These parasites attach to honeybees and appear to be "both a disseminator and activator of a number of bee viruses," according to a report on honeybee disease in Europe by the Food and Environment Research Agency. In countries experiencing bee decline, *Varroa* is a feared and growing presence among beekeepers – even if neonicotinoids are absent. For example, in upland areas of Switzerland where neonicotinoids are not used, bee colony populations are under significant pressure from the mites; and in France, declines in the bee population in mountainous areas are similar to those on agricultural land (although neonicotinoids are commonly used in the latter but not in the former). Conversely, where *Varroa* mites are not present, bee populations thrive even when neonicotinoids are heavily used. For example, Australia, which is currently *Varroa*-free, boasts a thriving bee population in spite of widespread use of neonicotinoids. In fact, their bees are so healthy that Australian beekeepers export queen bees and nucleus hives to countries with declining populations. The problem with many of the studies that supposedly establish a link between neonicotinoids and bee deaths is that they fail to simulate the exposure levels bees are likely to encounter in the wild. "The doses the bees are exposed to [in lab studies] are far (continued on pg 6)

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Presidents Comments -- April 2013

Checking the snow cover in and around the bee yard today, I feel a little envious of Charles Polcyn right now. He is hiking the mountain trails in Peru with his family, while we're "hiking" snow away from our bee hives in Manitoba. Hopefully it is OK to be envious of the warmer climate though.

Beekeepers usually feed outdoor colonies by mid March. With the last storm dropping 15 cm in Eastern Manitoba and about 20 or more in the West, normal spring feeding is delayed. Preliminary feedback from some members indicates outdoor wintered colonies are suffering losses, whereas indoor colonies seem to be faring much better. Perhaps too early to determine the cause, as recent March snow fall, along with minus 20 degree nights, postponed checking outdoor hives for food and pollen reserves. Normally outdoor colonies have received a pail of feed by this time. In addition, hives may be surrounded by about 24 inches or more of snow, making access difficult.

Some members are reporting bee cleansing flights during the last week in March as an encouraging sign of life. Others report cleaning up dead outs that have small clusters while adjacent frames still had food. While another discovered a mouse had been lurching on the stores in the bottom super while the bees moved up to the top super and died from stress.

In a more positive note, RRAA appreciates a new logo designed to celebrate our 50th year. Alex Lloyd, RRAA member recently retiring from the forces, had a colleague, Kent Lilebo prepare several designs for our club to choose from. Thanks to Kent, we now have the design files to use on merchandise. Executive members Art Quanbury and John Russell will be seeking quotes for things like Shirts, Caps and other items for our club.

Meanwhile, plans continue for our 50th celebrations on Friday April 26, as indicated elsewhere in this newsletter. Plus we look forward to the next meeting where David Ostermann will talk about Spring Management and following that, members question and answer session.

See you then!

Jim Campbell for the vacationing Charles Polcyn

Minutes of the RRAA General Meeting River Heights Community Club—March 12, 2013

Chair: Charles Polcyn
Recording Secretary: Art Quanbury

Minutes of February meeting:
Moved: Chris Argiriou and seconded Lance Waldner that the February 12 minutes be accepted. Carried.

Business Arising
Logo. The logo was accepted at the January meeting and plans are underway to use it for promotional purposes.

Correspondence
Charles reported that he and Jim made a presentation at city Hall re: keeping bees in the city. Two councillors voted for and two against so the proposal will not be carried forward to the council as a whole. The process will have to be initiated all over again. At the same time, the city is dependent on apiarists to deal with swarms in the city because the pest control companies like Poulin's will not destroy a swarm of bees since they are an endangered species.

Treasurer's Report
John Speers reported that the association has \$3200.00 in the bank. \$2000.00 has been given to the university to support projects on bee research. About one half of the members have renewed their memberships so far.

New Business
MBA Report: Jim Campbell reported briefly on the recent conference held last month. The presence of the small hive beetle in one part of southern Manitoba was a major topic of discussion. One possible outcome is a joint activity between MBA and North Dakota Beekeepers Association. It would be held possibly at the peace gardens and could take the form of a field day or symposium.

Charles also presented information on queen size. A minimum weight for a good queen (fat queen) is 110 mg.

North Dakota has 220,000 hives compared to 80,000 in Manitoba. Many are located close to the border. In order to finance inspection of the hives each beekeeper pays \$5.00 plus an amount per hive. In Manitoba there may not be sufficient funds to permit inspection of apiary operations this year and some form of funding similar to what exists in North Dakota may be needed.

Mary Louise Chown brought some honey to sample from Cozumel and told a folktale about how honey came to be.

Guest Speaker – Waldemar Damert
Waldemar gave a detailed talk on his queen rearing system that he has refined over many years. While it is not possible to describe the details in the minutes he did say that all the equipment he uses is available from the Co-op store for about \$150.00. By rearing his own queens Waldemar is able to develop a bee population that is most successful for him. The important aspects of a successful hive are a three year survival life with a production of 250 pounds of honey per year from each hive. He has also been able to maintain his winter losses at 3%. He winters his bees outside with a 2 inch foam insulation cover (top, sides and bottom).

There are two openings in the front (top and bottom) 3 "x ½". This allows for a flow of air through the hive to prevent moisture build-up.

Member Poll for Interest in T-shirts and ball caps.

The poll showed that about 12 members would be interested in purchasing T-shirts with our logo for about \$17.00 there was a request to include some lady's styled shirts as well as the regular T shirt. About 12 members also showed an interest in a ball cap with the logo on it.

Draw Winners	
Nelson Szwaluk	Lunch bag and honey
Tim Kennedy	Lunch bag and honey
Doug Beckingham	Screwdriver set
John Speer	Screwdriver set
Mike Grysiuk	Carry bag
Chris Argiriou	Lunch bag and Cuban honey
Ken Rows	Lunch bag and artificial honey
Adelle Kennedy	Honey based Shampoo
Albert Anderson	Toque
Keith Bamford	Pail and cap
John Russell	Pail and cap

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Red River Apiarists' Association Executive Meeting, Sals Restaurant, Pembina Hwy March 12, 2013

Present: Charles Polcyn, Armand St. Hilaire, Art Quanbury (recording secretary), Jim Campbell, John Speers, John Russell

Logo and Promotional items

A digital file (jpeg) of the logo needs to be obtained from Alex Lloyd so it can be used for printing on T- shirts, caps, etc. Jim will contact Alex and obtain the file. One quote for T-shirts has been obtained from Expressions on Pembina Hwy. They have a minimum order of 26 shirts and cost would be \$17.00 for full colour or \$9.50 for one colour. Caps would cost \$120.00 for a one time set-up for embroidery and \$12.00 each with a minimum of 24 caps. Other items include pull-over hoodies (\$14.00), zip-up hoodies (\$17.00) sweat shirt (\$10.00) all would have logo on left front. No information was provided for minimum orders of these items. Two weeks delivery time. No mention of security/order deposit.

Two more quotes on these items are needed. Art Quanbury and John Russell will obtain quotes. At the meeting tonight Charles will ask for a show of hands to get numbers on T-shirts and ball caps that would be purchased.

50th Anniversary Celebration

This event will take place on April 26th at the River Heights community Club. (same room as for our regular meetings). Jim has already reserved this space. It was suggested that a social platter(s) could be purchased from Miller's Meats with a selection of cold meats and cheeses. There could also be an additional potluck with members bringing other items. It was discussed whether there should be a charge (\$10.00) or a suggested donation to help defray costs. There might be about 50 people in attendance. John Russell agreed to order a cake from Sobey's of the appropriate size (maybe full slab) with appropriate writing and design. A discussion was held on whether to have a cash bar. This would require a liquor license and considerably more work and organization.

It was decided to ask the members tonight if they wanted a cash bar or not.

Meeting Plans for the Year

April meeting. Ask David Ostermann to provide a shorter than usual presentation on getting ready for the season so as to leave time for Q. and A. from members on what they do for preparation. (not sure who was to approach David Charles, Jim?)

May Meeting. Two topics were discussed. One was a presentation/discussion on swarming and the other was a presentation by Ron Rudiak on Lyme disease.

Day of the Honey Bee. Will be held on May 25. This event will be similar to other years. Jim will contact Forks Market for space The MBA has sent the provincial government a request to proclaim May 29th the Day of the Honey Bee. Armand will arrange to get the display material from the University for that day (25th). The display will be kept simple. Jim agreed to get his observation hive to the University and Charles will pick up material from the University. Jim will arrange for liability insurance for the event.

June Field Day. Plan is to hold it on June 20th at the apiary of Phil Veldhuis in Starbuck. Charles will contact Phil about holding the event there. Food for the event could be from Danny's Whole Hog. John Russell will contact Danny's about costs and other details. There would be a per head charge for the food. **NOTE:** Plans changed after the meeting as MBA will have Field Day at Ash Apiaries, Gilbert Plains on June 20, thus RRAA will join this event and request Phil for an event on Thur. June 27 or preferably Sat. June 29.

September Meeting. Topics will be various aspects of fall work including fall feeding, and wintering preparation.

Honey Days & Cultural Days. Will be held on Sept. 27, 28, 29. This will be similar to last year's event. More details to follow as the time gets closer.

October Meeting. The topic to be presented was inside vs. outside wintering.

November Meeting. This is our windup meeting for the year and will include an extended social time and a display and presentation of members' gadgets and other nifty and useful bits of information.

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MBA Report April 2013

Jim Campbell, MBA Representative

Manitoba Beekeepers' Association are continuing with improvements to the Bee Winter Mortality Insurance Program.

At a meeting with the Manitoba Agricultural Services Corporation on March 6, Allan Campbell, MBA President discussed several areas needing attention. MASC Board and Staff responded favourably by agreeing to look at advancing 50% of indemnity while finalizing

claims, in order to help producers purchase replacement bees. In addition they confirmed tracking individual history which could lead to future reductions in deductible from current 30% levels, plus recognized need to have more indemnity examples on the web. There was also some discussion on the Manitoba Farm Products Marketing Council reviewing applications for MBA Regulation compliance.

MBA reviewed its' current regulations and agreed to update some older versions by fall time. The ones covering the fees for over 1000 colonies will need to reflect the increased fees from Canadian Honey Council. The minimum price regulation is from 1986 and thus requires attention.

In response to a survey in early March, directors will be revising the program for the Annual Meeting. This fall the reports will be shortened, and there may be a special speaker to talk about managing their own operation.

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Letter to the Editor,

Dear Sir,

Readers may have noticed a Public Announcement in the advertising section for the last two weeks (but not this week so check last week's edition) by the Red River Weed Control. This Public Announcement informs us that they intend to spray all sorts of highly poisonous chemicals on road allowances in the area and invites the public to send objections.

Two of these chemicals (Tordon 22K and Tordon 101) are especially dangerous. One part per billion is enough to kill fish. That is equivalent of one drip in a swimming pool - and the chemical stays active in the soil for at least 5 years.

It is strictly forbidden to spray this product in ditches, but the Public Announcement states that it will be sprayed on roadsides and we all know that roadsides are ditches. Even if they spray the roadside ditches during the summer, the chemical lasts 5 years and next year those same ditches will likely be full of water running to the rivers and lakes.

We have to stop this madness of polluting our environment. I know many people that read letters to the editor section are concerned citizens and letter writers themselves so please write to Manitoba Conservation, Pesticide Section, Suite 160, 123 Main Street, Winnipeg R3C 1A5 or email to krystal.penner@gov.mb.ca expressing your objections. .

Thank you, David Dawson, in La Broquerie.



Editor's Note

by Ken Rows

Like most of you spring bee health is my number one issue. Dead outs I have and for those nosema has been the cause for 30 % while the others have been lack of feed (too light going into winter or fall being too mild they used up large part of their stores. But in the odd two I had 8 frames of honey feed and pollen with lack of bees. I surmise mite forced evacuation even though I treated and they were very strong doubles.

Wow I am into pollen supplemental feeding and cleaning up. I was into out door management feed and treating last year at this time.

You will note I have added another article on pollen preferences in bees showing it is not usually those preferences of the beekeeper. The willows are beginning to break leaf bud here in Eastern Manitoba so expect pollen sources in the next couple of weeks.

I have also added to this newsletter David Dawson's concern about provincial weed control chemical spray notice. Why, because it is harmful but more so because we are asked to give our point of view. It seems to me applicators are encouraged politically to use control compounds but are willing to listen and act on the publics concerns. May be student mowers would be better.

April 26th is an RRAA 50th Anniversary social see you there.

2013 is a RED year for queen marking!

CLASSIFIEDS

1 For Sale: Complete honey extracting line 48 Frame extractor, uncapping table, sump, tank, pump, pipes. **Contact Lance at 204-712-6783, lancewld@gmail.com**

2 For Sale: 20 Supers (used) for sale; \$25 each; two (2) for \$40 p/u; or delivery extra. Frames (used) \$6.00 each. Bee pollen for sale. **Call 204 878-4353 Glenn & Margaret or margandg@mymts.net**

3 For Sale: Just a quick note saying that we have approx. 200 supers of drawn plastic comb for sale @ \$32 each. Can deliver to Winnipeg. Supers are in good to average shape and all the frames are fully drawn out plastic frames. We have no AFB history. **Paul Gregory paul@interlakeforageseeds.com**

4 For Sale: 50 frame Maxant extractor for sale with a brand new spare fibre drive wheel. I was hoping to get \$2000 for it OBO contact : **wrobertson86@outlook.com -Wade Robertson**

5 Wanted: Looking for good used Cowen type hori-

The Bee Cause is the official publication of the Red River Apiarists' Association for distribution to its members and their colleagues in the beekeeping industry. It is published eight times a year on a monthly basis except December and the summer months of June, July, and August when membership meetings do not occur.

Articles can be best submitted in word documents as email attachments. Though they may be edited for spelling and basic grammar, no changes will be made to their contents, message and opinions. They are those of their originator and not of the Red River Apiarist Association.

Deadline for any submission to this newsletter is the second Saturday preceding the membership meeting to allow for publishing and mailing delays. Regular membership meetings are normally scheduled 7:30 PM on the second Tuesday of every month at the River Heights Community Centre located at 1370 Grosvenor Avenue in Winnipeg except the months as noted above.

The Red River Apiarists' Association, formed in 1963, represents the beekeepers of the Red River Valley and environs in southern Manitoba. The association provides a forum for the promotion of sound beekeeping practices through education, networking opportunities, meetings, field days, workshops, presentations by local apicultural experts, as well as the dissemination of this monthly newsletter.

We are on the web!

www.beekeepingmanitoba.com

zontal 28 to 60 frame extractor, plus sump and pump. Call **Don Friesen, Rosenfeld, at 204-746-8863 or e-mail stonefield71@hotmail.com**

6 For Sale: 20 Pail feeders with screened lids, in good condition. Contact: **Lance 204-712-6783, lancewld@gmail.**

7 Wanted: 2 or 4 frame stainless steel extractor, crank or motorized contact Dennis Ross at 204 878-2924 or rosskr@mymts.net

8 For Sale: 12 hive top feeders, 19 queen excluders, 4 super extractor. Contact Doug at Tel 757-4694 or doug.henry1@gmail.com

9. For Sale: hives 1 super with equipment and bees - \$200. 5 frame nucs - \$150, 4 frame nucs \$125, 3 frame nucs \$120. available May 15 depending on weather. **contact Dennis Ross 878-2924 e-mail rosskr@mymts.net**

10. For Sale: custom made Bee-gloves \$17. **Contact ken Fehler 204-667-9013**

11 For Sale: Strong 4 frame nucs, with laying queens. Will accommodate 3 or 5 frame nucs. Available approximately May 15 weather permitting. Ph **Chris Argiriou 296-4848 (cell) or 885-4588 (home).**

12 For Sale: Man Lake SS Extractor 9/18 frame. Asking \$1300, used twice. **Contact Janice at 204-895-9667.**

13 For Sale: Bee Equipment, Nucs, Plastic Feeder Frames, Box & Frame Parts. Contact **Charles Polcyn** at (204) 284-7064 or by Email- charles_polcyn@ymail.com

14 For Sale: 150 single hives with Manitoba queens, insulated tops & screened bottoms, 400 honey supers with drawn comb on plastic foundation, ~ 200 - 21/2 gallon feeder pails, numerous 4 frame nuc boxes and queen excluders, **contact Vern Derraugh 204-755-2250 or Derrco@highspeed.com**

14 For Sale: 4 frame Splits end of May \$150; **Queens** beginning of June \$25 own 2013 Stock. plies pre-order for availability (weather permitting). Contact Waldemar Damert @ 1204-755-2340 or 204-266-2276 or e-mail wdamert@yahoo.ca

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(from pg 1) above what a realistic field dose exposure would be,” says Dr. Cynthia Scott-Dupree, who headed a field study in Ontario, Canada that compared hives exposed to neonicotinoids with hives that were not. She and her colleagues measured honey production, bee deaths, weight gain of colonies while foraging on canola, and insecticide residue on bees and in pollen, nectar, beeswax and honey. No link between insecticidal seed treatments and bee health was found.

None of this real-world evidence has dissuaded environmental activists from calling for the immediate ban of these insecticides – in spite of the fact that there are often no good alternatives and a ban would cause devastating losses to agriculture. And EU regulatory authorities – who are often readily influenced by activists – have called for Draconian restrictions on neonicotinoids; in April the 27 countries of the EU will vote on whether to accept their recommendations. Banning neonicotinoids in spite of the persuasive evidence of their safety to bees would be both unwise and dangerous. According to analyses performed by seed companies, in the absence of neonicotinoid seed treatment, crop yields in Europe could fall, with significant negative impacts on the EU economy and jobs.

Neither the scientific evidence nor the real-world experience with neonicotinoid seed treatments supports a ban. Before they inflict yet another avoidable shock on their already struggling agricultural production, European regulators should “bee smart,” consult their Australian counterparts, and heed the data.

Henry I. Miller is the Robert Wesson Fellow in Scientific Philosophy and Public Policy at Stanford University’s Hoover Institution and a fellow at the Competitive Enterprise Institute. A physician and molecular biologist, he was the founding director of the Office of Biotechnology at the FDA.

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Winter Preparation Starts in the Spring David Ostermann

Beekeepers have more to do with less time – more dead-outs, more hives/splits, more replacement queens, more monitoring and treating, etc. – this is the trend these days. For some this has resulted in not being able to do everything or delaying activities to later in the season. Unfortunately this can be problematic, particularly when varroa levels are allowed to increase. Higher varroa levels can not only affect honey production, but also winter colony survival.

Spring is one of the only two windows we really have to get our bees healthy, the other being fall. This may be changing with new products and options of cultural control, but spring and fall are still the critical treatment times for most producers. This is obviously well known so I don’t want to harp on it. But I do want to focus on why it’s so important to pay attention to varroa in both spring and fall these days and discuss how this has changed over the years.

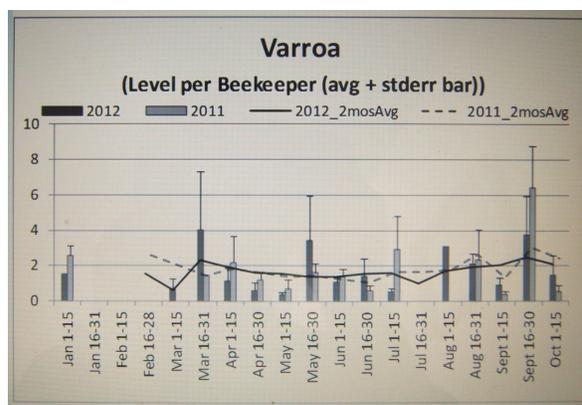


Fig. 1. Figure shows the varroa levels of samples processed in the Apiculture Diagnostics Lab in 2011 and 2012. The levels generally did not increase from 2011 to 2012, but varroa control remains a top priority.

For a quick historical perspective on varroa control products, let’s focus on the ‘hard synthetic’ chemicals, when organic acids were less popular and there were fewer registered products. If you remember (and it seems so long ago) there was a time when 1 varroa treatment was probably adequate for up to 2 years! Remember CheckMite before resistance? Your levels were certainly high after 2 years without treatment, but your bees were probably ok. This meant you could treat spring or summer, either/or, and you didn’t even necessarily have to treat the following year. Wow!! Then, as we started seeing resistance to Apistan and CheckMite, varroa levels were increasing and treatment with a product like Apivar was probably sufficient for up to 1 year. How long a product is effective depends on many factors, including treatment duration, treatment efficacy, even residual activity in the hive, among other things. So making these comparisons is not always apples to apples. But it’s important to know where we’ve come from, to help understand where we are, and where we may be going.

Where we are – is having to treat for varroa more frequently than in the past, while using and rotating different products. Where we may be going – nobody knows, but I suspect there will be no “silver bullet” any time soon. Instead, our ability to monitor levels, assess risk and use the right product at the right time will continue to be our best ‘tool’ against varroa. And this (continued on pg 7)

(from pg 6) challenge for all honey producers should continue to be supportive of the price of honey!

When we hear about major winter mortality related to varroa, sometimes the beekeeper says “I wasn’t able to treat in the spring but I treated in the fall”, or “the hives looked good in the summer so I didn’t do a fall treatment”. Let’s consider these scenarios.

Why a fall treatment for varroa may not save your bees – Varroa is a challenge for a number of reasons including virus promotion. Deformed wing virus (DWV) is associated with higher varroa levels, and it’s believed viruses like DWV can linger and hurt bees even after varroa is controlled. Therefore, if going into the fall with higher varroa levels, even if there is ideal control with an aggressive fall treatment, the virus levels in the hive and damage to the bees may already put colonies on a course for higher winter mortality.

Why a summer assessment of colony size and honey production may not be a good indicator of health to survive winter – If a colony is strong and producing a lot of honey that says more about the current state of health than it does about its ability to survive the upcoming winter. This is because strong colonies can favour varroa development which can lead to more damage as the bee season goes on. The damage becomes more pronounced in the fall and winter after a long season of brood production and mite population growth, a reduction in brood and increase in mite phoresy, and at a time when forage is diminished, bees may be robbing and/or otherwise stressed.



Fig. 2. The bee at the centre has deformed wings which is associated with varroa mite infestation. Bees with deformed wings can be quite obvious to see, yet once you start seeing them, even a small number of bees per hive, it’s likely that varroa and/or the virus are at damaging levels (Photo by D. Ostermann).

Maintaining low levels of varroa throughout the year is ideal. Nowadays this is understandably more difficult because of having to treat for varroa more frequently, while using and rotating different products. Not taking advantage of a treatment season or otherwise not staying on top of varroa in the spring, can allow levels to build up which can be risky for the rest of the season. That’s why I feel winter preparation really starts in the spring!

Please note this article focuses on varroa due to it continuing to be a factor when losses are high, but there are many factors

that affect winter mortality, including queen health, winter conditions, starvation, etc. If you have any questions contact David at 204-945-3861 (Winnipeg).

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Issues raised at the Manitoba Beekeepers Annual Convention March 1 & 2 in Winnipeg..

Open Barrel feeding of pollen supplement and antibiotics have come under opposition by the Manitoba beekeepers as this type of feeding colonies is an ineffective way to administer controlled doses of antibiotic and other medications, and may result in unintended consequences to neighbouring beekeepers, such as unregulated uptake of medication and syrup into hive boxes still to be extracted, resulting in potential honey contamination,.

APIARY SITE LIST The Manitoba beekeepers also feel a need for all beekeepers to take responsibility in the process of protecting Honey Bees when pesticide application is being done, and that the pesticide applicators need an easily accessible resource to be able to check for beehives in the area of an application, encouraging the Manitoba Beekeepers executive or Manitoba Extension Apiarists to keep a voluntary up to date electronic map of hive locations with beekeeper contact information, which the applicators can access to prevent bee loss.

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**Lyme disease is no issue to take lightly!!
So we make it a No. 1 issue
for defensive Caution.**

Canadian Adverse Reaction Newsletter Volume 22 Issue 4 October 2012

Lyme disease test kits and limitations

Key points

Serologic test results are supplemental to the clinical diagnosis of Lyme disease and should not be the primary basis for making diagnostic or treatment decisions.

Lyme disease test kits have sensitivity and specificity limitations.

Health care professionals should be aware of these limitations and are encouraged to report suspected incidents, including false-positive and false-negative results, to Health Canada.

Lyme disease test kits are class II (IV being the highest risk class) in vitro diagnostic devices. The devices are intended for the detection of antibodies to *Borrelia burgdorferi* in human serum, plasma or cerebrospinal fluid.1 They are used to provide serologic evidence of *B. burgdorferi* exposure.1 Infection can result in dermatologic, neurologic, cardiac and musculoskeletal disorders.2 Serologic testing is the only standardized type of laboratory investigation available to support the clinical diagnosis of Lyme disease in North America.3 The public health agencies of Canada and the United States recommend a two-tiered approach for blood testing when Lyme disease is suspected.3–7 The first tier consists of an enzyme immunoassay, such as an enzyme-linked immunosorbent assay (ELISA), or an indirect immunofluorescent assay. If the result of first-tier testing is negative, the sample is reported (continued on pg 8)

(from pg 7) to be negative for antibodies to *B. burgdorferi* and is not tested further. If the result is positive or indeterminate, second-tier testing with a standardized Western blot is then performed.³⁻⁵

As of June 2012, Health Canada received one incident report of false-negative serologic test results for 24 patients that may have delayed treatment. Timely recognition of Lyme disease and treatment are imperative to facilitate recovery and prevent long-term sequelae.^{2,7,8} The currently available Lyme disease test kits have been found to have limitations of sensitivity and specificity, particularly when used on patients with acute infection, which is usually easily treated with antibiotics.^{7,9} Even when the conventional two-tiered testing approach is used, the sensitivity and specificity of the combined test results can be less than optimal.⁹⁻¹¹ In a comprehensive study of 280 serum samples from well-characterized Lyme disease patients, the sensitivity of the two-tiered approach was as low as 38% for the sera of patients who had erythema migrans during the acute phase and 67% during their convalescence after antimicrobial treatment.¹⁰ In late Lyme disease, the sensitivity increased to 87% for the sera of patients with early neuroborreliosis and to 97% for the sera of patients with Lyme arthritis.¹⁰ Many factors contribute to false negative or false-positive serologic test results for Lyme disease.^{1,7,9,11-14} In general, false-negative results have been attributed to (a) a slow antibody response early in the course of the disease, (b) genetic diversity of *B. burgdorferi* and (c) treatment with antibiotics. False-positive results have been attributed to (a) cross-reacting antibodies due to other conditions or infections and (b) the persistence of antibodies after disease resolution. Variability in serologic test results for Lyme disease may also be related to interlaboratory differences and lack of interassay standardization.^{9,13,14} In contrast to the known HIV serologic testing using the two-tiered algorithm to confirm diagnosis, the Lyme disease test kits are not designed to screen patients or to establish a clinical diagnosis.^{9,12} A positive test result does not necessarily indicate current infection with *B. burgdorferi*, and a negative result, especially early in the course of infection, does not exclude *B. burgdorferi* infection as the cause of illness.⁹⁻¹² Serologic test results should be used to support a clinical diagnosis of Lyme disease and should not be the primary basis for making diagnostic or treatment decisions.^{1,11} Diagnosis should be based on patient history, which includes symptoms and exposure to the tick vector, and physical findings.^{4,11,15} Health care professionals should be aware of the limitations of Lyme disease test kits and are encouraged to report suspected incidents, including false-positive and false-negative results, to Health Canada (www.hc-sc.gc.ca/dhp-mps/medeff/report-declaration/index-eng.php). Rana Filfil, PhD, Health Canada

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Special Addition by Ron Rudiak:

Hello Everyone:

I'll add a comment on this greater awareness of potentially fatal Lyme disease article.

Most areas in Canada and the US now have tick populations which carry *Borrelia burgdorferi* bacteria (Lyme disease) brought there by bird migrations. In North America several species of ticks act as the vector for infecting animals and humans alike, especially in the warm months of spring and early summer. Southern Manitoba is one of the known hot spots for Lyme. If treated quickly soon after the bite is received with antibiotics recommended by the CDC and Health Canada then an early infection should clear up.

However, if the infection goes unnoticed, which is quite common, until the infection becomes widespread in the body, then it is a totally different matter. Both CDC and Health Canada deny that chronic Lyme exists - but it then becomes difficult to treat and the patient continues to worsen (resulting debilitating (Cnt'd on pg 9)

(from pg 8) illness and ultimately death is often the result). If one wants to spend several hundred thousand dollars to receive treatment it is available in the US from a few private clinics.

Our Lyme support groups are working hard to get the Govt. of Manitoba (and each of the other provinces) to recognize and provide treatment for chronic LD (many months of an antibiotic cocktail provided intravenously). However, this disease unfortunately has become political in nature, on both sides of the border, which in itself reads like a mystery novel which is sad but it results in big pharma making tons of money and saves the US insurance companies from going broke.

I will print off a brochure on tick and bite recognizing and getting early treatment for our meeting in May and can have it available for our picnic. There is new pamphlet from Manitoba Health but it leaves out some important information which is really unfortunate. The govt. information says that it is hard to get, easy to recognize and treat. But don't you ever believe it!

The result of my having Lyme is that I've received no treatment on this side of the border and find that my body is in constant pain (muscles and joints) and my energy is often used up before lunch time. The list of people in the Province with chronic Lyme continues to grow.

I will attach the PDF from Health Canada, posted recently, which states that their approved test that everyone received was no good. At present there are only two labs in the US that provide tests that are quite reliable (IgeneX and Advanced Medical Labs) but be prepared to drop 5 - 600 dollars for each test.

Stay well, Ron Rudiak

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ScienceDaily (Apr. 10, 2007) — Though many spring flowers have bright advertisements offering sweet rewards to honeybees, some common flowers have not-so-sweet or even toxic nectars.

ScienceDaily (Dec. 22, 2010) — Honeybees can learn to avoid nectar containing natural plant toxins but will eat it when there is no alternative, scientists at Newcastle University have found.

This means that in areas dominated by these so called 'toxic plants' - such as almond or apple orchards -- bees struggle to find an alternative food source and so are forced to eat toxic nectar.

With honeybee populations already under stress, the Newcastle University team believe these toxin-laden nectars could, in some cases, be a factor affecting colony health.

It has long been known that while most plants reward pollinators for visiting their flowers, some offer nectar that is poisonous.

Honeybees -- vital for crop pollination -- may be susceptible to some of these nectar toxins and beekeepers and scientists have long recognized they can be poisoned by the nectar.

Now researchers in the Honeybee Lab at Newcastle University have shown for the first time that the honeybee can learn to avoid nectar containing toxins. The study showed that when bees accidentally ate nectar that made them sick, they subsequently avoided the smell of the toxic flowers.

Publishing her research in the academic journal *Current Biology*, Dr Jeri Wright, director of the Newcastle University Honeybee Lab, said that understanding how honeybees learn to detect these toxins

could ultimately help us to breed plants that don't produce them and protect the honeybees.

"Avoiding toxins in food is as important as obtaining nutrition," explains Dr Wright. "What we have shown here is that -- like humans -- bees are not only able to taste toxins but are also capable of learning to avoid flowers with nectar that made them feel unwell after eating it.

"The problem is that despite this, bees could be feeding on 'toxic' nectar because there is little else around -- for example, in a large orchard where they have been brought in specially to pollinate it. At a time when populations are already vulnerable and under stress, this could be crucial to their survival."

The Newcastle University Honeybee lab is one of only a handful in the UK and is playing a key role in researching the demise of the UK's honeybee populations.

In this latest research, the team found two distinct pathways in which the bees were learning to avoid the toxic nectar; the first through taste and the second by learning after the toxic nectar had been eaten.

This second pathway was triggered by the chemical serotonin -- a neurochemical that could also play a role in this form of learning in humans.

Dr Wright said the next step was to try to understand how the consumption of toxic nectar influences colony health in agricultural settings.

"It makes absolutely no sense for plants to poison the pollinators they rely on for their survival," she explains. "It may be the toxins are there to protect the plants against nectar robbery by ants -- we just don't know.

"What we do know is there are a number of plant species in the UK which produce toxin-laden nectar but if there is little else around it seems the honeybees are being forced to continue to feed from these plants.

"This could well be having a major impact on the UK's honeybees and we need to understand this if we are going to protect them."

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DAY OF THE HONEY BEE IN 2013

WHEN: Takes place Saturday 25 May 2013, 9:30 a.m. until 6:30 p.m.

WHERE: Forks Market, Winnipeg; Centre Court (Centre Aisle-West end).

WHAT: Celebrate the Importance of Honey Bee for pollination (and the foods we eat).

WHO: Food consumers, families, gardeners, farmers, students and fruit growers are invited

WHY: To see and learn which foods, fruits, vegetables and flowers depend on pollinators.

The Manitoba Beekeepers' Association (MBA) plan to request the Manitoba Provincial Government and Rural Municipalities (St Andrews, Rosser, & Rockwood, Gimli, and Whitemouth) around Winnipeg proclaim May 29 as The Day of the Bee, with celebrations taking place the Saturday prior. Members of the Red River Apiarists' Association staffed the display at The Forks.

Theme- "*Honey Bees - Good for Us*".

Although the official Bee Day is Wednesday May 29, the public celebration will take place on Saturday 25 May, 2012, since this is more convenient for visitors to attend. The reasons for the public awareness campaign are described in previous years' reports as indicated below:

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Manitoba Beekeepers honour

Two distinguish individuals of the Manitoba Beekeeping Association (MBA) honoured at the MBA March 2013 Convention.

1—**Honorary Life Member Award to Keith Lloyd** of McGregor Wax Works

2 — **Bee Hive Award to Ron Rudiak** of Sunny Brook Apiaries



RRAA Celebrating 50 Years

Red River Apiarists' Association is inviting all current and former members to a social evening on **Friday April 26, 2013**. This event will celebrate our 50th Anniversary!

The Anniversary Celebration is planned for **7:00 p.m.** at our regular meeting room on the main floor River Heights Community Centre, 1370 Grosvenor Ave, Winnipeg.



Orange-Ginger Parfait - Marg Smith

Ingredients:

- 2 Large oranges
- 1 Tbsp honey
- 1 Tbsp ground ginger
- 2 cups plain, low fat, Greek Yogurt
- 4 tsp slivered almonds
- 4 tsp mint leaves

Instructions:

Peel oranges and segment over a small bowl. Cut segments in half and squeeze membrane over bowl to gather as much juice as you can. Combine orange segments, honey, juice and ginger. Toss well to combine. Spoon 1/2 cup Yogurt into each dish and top with 1/4 of each of the remaining ingredients. Serves 4.

To know is to try this nutritious delight.

**Red River Apiarists' Association
Winnipeg, Manitoba
2013 MEMBERSHIP APPLICATION**

I apply for membership in the Red River Apiarists' Association. Membership includes one-year subscription to the newsletter "The Bee Cause" (8 issues)- \$25.00.

Name _____ Tel. _____

Address _____

City _____ Prov. _____ Postal Code _____

E-mail address _____

Signature _____

New Member [] Renewal [] Student [] [free 1st year]

Other. Please specify. _____

This completed form may be brought to the meeting or mailed with your cheque to :

John Speer, RRAA Treasurer
Box 16, Group 555. Winnipeg, Manitoba R2C 2Z2.

Make cheques payable to Red River Apiarists' Association.

Please do not send cash in the mail., MB R2C 2Z2