

Next meeting:

May 14th, 2019

Elmwood Legion 920 Nairn Ave. Wpg, Mb

*Novice Group meets at 6:45 pm **Downstairs***

Main Meeting: starts at 7:30 pm

Guest Speaker:

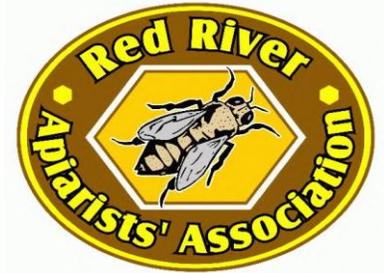
Dr. Rob Currie

Topic: Varroa and the Viruses They Vector.

Red River Apiarists' Association

56 Years

TeBeGae



2019 Issue 5

May 2019

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The Prairie Crocus is an early wild ground-flower sought out by this Carnolian strain Honey Bee. -Photograph by Jim Campbell



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TICK -TOCK!!

It's almost ^{THE BEE CAUSE} that time again. The R.R.A.A. would like to remind you of the dangers of Lyme Disease.

It's important it is to be vigilant and take precautions when it comes to dealing with ticks when tending the bees. Deer ticks of all life stages potentially carries the bacteria that causes Lyme disease, so if you think you have been bitten, try to keep the tick as a sample and seek medical attention immediately. The Manitoba Tick Checker is a provincial service that helps identify or confirm the species of ticks. Save the link below:

<https://forms.gov.mb.ca/tickSubmission/>
(*keep the tick after the photo shoot*)



A Sweet, Sticky Fraud

-James Atzesberger

Honey is anything but pure, according to a new scientific study.

A team of researchers from Macquarie University in Australia tested 100 samples of globally sourced honey and discovered that more than a quarter of them were "fake" That is: adulterated with cheap sugars and syrups.

The paper, published recently in the journal Scientific Reports, found that 52 per cent of Asian honey samples had been mixed with other substances, but the problem also extended to Europe (28 per cent) and Australia (18 per cent.)



Fresh Honey poured into jars in Kanchany, Belarus - photo: Vasily Fedosenko

In a recent test, 28 per cent of the samples of 'pure' honey sold commercially in Europe were found to contain cheap sugars and syrups.

New Zealand has a particular problem, the study notes, with all the tested samples of manuka honey proving to be adulterated. Not a huge surprise, given that the country produces just 1,700 tons of it annually, yet as much as 10,000 tons of "manuka" is sold each year.

Seven North American samples, including two from Canada, were tested and all passed.

Food fraud is estimated to be a \$40 billion US a year business, and honey is thought to be the third-most adulterated product, behind milk and olive oil.

But the study suggests that the problem might be bigger than previously thought. Tests on more than 2,200 honey samples by the Europe Union recently found that 14 percent or one in every seven jars, were fake, adulterated with sweeteners like sugar, molasses and potato syrup. A further 20 per cent made false claims about the origin of the honey, blending together products from various regions and countries.

-Continued on next page.

The Bee's Knees — The Origin.

A silly turn of phrase to be sure, but where does it come from?

Well according to the English Language & Usage Stack Exchange , a Q & A site for linguistics, the consensus is the following:

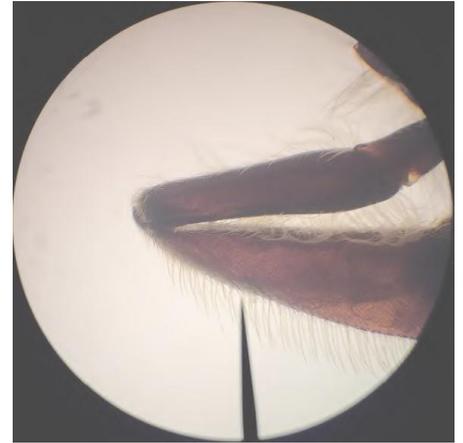
“It's alliteration of the business, in the sense of exactly what you need to get the job done. But whilst I believe this commonly-held assumption helps the expression retain currency, it's probably not relevant to the original coinage (see below). In the same vein, a (Cockney) friend of mine habitually refers to an excellent example of something (a fine wine, quality musical instrument, whatever) as the guvnor, where younger people might be more likely to say it was boss.

Admittedly, in this letter to Jonathon Swift (1667 – 1745) from his friend Dr Thomas Sheridan, the good doctor is just flippantly writing in phonetic style - but note

I that he writes an ape is till a bout bees knees for an epistle about business. Clearly the aural pun itself isn't a recent innovation. As regards how and when the bees knees started to be used as a term of approbation, the earliest clear example I can find in Google Books is this from 1923. World Wide Words gives more details of how this expression was part of a relatively short-lived frivolous slang fashion doing the rounds in 1920s America.

That craze spawned a plethora of such "animal/attribute" pairings, including elephant's adenoids, cat's meow, ant's pants, tiger's spots, bullfrog's beard, etc. Most of which are long-forgotten now, apart from cat's whiskers/pyjamas.

–J.R.



A Sweet, Sticky Fraud Continued

Honey purity has become an issue Down Under, following an investigation by the Australian Broadcast Company and Fairfax Media that revealed many of the country's largest supermarkets and producers are selling adulterated bee products falsely branded as being 100 per cent pure.

The investigation says Australia's food safety agency is still performing outdated C4 sugar tests on imported honey, which routinely fail to detect added syrups. The Australian Competition & Consumer Commission has launched an inquiry into the claims.

China, which saw its honey production rise 88 percent between 2000 and 2014 — even as its bee population was under stress from pesticides, loss of habitat and pollution — is thought to be the source of much of the fake stuff.

And popular e-commerce sites like Alibaba are filled with ads for cheap rice syrup and other sweeteners, claiming they can't be detected by official honey tests.

By some estimates, up to 99 percent of honey sold in China is adulterated, some of it being as much as 50 percent adulterated.

In Canada, where the value of domestically produced honey dropped by nearly \$53 million between 2015 and 2016, producers have been sounding the alarm about fake imports. They accuse the food industry of exacerbating the problem by buying up the fake honey at cut-rate prices for use in products like granola bars and cereals.

The Canadian Food Inspection Agency says honey has been a "sampling priority" for two decades, and that the isotope ratio technique it uses to test for purity meets international standards. A hard statement to swallow in today's market environment.

This issue provides a strong argument for the push for nuclear magnetic resonance testing and the immediate building of a national database for Canadian honey. We need to lead in purity certification if Canadian honey is ever to enjoy a return to its proper dollar value.

Palestinian beekeepers, seen here through an overturned hive,



**collect honey at a farm in Rafah in the southern Gaza Strip.
(Abu Mustafa/Reuters)**



Save The Date!

June 1st 2019

An OTS (On The Spot) Workshop and Educational Session With John Schwartz

Hosted by Brad Hogg, Faith Apiaries

The essence of OTS is that you have, in your apiary, everything you need to produce queens, for whatever purpose you choose to use them without grafting. Combining OTS queen rearing with artificial swarms is a tremendous early spring swarm prevention technique any beekeeper can quickly learn. This workshop will attempt to help beekeepers understand swarm behavior better and instruct how to combine these two techniques.

John Schwartz lives in Solon, OH, is married with six children ages 11 to 24.

John and his family originate from the west coast (most recently Alaska) before moving to Ohio in 2011. His day job is a digital manager for TFL.org and beekeeping is something that keeps him sane on the side.

John began beekeeping in 2004 in Oregon and has been using OTS to keep his apiary size to about 50 colonies since 2012. John has a blog and a nuc selling business serving local NE Ohio beekeepers which you can find at:

<http://thebee.farm>

or you join his OTS Facebook group at

<https://www.facebook.com/groups/otsbeekeeping/>

John enjoys helping beekeepers become self-sufficient and can always be reached via email with questions at: johnschwartz@gmail.com.

Bring a lawn chair and your lunch!

There is no fee but we are passing a hat to offset the cost of expenses for inviting John Schwartz up to Manitoba. Please contribute what you can!

Planning to Attend?

R.S.V.P for :

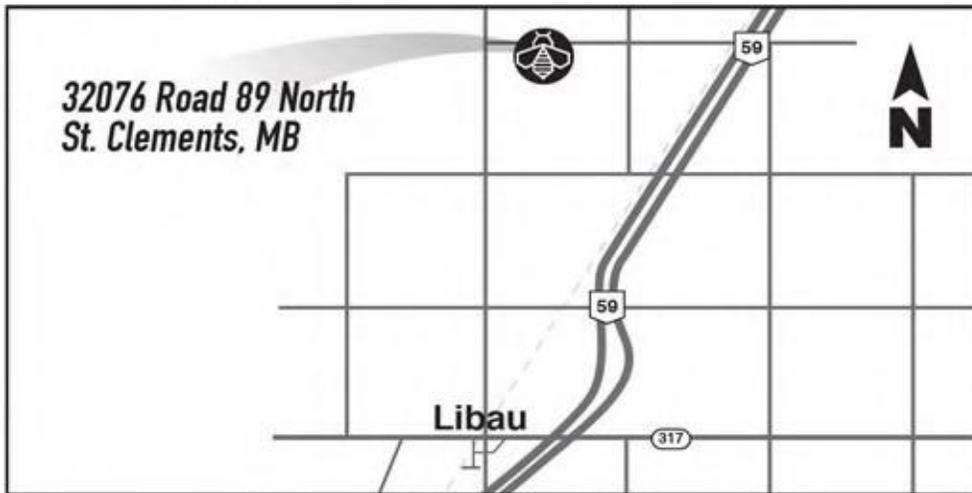
Event updates.

**Added on programming
Rain Dates and or Rain
location**

Please Email Brad at:

brad@faithapiaries.com





A Special Thank you!

Our April meeting enjoyed an attendance of an estimated 125 + members and guests!



On behalf on the R.R.A.A. We'd like to thank all of the beekeepers from our sister organizations, our new members, and the U of M students who joined us for an excellent presentation from Dr. Kyle Bobiwash.

Together we learn,
Tomorrow we Teach.

- The RRAA Exec.

A Primer on Foul Brood.

- Submitted by Member

American Foul Brood (AFB) commonly just called Foul Brood is, as most people know, a highly infectious bacterial disease. Now that we cannot just get the antibiotic, oxytetracycline (Foul Brood Mix®, Oxytet-25-S®, Oxysol 62.5®) over the counter, but have to get a prescription from a vet, I think dealing with AFB is going to be a hassle in future. Even if you can get a vet to inspect your bees (for a hefty fee no doubt) and be given a prescription, how many vet visits will be necessary?

And what about next year and the year after? In many countries the 'cure' is to kill the bees, dig a hole, burn everything – bees, frames and honeycombs - in the hole and finally fill in the hole.

Personally I think there could be massive outbreaks of

AFB this year, especially with those beekeepers that never replace old black brood combs and have given their bees antibiotic year after year. Or perhaps with new beekeepers that have bought nucs on old black combs.



-American Foul Brood Photo Credit : Rob Snyder 2005–2012

Basically there are three methods of dealing with Foul Brood:

1. Kill the bees and burn everything.
2. Remove and burn the combs that show visible signs of the disease and then treat with antibiotic.
3. Shake all the bees off all the combs onto new frames fitted with foundation, and then burn the old combs.

With #1, (kill bees & burn everything) - scorching the inside of the boxes, bottoms and covers with a blowtorch will sterilize them so they can be saved. In many countries as well as some US states, burning the combs and scorching the boxes is the standard practice. A good way to kill the bees is to close the entrance after the bees have stopped flying for the day, and then pour a cupful of gasoline down the feed hole in the feeder board. Let the gasoline completely evaporate before thinking about a fire.

With #2, (remove affected combs and use antibiotic) - a visit from a vet and a prescription for antibiotic will be necessary. Depending on the time of year you have to be careful not to allow any antibiotic to get into the honey. For full instructions see the Provincial guidelines for administering antibiotics. Personally I do not think this method is a real cure, and I would expect foul brood to return the following year. In other words the antibiotic is just masking the disease as viable spores will be everywhere in the hive.

With #3, (shake bees onto new foundation) - some very satisfactory tests were carried out at Beaverlodge Research Farm in Alberta in 2005. The experiments involved shaking bees out of infected colonies during dandelion time, onto new frames with wax foundation, or a combination of foundation and drawn combs. When only foundation was used the colonies did not develop AFB, confirmed by microscopic examination for spores in bees and honey. When a combination of new foundation and drawn comb was used, those colonies did develop AFB. From a honey yield point of view, it was noted that the shaken colonies missed out on the early flow but caught up for the main flow – at least in Alberta. This course of action seems more suitable for the hobbyist beekeeper with only a few colonies. The commercial beekeeper can more easily afford the vet bill and write it off as a business expense.



.....Continued on Page 6

A Primer on Foul Brood.

.....Continued

- Submitted by Member

So, if you get AFB, you have a choice of action. If you are a hobbyist, for a serious widespread infection involving many larvae in multiple combs it would be best to kill the bees and burn all the combs. See below about scorching the boxes.

For a mild infection with a small number of infected larvae, I believe you can probably cure it yourself by shaking the bees off the diseased combs onto new frames fitted with wax foundation in a new box, bottom, & cover or old ones that have been thoroughly scorched inside with a blowtorch. All the brood combs should be burnt. But, what to do with all your supers, bottom boards, cover boards and all your honey combs, all of which could have enough AFB spores to re-start an infection. And don't forget your gloves & hive tool. The best thing to do would be to extract any honey and burn all the frames and combs, along with the brood combs. You could risk it and keep the honeycombs but there may be enough spores in them to re-infect your colony, either this year or next year. And note that even if you melt out the wax before burning the frames, melting the wax does not sterilize it as the



spores remain viable. Some people say the spores are encapsulated in wax after melting and thus cannot grow, though why risk it and why risk spreading the disease to other people. It should also be noted that neither boiling water nor bleach will kill the spores, which is why the best thing to do is scorch the inside of all your hive parts with a blow torch (or burn them).

A very good article on dealing with Foul Brood can be found here

https://pollinators.msu.edu/sites/_pollinators/assets/File/AmericanFoulbrood_Milbrath_2018.pdf and the Honey Bee Diseases & Pests 3rd edition that is available at the CO-OP.

◁◁◁◁◁ President's Message ▷▷▷▷▷

Happy Spring! Nucs seem to be on schedule despite a chilly spring and dandelions are blooming so there's much to be excited about. It was very exciting to see so many attending the last meeting! Faces from the MBA, senior RRAA members returning for a visit, invited guests, and U of M students made the hall feel a little crowded. We hope to have more meetings like this as Tim Kennedy sources the best minds and speakers for our educational benefit.

The Novice Group that meets upstairs is having a challenging time due to its large attendance. Space is becoming an issue and so is background noise, (Which is why we escaped up there to begin with.) **In the interest of keeping things comfortable for a good teaching environment, we will be holding the Novice session DOWNSTAIRS.** To keep the halls ambient noise levels to a reasonable volume, we will be requiring that **all members who still wish to arrive early that are not involved in assisting set up enjoy each others company UPSTAIRS before the meeting starts at 7:30.** I appreciate your patience while we adapt to these challenges as a growing organization!

Legion Rules that you are expected to follow:

- 1) Sign in at the pedestal by the bar
- 2) Remove your hat or headwear. It's a sign of respect for the fallen.
- 3) **NO OUTSIDE BEVERAGES!** Leave your take out coffee or water bottle downstairs behind the counter.

We are grateful for the help the Legion provides us, and value the relationship we have with them. All Legions are struggling somewhat in this day and age, so consider supporting them by buying a beer, a coffee, or a soda. **You may not bring unfinished beverages downstairs.** Finish them upstairs please. (Manitoba Liquor Laws, AND Legion House Rules.)

I Appreciate your co-operation. I will not appreciate having to mother hen my students and scold you upstairs for socializing when we are trying to hold lessons. Please respect the R.R.A.A. programing and the Legion by being part of the solution, not part of the problem.

Last Call for Mentors and Students to Register for the R.R.A.A. 2019 Mentor Program! Sign up at the May meeting or email me at honeyb@mymts.net See you on the 14th!

-John Russell

RRAA Meeting Minutes for April 9th 2019 - Recorded by Monica Wiebe

Novice session: 7:00 – 7:30 p.m. Upstairs Tom P. presenting. Reflections of my first two years.

Meeting called to order at 7:30 p.m. John Russell chairing Reminder to Sign In Name Tags are helpful, please grab one as you sign in. Copies of by-laws are available on the entry table

Reminder that if we can email the newsletter we can save costs. And we can make it a bit bigger too.

Minutes from the last meeting, moved by Albert Anderson , seconded by Carol Wenaus to accept the minutes as presented. No changes noted.

After coffee- Mentorship clipboard will be circulating.

Treasurer: No report

Report from MBA: Marg Smith

Safe Honey Production Workshops 2019 Training Workshop for Registered CFIA Honey Producers to be held on April 22 and Tues. 23. Registration capped at 50, first come first served.

Waldemar Darmert

Biggest problem was starvation this winter. Putting on Waldemar's famous feeding patty is recommended but by now it's a bit late. Last Saturday lots of cleansing flights. Keep them wrapped up, the brood needs the warmth. Not much water standing anywhere. Clean your dead outs now to keep mold from growing. Scrape and check - Waldemar has checked at -2 with no wind and shelter, to open. If wind it needs to be above zero.

Question about mite treatments - Time of year determines treatment. Formic acid and sometimes strips if to close to other beekeepers. You want to go into winter with healthy bees to make strong winter bees. Fall mites stronger impact than summertime. Apavar still works. Formic Acid harsh. The 1% threshold is good to wait with treatment.

Feature Presentation: Pollinators and pollination variability Speaker: Dr. Kyle Bobiwash

Kyle.bobiwash@umanitoba.ca

Current research on wild bees. Pollination defects are global. Vitamin A, iron and folate are pollination dependent. Wild pollination has value- vibration is necessary at the level that blueberry flowers can benefit from them and this is not a characteristic of honeybees.

Characteristics of wild pollinators vary. The greater the diversity the higher the chances of good pollination. Variety of pollen impacts protein content. Pollinator biodiversity is the key.

Management of both agriculture also, semi natural and natural landscapes are key to maintaining pollinator

Coffee: Thanks to all who brought goodies, set up and cleaned up.

Loonie Draw at coffee break - \$168.25 raised. Lots of cool donations, thanks all.

Next time -Genetics impact -Dr. Curry

Thanks to all who helped with set up and clean up. Meeting adjourned: 9:05

Respectfully recorded by,

Chalkbrood: A disease of honey bees

Chalkbrood is a fungal disease of honey bee brood that infects the gut of the larvae. It is caused by a spore-forming fungus named *Ascosphaera apis* that is consumed along with larval food. Although chalkbrood disease can affect workers, drones, or queens it most often occurs in workers and drones. Chalkbrood is frequently seen in late spring when colonies are expanding rapidly, the weather is still cool, and there may not be enough nurse bees to keep the brood warm. It often disappears spontaneously as summer temperatures rise. Although chalkbrood rarely destroys a colony, it can weaken a colony and cause reduced honey production.

What does chalkbrood disease look like?

- 1) Larvae become chalk-white and are often covered with cottony filaments
- 2) The white coloration may eventually give way to a gray or black, depending on the life stage of the fungus
- 3) It often appears at the perimeter of the brood nest
- 4) Infected or dead larvae may be seen at the hive entrance or in pollen traps. The dead and hardened larvae are referred to as “mummies.”

How does the disease enter the hive?

The disease is transmitted by spores that are readily moved from colony to colony on infected pollen, robbing bees, drifting bees, or beekeeping equipment. Since spores remain viable for many years, they can persist in a hive until the conditions become right for growing.

What conditions allow the chalkbrood fungus to grow?

- Excessive moisture in the hive, caused by poor ventilation.
- Cool temperatures.
- Inadequate colony nutrition (a healthy colony is more apt to keep the hive free of mummies and keep the brood nest warm).
- Colonies weakened by other disease organisms.
- Poor genetic resistance.

How can chalkbrood be prevented or reduced?

Increase ventilation in the hive.

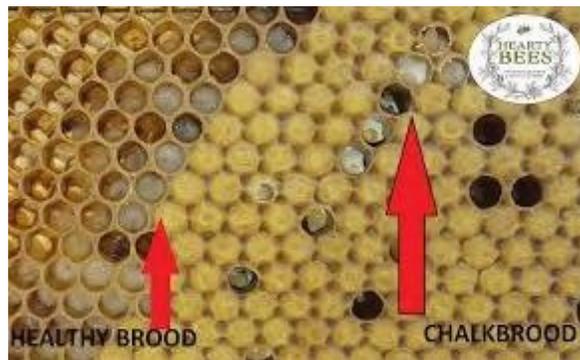
Replace old, blackened brood combs as these may harbor chalkbrood spores.

If a colony lacks sufficient food stores, supplement with good-quality feed.

Replace queens with stock bred for hygienic behavior and/or disease resistance.

Some reports have indicated that the incidence of chalkbrood disease is increasing. The increased frequency may be related to poor nutrition, higher disease loads, and increased colony stress that seems to be occurring in honey bees globally.

-Rusty @Honey Bee Suite



YOU ARE NEEDED!!

What makes a great association great? Involvement, and contribution! If everyone does one small task, gives up one HOUR a month to help the RRAA, then we all benefit! (Call 204-612-2337 to lend a hand.)

WAYS TO CONTRIBUTE: Mentoring- a novice beekeeper, join a RRAA committee, bring a toonie draw prize, submit an article or a book review for the newsletter, bring cookies for our coffee break, share experiences and advice with new

Having Trouble Finding A Good Parking Spot?

Norshel Inc. at 890 Nairn



(Two doors west of the Legion) Has generously given the R.R.A.A. members permission to park on the property when the legion lot is full. Please do not block lanes or building exits, or park in the Midland Foods parking lot.

Extracting Honey Without an Extractor

- J. Sartell

Extractors are expensive, and in your first year or two it's a hard expense to justify when you have only a couple of colonies and you are still in the "I don't know if this was such a good idea...." phase. Jennifer Sartell of Iron Oak Farms walks us through her first experience of harvesting a few frames.

Last fall we harvested our first frames of honey! It was a very exciting moment for us, cut short by a rapid moving storm that came up on us so fast that we hardly had time to get the roof back on the super boxes before the downpour was on us. We were sent running for the house with only four honey frames in tow. But I can't believe the honey that we got from just four full frames!

We don't have an extractor to remove the honey from the comb. So we were forced to improvise.



At first, we really wanted to preserve the wax comb that the bees had built so we could return the frames to the bees with the comb still in tact. This would save the bees the extra work of having to re-create this wax comb. We tried cutting just the capped section of the honey and attempted to suspend the frames horizontally so the honey could drain out. This didn't really work that great. The honey pretty much stayed in place, in a sort of vacuum inside the cells. I now understand why the centrifugal force is required in an extractor to whip the honey out.

We decided that scraping the frames of wax and honey and letting it strain through a strainer was our best option, and that maybe because we were working with only 4 frames, that it wouldn't be too much of a strain on the bees to build that comb back up. In our northern climate and shortened warm season, it is more difficult for bees to make wax. At this point in our bee keeping experience we're sort of "babying" our bees, especially considering the devastating threats they face nationwide. Anything we can do to eliminate stress on our colony is something we try first.

So much to our chagrin, we scraped the frames...wax, honey and all and let it strain through a strainer into a bowl.

We suspended the strainer clamped in one of my camera tripods and taped with packing tape for good measure.



Once it was all strained, we poured it into jars. This is what we were left with! 3 1/4 quarts! Plus the honey that filled this bread pan in my experiment to separate the wax from the remaining honey.

I melted the honey and wax in a pot and poured it into the bread pan. As it cooled, the wax solidified on the surface and the honey stayed below. We can now use this wax to seal and protect my husband's blacksmith items or to make candles and homemade beauty



products like deodorant and lotions.

After seeing how much honey we got from just 4 frames, I'm tempted to leave the rest for the bees as our first goal right now is to establish a healthy hive so they can produce for us years to come.

These are the finished scraped frames ready to be returned to the hive. The bees will clean these hives of any out of place honey and rebuild the comb using the plastic "comb sheets" that you see here in the frame as a guide. The plastic sheets have a pressed hexagon pattern similar to what bees naturally build. - **J.S**

How Do Honeybees Make Comb? -Dan Seavey

When people mention beekeeping, it's the sweet golden stuff that gets all the attention. But bees also make another useful and rather remarkable product in the form of comb.

What is beeswax exactly? How does it come into existence in the hive? Do bees collect it? Is it part of the pollen that they carry? Do they "spin" it, the way a spider creates silk for its web?



The short answer is that it's made from honey. I know, I know, this doesn't really make sense, but it's the truth...sort of. Bees consume honey and as they digest it, the honey is converted into wax through a series of glands on the bee's abdomen. A honey bee has 8 wax-producing glands. Bees consume an estimated 6-8 pound of honey to produce 1 pound of wax. Bees don't produce wax all their lives. A bee produces the most wax when it is 10-20 days old. After this age, a bee's wax production begins to wane.

How do the bees change the wax into the hexagonal shaped cells?

After the bees secrete the wax through the pores of their abdomen, it collects in flakes on their bodies. Bees will chew the wax, or more often, an obliging neighbor/worker bee will chew the wax flakes off of a friend. The bees chew and chew, mixing enzymes from their saliva and softening the wax flakes until it is formable like clay. The bees then add the wax to the comb, continuing the hexagonal shape.

In nature, bees will create "U" shaped comb hanging in flat disks. The wide top where the comb attaches allows for the most surface area to secure the comb below. As the comb narrows at the bottom, it becomes lighter in respect putting less strain on the attached surface.

When using a Langstroth hive, the bees take the hint from the frame inserts which are already molded in the hexagonal shape. They continue to form the cells from this pre-existing form. And usually, you have perfectly framed honey cells. But every now and again, nature and instinct take over and the bees will deter from the forms and build a more natural honeycomb. This is called rogue or burr comb building and can make it difficult to pull frames from the hive without damaging areas.



In hot weather, why doesn't the wax melt?

Occasionally it can. But bees are expert temperature regulators. They use a fanning motion with their wings to cool the hive on hot days. They will also beard, in which some of the bees leave the hive to help lessen the "body heat" factor and collect in an external cluster at the entrance. If the wax gets too warm it will melt, but if it gets too cold it becomes brittle and un-moldable. It's not only important that the bees keep the hive at 90 degrees to keep the Queen warm, but it's also important for the formation of wax comb. - **D.S.**

The RRAA , the Bee Cause, for you and through you:

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 without the authors' written & expressed consent. They are those of their originator and not of the Red River Apiarists' Association.

Deadline for any submission to this newsletter is the second Sunday preceding the membership meeting to allow for publishing and mailing delays and the legal obligation to allow membership to review last meetings' minutes for errors or omissions before next meeting. Regular membership meetings are normally scheduled 7:30 on the second Tuesday of every month at the Elmwood Legion 920 Nairn Avenue in Winnipeg excepts months 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.

Presenting at the next Red River Apiary Association meeting:

Tuesday May 14th at 7:30 pm

Elmwood Legion 920 Nairn Ave.

We invite you to attend the presentation by:

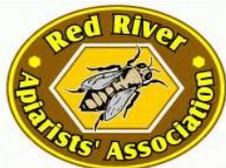


Dr. Rob Currie Professor, Department Head of Entomology,
Faculty of Agricultural and Food Sciences, University of Manitoba.
Management of varroa mites, honey bee viruses and pathogens,
physiological, ecological, and behavioral studies of insect pollinators.



Topic: Varroa and they Viruses They Vector.

This is a presentation for ALL Bee keepers in the industry, engage in discussions, and there should be ample time for questions, over coffee time and treats.



Editorial Notes

CALL FOR SUBMISSIONS

Have you come across an interesting article? Would you like to share an observation? Share an anecdote or an observation from your own beekeeping experiences?

Do you have an opinion you want to voice to the beekeeping community? Seen a video you found informative or would like a topic researched?

Send it in to the Editor!

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THE BEE CAUSE

PAGE 20

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2019 ISSUE 5

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REMINDER!

**RRAA NOVICE MEETING
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All members not attending are asked to wait upstairs in the legion hall until 7:30

Have a beer, or a coffee and socialize, but please do not disturb the novice class.

Respect the Legion Rules:

- No outside beverages.
- Remove your hat upon entering - Sign in at the Bar.

We are on the Web!
www.beekeepingmanitoba.com

-Do not take purchases downstairs
 at 7:30



Nine vs Ten Frames

- Submitted by Member.

New beekeepers will eventually discover the method and theory of 9 frame beekeeping over the traditional 10 frame method. This submission from a senior member explains a bit more about the natural mechanics of the subject. -J.R.

When I was a new beekeeper sixty+ years ago, I used to devour the 'For Beginners' column in the bee journal that came as part of the subscription to my local Beekeepers Assn. Over the years I received a variety of bee magazines and amassed about 400 books on beekeeping – which I would now like to sell: anyone interested?

One of the things that really impressed me from all these books and journals was a brilliant article in The Beekeepers Annual, 1990 edition, by Bernhard Mobus, at the time, Beekeeping Adviser to Scotland. The whole article, covering many, many pages was all about damp and condensation in the hive, but the one particular section that has stayed with me over the years is an explanation of why our honey bee is the size it is. Bees have been around for millions of years as evidenced by fossilized bees in fossil amber. During that time you might think that evolutionary pressures would have made our honeybee larger, like the fuzzy bumble bee which can fly at lower temperatures and carry a bigger load.

It all comes down to heat loss during winter and survival, in particular the space between full sealed combs of honey which would normally be above the cluster and brood rearing area. In simple terms this narrow space through which one bee can crawl is very restrictive to convection (and thus heat loss) thereby minimizing the amount of honey consumption to keep the brood warm. If the bee itself was larger that space between the full sealed combs would similarly need to be larger. This in turn would allow a chimney effect up-draft to happen sucking heat upwards and making survival less likely. It turns out that our bee is the optimum size for survivability in temperate climates, and explains why tropical bees are different.

So, when you are setting up your hives you would be helping your bees if you make sure the frames are spaced correctly, and for those who prefer nine frames in a ten frame box, be aware of what you do: make sure those nine frames are closed up for winter.

Finding A Dragon To Slay: Digging further into the Neo-Nic situation - J. Russell

At the beginning of the year I brought up a controversial topic for the membership to think about, with the intent for the R.R.R.A to form an opinion and have a stance on neonicotinoids pesticides. Needless to say it was a luke-warm reception , with a lot of apprehension and we left it with the challenge for ourselves to read, research and educate ourselves on the vast amount of studies and data out there. Hopefully we will revisit the topic at a later date, better prepared to discuss and debate findings and opinions.

I cannot say my opinion on them has changed, as I still feel they are causing damage not only to bees but nature in general, In looking to support my beliefs I've come across material, lectures, videos, and studies that have shown me that the problem does not necessarily rest solely on the shoulders of one factor in our beekeeping environment. Canada looks like it will be banning Neonics, and I'm certainly not going to lose a moments sleep, but we cannot remain solely fixed on this one "Dragon" when other detrimental factors are at play. Monoculture is a huge issue, farming culture of destroying every non seeded plant and seeding half way down the ditch is another. The default return of more toxic pesticides, residential spraying, and poor wax management are also potentially ignored topics to examine if we only obsess over "Silver Bullet" solutions. (Eliminate Neo-Nics, and all will be well.) Refined and flexible management practices need to be developed for beekeeping to exist.

Randy Oliver hosts a website called Scientific Beekeeping. If you don't know who he is, you should. He's a premier bee researcher and his work is published regularly. He has compiled and composed a large series of articles that every beekeeper interested in keeping abreast what is, has been ,and will affect your bees and your operation.

<http://scientificbeekeeping.com/tag/sick-bees> is a good place to start. The amount of reading is overwhelming, depressing, and easy to ignore. However if you do not intend to keep up with the happenings in the agriculture world that directly affect you, you will be hard pressed to deal with change when you need to.

Randy Oliver started keeping bees as a hobbyist around 1966, and then went on to get university degrees in biological sciences, specializing in entomology. Today, nearly 30,000 people from nearly every country in the world visit ScientificBeekeeping.com each month. Randy is known not only for his summaries of scientific papers as they are published or his own research projects but also for his outspoken, take-no-prisoners evaluations of the quality of research and his willingness to point out fashion flaws when someone in the parade isn't wearing any clothes.



Troubling allegations' prompt Health Canada review of studies used to approve popular weed-killer

- By Gil Shochat (Condensed)

Health Canada says in light of "troubling allegations," its scientists are reviewing hundreds of studies used during the approval process for glyphosate, the active ingredient in Canada's most popular herbicide, Roundup. The decision comes after a coalition of environmental groups claimed Health Canada relied on studies that were secretly influenced by agrochemical giant Monsanto, the maker of Roundup, when it re-approved use of glyphosate in 2015 and confirmed that decision in 2017.

The coalition, which includes Equiterre, Ecojustice, Canadian Physicians for the Environment and others, says academic papers looking at whether the herbicide causes cancer were presented to Health Canada's Pest Management Regulatory Agency as independent, when in fact Monsanto had a hand in writing them.

At the time, Health Canada decided the risks of glyphosate to human health were acceptable, if used as directed in updated product labels. Now it's taking another look.

"Health Canada scientists are currently reviewing hundreds of studies to assess whether the information justifies a change to the original decision, or the use of a panel of experts not affiliated with Health Canada," the health agency told CBC-Radio Canada in an email response to the coalition's claims.

The coalition's contention that Monsanto had an uncredited role in producing some of the studies comes from court documents made public in the case of Dewayne "Lee" Johnson. In August, a California jury ordered Monsanto to pay Johnson \$289 million US in damages after the former groundskeeper alleged Roundup gave him non-Hodgkin's lymphoma, a type of blood cancer. He was diagnosed in 2014 at age 42. A judge upheld the verdict last month, although Johnson's payout was slashed to \$78 million US.

The coalition of Canadian groups says those documents prove that important scientific studies were either co-written or reviewed and edited by Monsanto without properly disclosing the company's role.

"Monsanto has been playing around with scientific studies," said Equiterre's Ribaux. "[It's] making these studies look like they are independent, when in fact they were written or heavily influenced by Monsanto. What we found is that some of these studies were key in the Government of Canada's decision to give a permit to Monsanto to continue selling glyphosate in Canada.

Bayer has already announced its intention to appeal the ruling. Bayer now faces more than 8,000 lawsuits in the U.S. over its glyphosate-based products. In a post on its website last month, Bayer said it continues "to believe that the liability verdict and damage awards are not supported by the evidence at trial or the law."

The company told CBC-Radio Canada "its product is safe and has been used successfully for more than 40 years." It also says there is an extensive body of research on glyphosate and glyphosate-based herbicides, including more than 800 studies required by regulators in Europe, the U.S. and elsewhere, that confirms these products are safe when used as directed.

Many government regulators, including the U.S. Environmental Protection Agency in 2017, have determined there is no conclusive link between glyphosate and cancer. But the World Health Organization's International Agency for Research on Cancer concluded in 2015 that glyphosate is a probable carcinogen.

Although it's claimed that Roundup (glyphosate) is safe there are studies claiming it leaves bees susceptible to disease by harming naturally occurring gut bacteria, and others claiming it interferes with bee navigation. Both studies have been criticized and refuted. However, more weeds combats monoculture if you are looking for a beekeeping upside. -J.R.

Links:

<https://www.cbc.ca/news/technology/monsanto-roundup-health-canada-1.4896311> (Original Article in full)

<https://www.npr.org/2018/09/25/651618685/study-roundup-weed-killer-could-be-linked-to-widespread->

beedeaths <https://geneticliteracyproject.org/2018/10/11/viewpoint-link-between-bee-death-and-glyphosate-still-a-farfetched-story/>

My First Year of Beekeeping – by Karyne Jolicoeur-Funk

I have always been interested in beekeeping and told myself that

one day I would become a
beekeeper. In 2018 I decided it was the

right time and I enrolled in the beginners' course at the U of M.

That is how it all began.

The university classes provided great information and offered an

Finding a mentor was a case of word of opportunity ask questions.

the area found out that I was taking mouth; a long time beekeeper in

the course on the lookout for local bees. From there, I found a mentor, a new friend, and a wealth of knowledge!

To start, my mentor offered me two nucs and starting sharing his

taught me how to put together frames experience. That winter, he

_____ and provided tips about beekeeping equipment. The months went by _____ and he continued to answer my many questions. _____

I set out to build, build, build! Although it is more work wiring _____

_____ frames and embedding wax, I wanted to use the real thing and avoid _____

_____ plastic. Luckily, at this point, my husband Denis started showing in- _____

_____ terest and helped me assemble 8 boxes and 80 frames. Around this _____

_____ time, I also started attending the RRAA meetings and receiving this newsletter – which was always a treat.

I planned for apiary placement: not too far, sun exposure, protection from the wind...I had a location in mind. When spring arrived, we cut-in an area that providing shelter form the North and a large opening to the South. Protection from black bears was also needed in our area. It so happens that Denis is an

electrician and after sharing my concerns, he build a small solar system to charge an electric fence for the apiary.

Finally, the time had arrived to see my bees! With my mentor, I went through the 2 nucs that would be mine. I received guidance about how to remove, handle and examine the frames. This really helped boost my confidence.

[Lined area for text]

When it came time to pick up my bees, they were already in my

[Lined area for text]

boxes (we had transferred them days earlier and gave them time to

[Lined area for text]

settle). This was done late in the evening and they were in our

[Lined area for text]

prepared location about an hour later. Branches were put in front of

[Lined area for text]

the entrances in the hopes of slowing down morning departures and

encouraging them to observe their new surroundings before leaving

the hive.

My mentor encouraged me to check my bees at least once a week so

that I would gain experience in handling them while the colony grew.

Knowing they had to make a lot of new wax, we fed them liberally

that first spring until it was evident they were finding good nectar

sources. It was wonderful to see all the different stages of brood in

the freshly drawn comb and to watch them bring back different

colours of pollen. I would rarely see my queens, but tried not to get disappointed and focused my inspections on seeing eggs, brood and food stores. I keep notes for each examination; these were mostly just scribbles for what each frame contained, but they helped me assess how things were changing from one week to another.

Denis became much more involved and increasingly interested. I started realizing that everywhere we went or when we had anyone over, I would find him talking about our bees. Even the kids were interested now and wanted to help me with equipment or inspections. New beekeeper in the making!

....Continued on the next page

My First Year of Beekeeping – by Karyne Jolicoeur-FunkContinued

That summer was full of new discoveries. Both hives were expanding. At some point I started seeing new structures on my frames. A panicked call and a visit from my mentor revealed that I was only seeing queen cups – with no sign of tenancy – not to worry. Summer rolled on and sure enough one of my hives decided to put those queen cups to use; I was seeing queen cells now! My mentor suggested an artificial swarm. After some planning, I went out to my apiary with my equipment and notes. I was nervous, but every step went as planned and I got it done. What luck; a third hive!

I soon decided to take advantage of the multiple queen

and split the artificial swarm hive into 2 new

nucs – and then there were 4! Although I know you

not supposed to bother the bees when they are

rearing a new queen, I really could not help myself.

cells

are

I was able to observe queen cells from start to finish,

see new queens and hear the famous queen piping!

I gave them some space once the new queens hatched

and hoped for a few nice days for them go out on

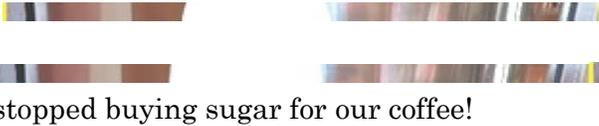
mating flights. Finding eggs on my next inspections of

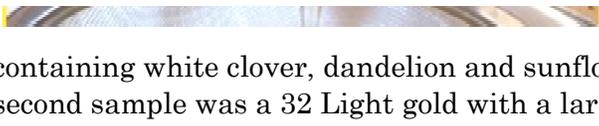
the nucs was truly a feeling of success. I had a lot

more going on than I had planned; two original hives

and now 2 new nucs.

Summers end approached. I did not expect much honey, but I still needed a plan. We ordered a 3 frame extractor with an electric motor (very happy we made that decision). In the end, we harvested over 100 lbs.





of honey. Family and friends received honey samples and Denis and I stopped buying sugar for our coffee! The honey was great, but I could tell there was such a difference in both our batches. I was curious how others labeled their honey (clover, wildflower, etc.). I brought 2 samples to the Bee Maid lab and it was assessed as a 22 White, containing white clover, dandelion and sunflower. While my second sample was a 32 Light gold with a larger variety of floral sources. We started making preparations for the cold weather. After some research, I wanted to winter outside with two boxes. As my mentor does not winter outside, I found another sympathetic beekeeper who generously shared her methods. Following that advice, we moved the 4 hives together and wrapped them with rigid foam, cutting out top and bottom entrances. During the coldest part of winter, I would go peek into the top entrances with a light – what a relief to see the clusters moving around! Warmer days came and it was difficult to see so many bees outside, dead in the snow. Now spring has arrived and I opened up my boxes on March 20th for a quick check. Happy to report that all 4 hives survived very well: eggs, brood and food left. I still have a lot of clean up to do when the weather gets warmer, but very happy to have my 4 colonies alive this spring. I can't wait to see what my second year will bring. - K.J-F.

PUBLIC NOTICE: Alyssa Wowchuck, the summer Program Interpreter at the Brandon Riverbank Discovery Center is developing a new program about honeybees called "Life of a Honeybee" targeted towards kids in grades 1-6. (Including details about commercial beekeeping) She is looking for a few props to add to showcase some of the tools beekeepers use on the job. If anyone has a queen cage to spare, broken or old tools that need to be retired such as a smoker, gloves, or a bee brush--anything without sharp edges that a young kid could handle that they can donate towards the program, it would be greatly appreciated. I'm hoping it does well enough this summer to stick around and have a permanent place in their list of future programs! You can email me at alyssawowchuk@gmail.com if you can contribute.

Neonics hinder bees' ability to fend off deadly mites, study reveals.

-By University of Guelph

A University of Guelph study is the first to uncover the impact of neonicotinoid pesticides on honey bees' ability to groom and rid themselves of deadly mites.

The research comes as Health Canada places new limits on the use of three key neonicotinoids while it decides whether to impose a full phase-out of the chemicals.

Published in the Nature journal Scientific Reports, the study revealed that when honey bees are infected with varroa mites and then regularly exposed to low doses of a commonly used neonicotinoid called clothianidin, their self-grooming behaviour drops off.

Without that self-grooming, bees are susceptible to mites that can also carry viruses that can quickly kill, said lead author Nuria Morfin Ramirez, who completed the research along with Prof. Ernesto Guzman, School of Environmental Sciences, as part of her Ph.D.

"When bee colonies began to collapse years ago, it became clear there wasn't just one factor involved, so we were interested in whether there was an interaction between two of the main stressors that affect bees: varroa mites and a neurotoxic insecticide, clothianidin," said Morfin.

"This is the first study to evaluate the impact on the grooming behaviour of bees."

Neonicotinoids, or "neonics," are the most commonly used insecticides in Canada. They are coated on canola and corn seeds or sprayed on fruit and vegetable plants and trees. But they have also been linked to honey bee colony collapses.

Varroa mites are also contributing to colony collapses and have been associated with more than 85 per cent of colony losses.

The mites kill bees by slowly feeding off their body fat and hemolymph (blood), and can also transmit a virus called deformed wing virus (DWV). One of the only ways bees can protect themselves is to groom aggressively and brush the mites off.

The researchers wanted to know whether the two stressors of pesticide exposure varroa mites were working together to contribute to bee deaths. The research team used bees from U of G's Honey Bee Research Centre and exposed them to a widely used neonic clothianidin, either on its own or along with varroa mites.

They experimented with three doses of clothianidin, all similar to what the bees would experience while feeding on flower nectar of neonic-treated crop fields, but all low enough to be considered sublethal.

"What we found was a complicated interaction between the mite and the pesticide that decreased the proportion of bees that groomed intensively, and affected genes associated with neurodegenerative processes," Morfin said.

Bees exposed to medium level doses of the neonic showed no changes in grooming behaviour, but when they were also introduced to varroa mites, the proportion of bees that groomed intensively was 1.4 times lower compared to the bees exposed to clothianidin alone.

When exposed to the lowest dose of the pesticide, the proportion of bees that groomed significantly dropped. The lowest dose was also linked to an increased level of deformed wing virus—an effect not seen at the higher doses.

"These results showed a complex and non-additive interaction between these two stressors," said Guzman. "This study highlights the importance of reducing stressors that bees are exposed to, to reduce the risk of disease and consequently colony mortality."



More information: Nuria Morfin et al, Effects of sublethal doses of clothianidin and/or V. destructor on honey bee (*Apis mellifera*) self-grooming behavior and associated gene expression, Scientific Reports (2019). DOI: 10.1038/s41598-019-41365-0



Insights Into Beekeeping

By Ken D. Rowes with assistance from Rod and
Susan McCulloch

This is part one of a multi-part publication of interviews with some of our most experienced senior members. Ken Rowes, our archivist and historian has made this a project to mine the knowledge, experiences, and methods of these well respected statesmen of the R.R.A.A. Due to their obvious length, we will be publishing in multiple issues but the complete interview is available upon request. —J.R.

In this article, I have interviewed Ted Scheuneman, a well-known (RRAA), 16 April 2017.

Through your experiences with bees and beekeepers you will be explaining similar events or methods. They all point to you, making for the better for you, your bees, and the environment.

I have known Mr. Ted Scheuneman for many years and have appreciated their management. Ted was born in Germany into a beekeeping family and started beekeeping in West St. Paul (Winnipeg) Manitoba in 1980.

The following are some of Ted's understandings of bees, bee management efficiency and better his results.

The question of hive entrances

entrances of a hive should be governed by 1-1/2 inches of an opening, more or less standard 3-1/2 x 3/8 inches for any size of beekeeping. Ted's topic of discussion at one RRAA meetings. Ted's explanation: management. Why? On all hives he has a screened bottom and to bottom of the frames. When the bees are ready, and want to exit, it is easier for the beekeeper to check, assessing swarming mode, control management. This, when you are done, you burn; because drones emerge and spread mites if you left them discarded, being uncapped drone comb because the bees have invested so much time (days) it acts as a lure for mites. From day 1-9 mites prefer drone

Bees too warm in the winter.

time, many beekeepers keep their bees too warm by having a screened

If we have a warm spell, the bees get the idea of getting into swarming early is to be avoided at almost any cost. For instance, if the brood is in January or February, like in a warm spell, then at the same time As soon as there is brood the mites are just waiting for that, so it is their own.

My question: **Is there a natural tendency for a hive to brood in winter?"**

Ted's response, "the natural tendency is not in natural terms but in a strain of bees) that brood right through on a smaller scale but that they keep them cool".

"Bees in winter time in our area (Manitoba) have to be cool – where we live in. So, keep your bees cool – if you are using Styrofoam insulation would be enough but breaks easier when you handle it).

My question: **Is there an advantage to plugging the bottom entrance brooding lower down?**

Ted's response: If you plug the bottom entrance more than 1-1/2 inches have 10 occupied frames, it will increase the warmth in the colony during a warm spell to initiate brood rearing. (Don't forget that 1 mite in a colony by November, so if you start brooding in January, February, March, or honey flow before you have to treat. A mite population of 6,000 -



Continued on next page.....

Insights into Beekeeping. - Ken Rows interviewing Ted Scheuneman (...Cont.)

My question: **Are you treating for mites now – April 16th?** Ted's response: For the past 5 years, I and several other beekeepers have developed a routine that we treat only once a year with Oxalic acid when the colonies are absolutely brood free. And this is the point, here in Manitoba it is November.

However, last year it was warm and some colonies still had brood on 2 frames and I didn't want to destroy the brood. I had to force them to go out of brood production by taking off the inner covers 24 hours per day for about 2 weeks even when the temperatures were -5 degrees Celsius, then treated those in December. It doesn't harm them but encourages them to go out of brood production. You can also just destroy the brood, remove larva and mites, some larva will have 3 or 4 mites. Cold doesn't harm the bees at this time but snow and rain will, so make sure snow or rain does not make the bees wet.

My Comment: **So, alternatively you could take the inner covers off (outdoor wintering) place the hive covers back on or cantilever on a slant to prevent rain or snow from getting in and induce the queen to stop laying at this time as well.**

Ted: "Another thing I do, as soon as I have bees back from the summer location, I feed them. As soon as the bees are fed, I take the back-end plug (to the insert under the screen bottom board) out to create a draft in from the back, raising the inner cover creates a good air circulation. I do this method right after I feed the bees to have them go out of brood production.

So, are we talking about winterizing in September or October? Ted: "Not exactly. When you are feeding, you want your bees and food warm. So, it is important **after** you feed your bees to keep them cool."

Mite Checks: Always know the mite load in each and every colony that you have. To be able to do that, clean out the pans, check 3-5 days later, how many mites were groomed off. All are counted dead or alive. In winter – January, February, March, and April- no more than one mite per day down is the limit. One mite per day down, at this time of year means there are 500 live mites in that colony. That means without a treatment before honey flow, that colony will not survive to the end of honey flow. With enough brood cells available, the mite population can increase ten-fold in 45 days.

In the summertime, it is a good practice to clean out the pans every 2 to 3 weeks. The pan is also an excellent wax-moth trap. The bees throw the young maggots through the screen into the pan. The maggots can live off the debris that falls into the pan, mature, mate, and multiply in the pan. If there is a wax-moth problem, it is necessary to clean the pans out every 10 days, or on a weekly schedule, until the problem is solved.

Ted: "Some treat 2-3 times a season (not during the honey flow) with different kinds of chemicals that are on the market. Chemicals are hard on the bees – they are poisons. There are advantages and disadvantages. The bee is a living being that is exposed to the chemical. For my way of thinking, **the less chemical you need to use the healthier the bees are.**"

Question: **What is your Oxalic acid treatment?** Ted: When all brood has emerged, usually the end of November/beginning of December, I treat the colonies with a 3.5% oxalic acid solution with a 60cc syringe and a 1mm needle. (the smaller the needle, the more droplets you create, and the better the killing effect. I use a 5cc drip per occupied bee alley (the galley between the frames). That will amount to 50cc per colony if 10 comb alleys of bees. Of course, if you only have 4 alleys that would be $4 \times 5\text{cc} = 20\text{cc}$ per colony. I use a 3-1/2 % solution, in 1 litre of 2:1 sugar syrup, then I put 35 grams of Oxalic acid. (You can use 30-34 but no more than 35 grams.) It is easier to make up a litre and discard what you don't use. It is not expensive. The sugar concentration is not very important. If you don't have any sugar handy, it can be mixed with water only. But, mixed with sugar, the distribution of the solution is better. Then everybody wants a piece of the pie.

Note: (1) **Once you mix it you have to use it within the next 36 hours after which it becomes toxic to the bees.**

Note: (2) **You should only treat a colony once per year with Oxalic acid.** It is the queens that are adversely affected by this chemical, because the queen lives the longest of any bee in the hive. It takes about 6 months to clear their system of this chemical. The queens are supposed to be fully productive for 4-5 years. I have had breeder queens

that were fully productive for 6 years.

End Of Part One.

Part two will be published in September

Disclaimer: All methods and techniques from any beekeeper should be considered, tested, and adapted to suit your individual skill level and experience. Advanced methods are developed over time and can be specific to an individual's style, operation, and geography. -J.R.

Canadian researchers warn of 'cascading impacts' as bumblebee species decline

The American bumblebee — a species once more commonly seen buzzing around southern Ontario — is critically endangered, according to a new study led by York University experts.

(York University/CBC) -Condensed from CBC News,

A team of researchers at York University has warned that the American bumblebee is facing imminent extinction from Canada, and this could lead to "cascading impacts" throughout the country.



The imminent extinction classification is considered the highest and most at-risk classification before extinction.

About 42 of the more than 850 species of bees in Canada are bumblebees — important pollinators needed to grow crops, including apples, tomatoes, blueberries and legumes, as well as trees, shrubs and wildflowers.

Professor Laurence Packer said quite a few of the 42 species of bumblebees are exhibiting substantial declines. "We've got a situation where ... the number of species that you can find in an area has decreased," He said with fewer bumblebee species around, plants will be pollinated in a different way.



Packer explained that bees have different preferences, so when some species are lost, the flowers that they prefer are likely to be less frequently pollinated.

"These kinds of declines in important pollinators are going to have cascading impacts throughout the entire ecosystem."

The findings of the York University researchers are included in a new study, published in the Journal of Insect Conservation on April 17.

The researchers found that the American bumblebee's area of occurrence has decreased by about 70 per cent and its relative abundance fell by 89 per cent from 2007 to 2016 compared to 1907 to 2006.

They have ranked the risk of the American bumblebee higher than a federal advisory committee's most recent assessment, which said the species is at special concern for extinction, rather than imminent risk.

Meanwhile Greenpeace Canada's Shane Moffatt said news of the disappearing bumblebee species should serve as "an important reality check" for the country.

"Sometimes these things can seem a bit abstract or a bit academic, but this is anything but an abstract issue. The fate of these species is connected to all of our fates."

Full Article: www.cbc.ca/news/canada/toronto/bumblebees-decline-pollinators-1.5106260?cmp=rss

HELP NEEDED! : The Teulon Old Tyme Village is looking for someone with experience to demonstrate candle dipping to the

public for their event on June 30th. An honorarium has been offered, and details can be discussed with June Makowski, Branch Librarian South Interlake Regional Library 19 Beach Rd., Teulon, MB, R0C 3B0 Phone: 204-886-3648



Any beekeeper who would like to be connected with farmers near their beehives, or would like to be informed of crop protection activities near their beehives, will find BeeConnected a valuable tool. After registering as a user, beekeepers may register the current location, or intended future location, of their beehives. If their beehives are

registered within 5km of a farmer's property, or a registered crop protection product activity, they will be notified, as will the farmer, and the two parties will be able to exchange further details using the secure messaging system.

It is anticipated that beekeepers may wish to register the future location of their hives in advance of moving them, to have discussions with nearby farmers ahead of time. BeeConnected allows for this to happen. Beekeeper activities can be registered for anytime in the future, in blocks of up to two months at a time. If beekeepers wish to keep bees in one location for longer than two months, then that time can be extended prior to the expiry of the activity for up to a further two months.

BeeConnected is optimized for Android and Apple smart phones.

**BeeConnected is partnered and endorsed by The Canadian Honey Council
Registration, and information can be found here:**

www.beeconnected.ca

Helping Our Pollinators At The Grass Roots Level

It's pretty much common (and frightening) knowledge that all of our pollinators are under threat and stress and are in need of human help and intervention on a global scale. As beekeepers we play an important role of helping educate the public. Providing direction on how to go about attracting, protecting, and beneficial planting help get people involved.



People want to help, but not all of them know how to get started.

Bee Better Manitoba is a group of like-minded organizations who have come together with a common goal - to inspire and empower Manitobans to protect, conserve and create pollinator-friendly habitat at home and in their communities.

Beebettermb.ca is an excellent site for resources for everyone that teaches about the importance of all pollinators, and a great place to direct your friends and neighbors to get them started. Yard suggestions, Planting guides, activist strategies; all of this can be found in this one convenient place! Help promote Bee Better Manitoba on instagram by using the hashtag **#beebetterchallenge** or tag them **@BeeBetterMB**

Red River Apiarists' Association Membership Application

The RRAA membership extends for one calendar year. Renewals are due in January and includes access to 8 monthly issues of the RRAA BeeCause newsletter.

I hereby apply for membership to the RRAA\$35.00/year

*Optional: Beekeeper Liability Insurance - \$65.00 + \$5.20 \$70.20/year

Total Payment \$ _____

**Note: Liability Insurance fees must be submitted before April 1st.*

Name: _____

Address: _____

City: _____ Prov: _____ Postal Code: _____

Email: _____ Phone: _____

Signature: _____

Please check one of the following:

- New Member
- Renewal
- U of M Student Beekeeping Course (free first year)
-

Payment Method:

- Cash
- Cheque
- E-Transfer
-

Completed form and payment may be brought to a RRAA regular meeting or mailed to:

**John Speer, RRAA Treasurer
Box 16 Group 555, RR5
Winnipeg, MB**

Beekeeping for Preschoolers Workshop. (Ages 1 to 5)

Part of our all ages program, we now offer our Beekeeping For Toddlers program at a discount to all members in good standing.



This comprehensive short course will cover theory and practice on the crucial areas of beginner beekeeping:

- 1) Spring Management
- 2) Suit-less beekeeping : “Veils are for Babies, and I’m a big boy/girl now”
- 3) Organic or “Soft” acid treatments vs Organophosphates and miticides
- 4) Juggling peewee soccer, 250 colonies, and afternoon naps.
- 5) Getting hive checks done before a 7:00 pm bedtime.
- 6) Cowen or Dandent? Who makes the best 120 frame extractors?
- 7) Pampers or Huggies? What’s best for a long day in the apiary?

Course is held on November 3rd and December 15 on Thursday evenings. (2 sessions total) at the Town Center Complex, Churchill Manitoba. Only 150 spots available. First come first claimed, **No Reservations**. Course Costs: \$875.00 + \$80.00 equipment fees. R.R.A.A. Members : \$874.99 **To register contact Tim Kennedy at : Datamule@hotmail.com**

a comprehensive guide to

Yellow Stripey Things



Carpenter Bee

- acts like it's hot - but can't actually hurt you
- has no concept of what glass is
- lives in your fence
- flies aggressively to try and scare you away



Honeybee

- is the bee that needs help the most
- excellent pollinator
- very friendly
- can only sting once



Bumblebee

- also pollinates stuff very well
- so fat it shouldn't be able to fly
- will let you pet it without getting agitated
- actually a flying panda



Hoverfly

- wears yellow stripey uniform to scare you
- actually can't do anything to you
- hangs out in fields
- follows you if it likes you



Paper Wasp

- looks scary, but will only attack if provoked
- sting hurts like hell
- will chase you if you swat at it
- has no concept of personal space



Yellow Jacket

- wants your food and will fight you for it
- never leaves you alone
- will sting you just for the hell of it



Cicada Killer

- looks like Satan's nightmares
- exclusively eats cicadas
- can sting you, but usually won't
- still pretty terrifying



Dirt Dauber

- almost never stings anything except spiders
- builds nest in the ground
- hoards spiders in said nest
- coolest looking of the wasps

Warning: This page contains 100% satire. Take with one grain of salt. —J.R.