

The Bee Cause



Volume 11, Issue 3

March 2014

- Next general meeting is 7:30 Tuesday, March 11th at the River Heights Community Centre, 1370 Grosvenor Ave., Winnipeg.
- (in room right off main-door)

Speaker:
Charles Polcyn Cuban bee-keeping

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Honey by the Bee

Compiled by Ken Rowes

More to the point this is a **background to saccharides (sugars) and HONEY** with some of my opinions inserted. I have often been asked about honey, its benefits or will it ever spoil.

Having a burning under riding desire to understand and be able to explain what I believe the ecology of the human healthy diet is, its role and the consequences especially as it pertains to pure natural raw unadulterated honey, I have researched the medical, chemical and nutritional literature. This is a start. article Dr. M. L. Dillard 1994, discussing food sweeteners provided an insightful note. Human anatomy and its inherent works of metabolism seems not meant to handle few or many drugs, products or chemical inventions made by man or nature. Man's physiological mechanisms has unknown limitations – But whatever the substance ingested there are always some people adverse to it in one way or another. Physician's desk references, list many reactions to nearly any medication. Our search for improvement is endless and the price is always high because those "few" who react badly to new agents often are a "few million" of us ...or you!

To understand the simple one needs to have a bit of a knowledge of the complex.

Sugars or saccharides

1 Polysaccharides

1.1 Polysaccharides are complex carbohydrates, many simple sugar building blocks (monosaccharides) bonded together, synthesized by exactly the same kind of condensation reactions as disaccharides. And as such can be broken down into their constituent monosaccharide's by hydrolyses.

1.2 Starches are polysaccharides and are principal carbohydrate storage products of higher plants; composed of many glucose units.

1.3 Glycogen is a polysaccharide and is the principal carbohydrate storage product in animals and insects sometimes called "animal starch".

1.4 Cellulose is a highly insoluble polysaccharide occurring widely in plants, "the most abundant product of Life in the world."

2 2.1 Characteristics of polysaccharides are complex compounds of high molecular weight. Specific polysaccharides are determined by the number and kind of monosaccharide units it contains and their arrangement with in the polysaccharide molecule. Polysaccharides tend to be insoluble in water and are major constituents of cell membranes.

2.2 Poyols

Chemically, polyols or polyalcohols are sugar alcohols as reduced carbohydrates. Because of their desirable sensory and functional properties and slower absorp-

tion rate, sweet-tasting polyols are replacements for sugar in special dietary foods for diabetics.

Wikipedia, the free encyclopaedia states polyols refers to chemical compounds containing multiple hydroxyl groups. In food science polyols are sugar alcohols commonly added to foods because of their lower caloric content than sugars; however, they generally are less sweet and often combined with high intensity sweeteners. They are also added to chewing gum because they are not metabolized (broken down) by bacteria in the mouth or do not contribute to tooth decay (examples; maltitol, sorbitol, isomalt.

Chemistry speaking in polymer chemistry polyols are polymers or monomers with hydroxyl functional groups available for organic reactions.. Polymeric polyols may be polyethers such as polyethylene glycol, polypropylene glycol... or (cont'd on Pg 4)

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Presidents Comments -- February 2014

A formal presidential report was not provided due in part by the 108th Annual Convention of MBA and the president just getting back from travels in Cuba. To fill the need an article from David Dawson was forwarded. It is focused on Neonicotinoid pesticide use, Canada's response to use sticky seed allowing continued use and a lobby to join the South Eastman Transition Initiative to change its use. He states this is a family of insecticides known as neonicotinoids, a modern chemical based on nicotine, and there are a few different brands supplied by the various international chemical companies. Most of the corn, soybean and canola seed in Manitoba is coated with this insecticide before seeding. Just to show you how toxic it is, the amount of chemical on one single grain of seed-corn is enough to kill 80,000 bees. In Europe these horrible neonicotinoid insecticides have been banned but the recommendation by Heath Canada is to make the insecticide more sticky so that there is less dust blowing in the wind at seeding time. What a pathetic response from Health Canada when wetlands are already contaminated up to 100 times the recommended safe level. Only about 20% of the chemical is taken up by the plants, the other 80% staying in the soil where it takes about 12 years to break down. Meanwhile, in following years, other crops are grown, whose seeds are similarly treated, resulting in an increasing build-up in the environment.

He further feels no competent farmer would expect a farm with poisoned soils devoid of invertebrate life, and without insect pollination, to sustain high yields long term, regardless of what the pesticide company's propaganda might say. Unfortunately most of our farmers are being very slow to see the light even though it is their children and grandchildren (and yours, dear reader) that will have to live in this contaminated environment.

So, he asks how bad does it have to get before you will get mad enough to get involved in opposing this sort of creeping pollution? Will you just wait until there is no fruit or vegetables on the supermarket shelves? Please act now. As a first step, join similar minded people in South Eastman Transition Initiative.

So here are some stats on Manitoba cropland from the Provincial trends 2012. Cropland being referred to as the total area in field crops (grains and oils seeds) fruits, vegetables, sod and nursery according to Census Canada. Of the 18 million Manitoba acres designated as farm acreages field crops make up 82.9%, that's 14.76 million acres. They were:

Soybean acres	705,032
Hay	1,800,000
Oats	695,945
Barley	483,432
Potatoes	72,043
Corn	211,148
Flax	167,367
Strawberry	304
Saskatoon	267
Vegetables	5,641
Sunflower	63,380
In the 2006 Census the Total cropland amounted to	11,600,000 acres of which some crops were:
Spring wheat	3,000,000
Canola (19.8 % of total cropland)	2,300,000
Soybean	350,567
Sunflower	190,230
Vegetables	5,641 (728 acres in onions)

Neonicotinoids (Wikipedia) are a class of neuro-active insecticides chemically similar to nicotine. The development of this class of insecticides began with work in the 1980s by Shell and the 1990s by Bayer. The neonicotinoids were developed in large part because they show reduced toxicity compared to previously used organophosphate and carbamate insecticides. Most neonicotinoids show much lower toxicity in mammals than insects, but some breakdown products are toxic.^[2] Neonicotinoids are the first new class of insecticides introduced in the last 50 years, and the neonicotinoid imidacloprid is currently the most widely used insecticide in the world. The neonicotinoids include acetamiprid, clothianidin, imidacloprid, sulfoxaflor, nitenpyram, nithiazine, thiacloprid and thiamethoxam.

The use of some members of this class has been restricted in some countries due to some evidence of a connection to honey-bee colony collapse disorder. In January 2013, the European Food Safety Authority stated that neonicotinoids pose an unacceptably high risk to bees, and that the industry-sponsored science upon which regulatory agencies' claims of safety have relied may be flawed. A study by Italian researchers, published by the Proceedings of the National Academy of Sciences of

the United States of America on October 21, 2013, demonstrated that neonicotinoids disrupt the innate immune systems of bees, making them susceptible to viral infections to which the bees are normally resistant. In March 2013, the American Bird Conservancy published a review of 200 studies on neonicotinoids including industry research obtained through the US Freedom of Information Act, calling for a ban on neonicotinoid use as seed treatments because of their toxicity to birds, aquatic invertebrates, and other wildlife. Also in March 2013, the US EPA was sued by a coalition of beekeepers, as well as conservation and sustainable agriculture advocates who accused the agency of performing inadequate toxicity evaluations and allowing registration of the pesticides to stand on insufficient industry studies.

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Can I quote: nature's anatomy and its inherent works of metabolism seems not meant to handle few or many drugs, products or chemical inventions made by man.

Red River Apiarist's Association February 11, 2014 Minutes

Chair: John Russell

Recording Secretary: Art Quanbury

Approval of Minutes of January 14, 2014

Moved: Armand St. Hilaire

Seconded: Giles Lantagne

Items from last meeting

The budget cut details for the provincial inspection program is still up in the air. Anyone wanting to take advantage of the Moving Forward Program should see John Russell for details.

Treasurer's Report

John Speer reported that the association has \$2800.00 in the bank and that less than half of the members have paid their dues for the current year.

MBA Report by Jim Campbell

The MBA is still considering the implications of taking on the inspection program with provincial grant money. The grant money is essential in order to carry out the program. If there is no program beekeepers can send samples to the National Inspection Program for analysis.

Social Committee

Ken Fehler has generously agreed to provide snacks for tonight's meeting. Thank you Ken for the cheese and crackers and sausage.

Guest Speaker

David Ostermann gave a presentation on an update to things in the inspection program and some pointers on late winter/early spring management.

Update on Activities

He commented that the inspection program was still up in the air but felt that MBA could have a role to play in the future program. The government could provide training and lab space for the program. In the meantime, beekeepers can send samples to the NBDC in Beaverlodge Alta. They have a fees and services schedule on their web site and provide information online. They have a quick turn around time for analysis of samples.

Other information provided included: results of a study that showed the presence of neonics in wetlands, coming mainly from

canola. There is very little data related to Manitoba however. Since all seeds are treated with neonics there is a concern for a buildup in the environment. Canola seeds treated with fungicides can also create a problem for bees because it interacts with products used to control varola mites. Neonics are also found in buckwheat seed. It has been found that neonics can survive in the soil with a half life of 7-353 days and in one study for 6931 days. PMRA activities have reported finding neonics ion samples of bees, comb and wax.

Reminder: Annual Beekeepers convention at the end of the month.

Spring Management Details

He mentioned that the amount of winter loss is not just related to the winter itself but is affected by activities and conditions of the previous year. Spring management involves feeding, sampling, treating, queening, splitting hives, and active management. Feeding includes syrup, protein sources, pollen patties and site selection. Having a young queen is important. Some beekeepers replace her every year. Spring is a time when treating can be done because there is no honey flow. There are no new treatments to report on this year.

There was some discussion of imported bees vs local bees and whether the local bees were more hardy. There was a discussion of early feeding and it appears that it depends on several conditions. Some beekeepers check the weight of the brood chamber to assess if there is food remaining.

Door Prize winners

John Speer cheese

Mike Grysiuk gloves

Tim Kennedy cheese

Adjournment

The meeting adjourned at 9:00 pm. Next meeting is Tuesday March 11, 2014 at River Heights Community Club. Time is 7:30 pm. —/\—

MBA Report March 2014

Jim Campbell, MBA Representative

Manitoba Beekeepers' Association (MBA) President, Allan Campbell, Dauphin, made a presentation to the Senate Standing Committee on Agriculture and Forestry. The Committee is seeking input on the importance of bees in pollination to produce food, especially in the fruit and vegetables, seed for crop production, and honey production in Canada. Allan made his presentation on February 11, along with Jake Berg, Saskatchewan Beekeepers' Association president, and Kevin Nixon, Alberta delegate to Canadian Honey Council, and Alberta Beekeepers Commission. Senators had lots of follow-up questions for the presenters.

MBA continues to work on details of the Apiary Inspection and Bee Diagnostic Lab programs for 2014. An application has been made to obtain funding from the province. Although grant money is available, there is no indication of when funds will be transferred to MBA. MBA has agreed to contract out the services rather than manage all aspects of the programs with current staff. Details of the program roll out are being developed. An initial search for inspector candidates is underway.

MBA created an early bird registration fee for the upcoming Symposium to encourage pre-registration. This move helps plan meals and Banquet numbers with fewer hiccups. As of the cut-off date 86 beekeepers, speakers, and displayers registered. With Randy Oliver, Grass Valley, California, and Dr. James Ellis, Univ of Florida, Gainesville as keynote speakers, attendance could be over 100. The downside for speakers is that they are coming from a climate far warmer than our minus 20 Celcius.

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(From Pg 1) polyesters a special class of polyols, hydroxyl-terminated polybutadienes used in formulations of polyurethanes.

Of the various sugar alcohols in the table below only sorbitol, mannitol, malitol and xylitol are considered of industrial importance as sugar substitutes.

<u>Sugar</u>	<u>Polyalcohol derivative</u>
Xylose	Xylitol
Glucose	Sorbitol
Mannose	Mannitol
Galactose (dulcitol)	Galactitol
Maltose	Malitol

Many polyols are natural metabolic intermediates and are widely distributed in plants and animals:

Sorbitol berries of the mountain ash

Red algae

Fruit of rosacae plants:

Apples, apricots, pears, cherries, plums, green grapes

Xylitol fruits, vegetables, cereals, mushrooms, lichens, seaweed

In general mechanism polyols are phosphorylated, oxidized to their corresponding sugar derivative and converted to energy,

2.3 Monosaccharides and Disaccharides

Honey is stated to be 92% composed of levulose (also referred to as Fructose), dextrose (also referred to as glucose) and water. Wikipedia describes Fructose, (Levulose) or fruit sugar as a simple monosaccharide found in many plants, where it is often bonded to glucose to form the disaccharide sucrose. It is one of the three dietary monosaccharides, along with glucose and galactose, that are absorbed directly into the blood stream during digestion. Fructose was discovered by the French chemist Augustin-Pierre Dubrunfaut in 1847, The name "fructose" was coined in 1857 by the English chemist William Miller. Pure, dry fructose is a very sweet, white, odorless, crystalline solid and is the most water-soluble of all the sugars. From plant sources, fructose is found in honey, tree and vine fruits, flowers, berries, and most root vegetables.

Commercially, fructose is frequently derived from sugar cane, sugar beets, and maize. Crystalline fructose is the monosaccharide, dried, ground, and of high purity. High-fructose corn syrup (HFCS) is a mixture of glucose and fructose as monosaccharides. Sucrose is a compound with one molecule of glucose covalently linked to one molecule of fructose. All forms of fructose, including fruits and juices, are commonly added to foods and drinks for palatability and taste enhancement, and for browning of some foods, such as baked goods.

In **Nectars** the ratio of levulose, dextrose, water and the remaining other 8% of various sugars etc. is different for each source of nectar. This is why each honey has a unique flavour, aroma, body and colour. Nectar is mostly water, much of which is evaporated by the bees in the curing process of the honey. As the honey cures it becomes a supersaturated sugar solution. This means that the solution contains more sugar than would naturally dissolve into water at that temperature. Even if the honey is not supersaturated at the hive temperature of 95 degrees (35 C), it becomes supersaturated when it is cooled to room tempera-

ture. This is because sugar is more soluble in warmer water than in cooler water. Dextrose is less soluble than levulose and has a strong tendency to precipitate (form crystals) from a supersaturated solution

Crystallization

Honey crystallizing is the process of dextrose reverting from a dissolved solution form into a solid crystal form. Some honey, such as canola honey, has a higher percentage of dextrose and will crystallize very quickly. Some honey, such as clover honey, has a higher percentage of levulose and will crystallize very slowly. Honey does not spontaneously crystallize; the crystals must grow on a seed surface. This is why commercial packing plants filter honey, removing any small particles from the honey, eliminating many of the seeds upon which the crystals may grow. Heating honey also dissolves any microscopic crystals that are too small to be seen, removing them as seed surfaces.

Raw honey has an abundance of seed surfaces as it is loaded with pollen, microscopic dextrose crystals, and bits of wax and propolis. It will crystallize relatively quickly as compared to commercially heated and filtered honey. If crystallized honey is warmed, the dextrose becomes more soluble and will return to solution, that is why heating crystallized honey will return it to its liquid state. You can't just heat it to the hive temperature of 95 degrees and expect all of the sugar crystals to return to solution though, because the honey was supersaturated at that temperature. The honey must be warm to a higher temperature where the water will naturally dissolve all the available sugar. That is why one must warm the honey to 115 degrees F (46 C) and not just 95 degrees (35 C) when re-liquefying it. **My point "Do not warm honey beyond 115 degrees and still call it Raw."** Some honeys will not fully return to solution at 115 degrees and there will be a thin layer of crystallized dextrose in the bottom of the jar. Once re-liquefied the honey generally remains in the liquid state for a month and a half or more if stored at 70 degrees (21 C). If stored in the freezer the honey will remain in the liquid state for many months. It will re-crystallize very quickly if stored between 55 to 60 degrees F (12 – 15 C).

Does honey keep forever?

The answer is no. Contrary to the popular belief that honey keeps forever; moisture makes it prone to spoilage just like any other food product. Water is the one common, necessary component for all living things on earth. Honey is hygroscopic, that means that it will attract and hold water molecules from the surrounding environment. Honey absorbs moisture from organism within it, if the honey has a low moisture content it will absorb so much water as to result in the organism's death or at least prevent it from multiplying. This is one of the ways that it acts as an antibacterial agent. If the moisture content of honey is below 17.1 percent, even sugar tolerant yeasts are inactivated so the honey is safe from the possibility of fermentation. Unfortunately the yeast is not killed and if the honey is raw the yeast may become active if the moisture content rises sufficiently.

Beekeeper / Consumer Awareness

It is important to understand that the virtues of a product or produce do not provide absolute healthy consumptive products. Such marketing ploys are associated with specific product laboratory evaluations which may be very different from the products on the market shelf or the local country / cottage producers table. Contaminants may enter such products from many avenues so it is buyer beware!

The best way to be as safe as you can (Cont'd on Pg 5)

(From Pg 4)

as producer or buyer is to be educated about how the food source can be contaminated. From the seed handling, the land use or misuse, the harvesting equipment or chemicals, the containers for transport or storage, to your grocery bag beware.

Point 1

Heat changes chemical structure of most compounds although there will be a range of thermal units to reach the points of change or molecular bond breakage.

So when you prefer for instance to liquid honey, you must understand the molecular change caused by such action termed pasteurization.

Heating along with ultra-fine filtration removes yeasts, pollens and many valuable enzymes, minerals and vitamins. Processing thus is important. For instance in the first stage of honey extraction, if heat is used to remove wax cappings from the honey frames the potential of change occurs. Yes, such simple sugar molecules will recombine to their former structure under specific conditions and by the honey producers process (manipulation); however, under large scale operations or in the processes of less knowledgeable beekeepers the change is permanent.

Point 2

When virtues are ascribed to a product such as honey, one must ask, 'How this product was handled "From the Bee to You" my logo. How experienced was the honey handler and was there care in the process for sterilizing containers to maintain food grade containers.

Check your containers, and question the process. Store bought honey is ultra filtered and pasteurized to eliminate as best as possible any potential allergic response by a consumer. This reduces the virtues of RAW unpasteurized honey which is only available from local beekeepers.

Point 3

Raw Honey is the natural bee refined plant nectar with traces of minerals, vitamins and enzymes. The main composition being the simple sugars levulose and dextrose.

Point 4

Honey ranges in colour from crystal white to glowing dark amber due in part by the saccharides (sugars). The saccharides provide the sweetness, the texture and colour. Minerals and moisture content also play a role in the colour, structure and texture of honey.

Point 5

Texture relates to the sugars. Polysaccharides form larger crystals providing the grit or granular texture found in some honey. The simple mono- and disaccharides form smaller crystals found in creamed honey. Note that much creamed honey (also referred to as spun / whipped or seeded) is produced by seeding the natural liquid honey from the hive with cream honey from the previous year and letting the process crystallize. Larger granular crystallization may result from heat, changing the molecular structure of the simple sugars and if temperatures used to

liquefy are above 115 F (46 C).

Point 6

Honey absorbs moisture. Thus it should be placed in dry storage. Storing it in the refrigerator encourages granulation, a slow cooling occurs encouraging granulation whereas, freezing will capture the state the honey is in, suspending it until thawed.

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Order Early Message

By Jim Campbell, RRAA Exec

Bee Maid—Bee Outfitters, Manitoba

Josh Kolesar advised beekeepers to order their supplies early to prevent disappointment.

At the last Red River Apiarist Association meeting, Josh Kolesar, sales associate, Bee Outfitters, spoke to the group about services they provide and some issues they encounter. For example, customers faced difficulties last spring as a result of high winter losses, as they sought replacement stock. Package bees were in short supply across western Canada due to the early demand from the blueberry pollinator industry in the East. This was complicated by a delayed spring in Manitoba. Some customers were disappointed with the lack of packages.

Josh commented on issues of unpredictability. He related a story about regularly selling about 1000 queen excluders per year, yet demand one year was for 10,000. There are often long lead times for stainless steel products, especially shipped in from USA, causing delays in receiving timely products. He suggested eliminating a past practice of standing orders for things such as queens. Customers received the same amount of supplies as they ordered the previous year. This practice often led to inefficiency as an order could be cancelled on short notice, leaving sales staff to scramble to find buyers.

In an effort to serve beekeepers better, Josh noted plans to upgrade the software system. He also encouraged the audience to help by ordering early. He suggested waiting until needing a new honey super, for example, could coincide with many others doing the same thing, and supplies could run out. He suggested planning ahead to avoid disappointment. He also encouraged people to visit the web site or stop by their store to see what kinds of product they offer the industry.

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Spring 2014 National Bee Diagnostic Centre

Overview: The NBDC offers diagnostic services for detection of the most common honey bee pathogens: AFB, EFB, Nosema, Varroa mites, Tracheal mites and Viruses. Depending on the beekeeper's concern, samples may be taken *per apiary* or *per colony*. When the main interest is the overall apiary health, a composite sample of adult bees from 8 randomly selected colonies in each apiary will be required (we recommend 1 composite sample for up to 1,000 colonies). When a specific colony is the main concern, one sample of adult bees or comb from this colony will be required. —/\—

More on the services to come in the March issue of the BeeCause.



Editor's Note

by Ken Rowes

Wow is the temperature hitting the prairies in the extreme low subzero level (-30s). From the few outdoor sources bees are doing just fine. An alert note skunks have been at bee entrances during near or above zero temps during early February.

BEES FOR SALE

As you know each spring many beekeepers are interested in replacement of winter losses and there are those initiating expansion. Then the hassle as to who has what and crunching to what is actually available. The notice is finally out to compile the listings for the 2014 spring sale of Nucs, Single and Double hives.

Sources are listed in the MBA web site and a few are listed in the Classifieds of the RRAA newsletter The Bee Cause.

The point to note: MBA listing is only permitted by beekeepers with no restrictions (history of AFB –last 3 years), no restrictions on moving bees or equipment due to resistance to American Foulbrood or the hive beetle.

If you have any for sale please contact MBA, extension apiarist or the RRAA editor. The RRAA will run your ad whether selling or wanting to buy bees or equipment, however, buyer will have to check with the extension apiarist for disease status of sources.

GREEN is the colour for 2014 marking queens.

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

CLASSIFIEDS

1 For Sale: Plastic queen excluders \$3.50 each. SS Tank holds 8 drums of honey, \$1800 OBO. Contact, Lance W. Phone 204-712-6783, Email; lancewld@gmail.com

2 For Sale: For sale : heavy frames of pollen - \$60 per super of ten frames, 15 supers of plastic frames - \$34 ea. Wrecking 2005 F-350 4x4 – asking \$4,000 OBO Booking spring colonies – minimum 4 frames of brood – mid May - \$250 30 honey supers with plastic comb - \$32 each Winter wraps made to your specifications - \$45 to \$65 each Interlake Honey Producers Ltd. Interlake Honey Producers, Fisher Branch, MB 204-372-6920 . 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**

3 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**

4 For Sale: 6 hive top feeders, 20 frames with foundation call 204-612-2754 **Doug Beck** or e-mail doug-janetb@hotmail.com

5 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).**

6 For Sale: nucs for sale, 3 frame \$100, 4 frame \$125. and 5 frame \$150. all nucs come with new queens. available approximately 15 th may, weather permitting. contact **Dennis Ross 204 878-2924 e-mail rosskr@mts.net**

Group Insurance for RRAA

By Jim Campbell, MBA rep

Since 2006, beekeepers had an option to secure group liability insurance coverage from The Co-operators Insurance Company, who prepared a package for individual Manitoba producers.

Insurance summary:

- a. Bodily Injury and Property Damage \$2,000,000.
- b. Annual Aggregate on Products & Completed Operations \$2,000,000.
- c. Personal Injury \$2,000,000.
- d. Medical Expenses \$2,500

Bodily Injury and Property Damage deductible -Each Occurrence \$2,500

Liability coverage may be appropriate for beekeepers who have bees located in their yard, or someone else's, or where neighbours may be close by. It covers you and any workers you have for your operation, and is available to all members of MBA and RRAA. It also covers those involved in public promotions of bees and honey. The RRAA Membership Application Form for 2014 is now modified to include a line for Insurance Option. To review some of the benefits, look at www.beekeepingmanitoba.com and go Links & Resources section, where there is a page on Insurance-Liability.

Premiums are \$45.00 per year, and are payable to RRAA initially. RRAA will forward premiums to MBA. MBA will handle future renewal billings, and could hold new applications to correspond to the insurance renewal date of 3 May each year

To subscribe, forward \$45.00 premium to: RRAA c/o Box 16, Group 555, RR5 Winnipeg, MB R2C 2Z2.

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The Telegraph - 1 February 2014

A new study has discovered that bumblebee colonies bred commercially in Central and Eastern Europe for use by British farmers and gardeners carry high levels of parasites.

An estimated 40,000 to 50,000 colonies of bumblebees are imported to England each year to help pollinate crops such as strawberries and tomatoes.

The commercially bred bumblebees are also now being sold to gardeners for around £100 a hive to help pollinate flowers in their gardens.

Researchers found that 77 per cent of colonies they tested as they arrived in Britain carried parasites.

The colonies were found to be carrying five parasites that can

infect bumblebees and five parasites that infect honeybees.

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Flaherty's budget February 12, 2014 to expand livestock tax deferrals to bees

Plans to bring beekeepers in on income deferrals available to certain livestock breeders, and to further expand rural broadband, are among the pre-Valentine's Day candies for farmers in Tuesday's federal budget. Federal budgets in recent years have been relatively light on line items meant directly for farmers, as ag program funding is largely locked into five-year federal/provincial/territorial ag policy funding frameworks — for example, Growing Forward 2, covering 2013-18.

Thus, federal Finance Minister Jim Flaherty's "Economic Action Plan 2014" proposes a few small changes for farmers, mainly in the tax treatment of farms.

For one, it proposes to expand the income tax rule that allows farmers to defer up to 90 per cent of the income earned when they sell off breeding livestock due to drought, floods or excess moisture conditions in federally-designated dry or waterlogged municipalities or regions. The deferral rule until now has defined "breeding stock" as cattle, goats and sheep over 12 months of age and kept for breeding, as well as horses over 12 months old and kept for breeding in the commercial production of pregnant mares' urine (PMU).

Starting in the 2014 tax year, however, the rule will extend to bees, and to all types of horses over 12 months old, that are kept for breeding. The tax deferral is meant to allow farmers to use the sale proceeds to replenish breeding stock, and is focused on breeding stock "because its sale is akin to disposing of long-term productive assets."

Allowing a slightly larger group of farmers to defer a portion of such sale revenue from their taxable income until the following year (or the first year in which a region is no longer designated) is expected to cost only "a small amount" of federal revenue in coming tax years.

Land donations

Flaherty also pledged to slightly sweeten the incentive for farmers and other landowners who donate "ecologically sensitive" land to certain registered Canadian charities to protect natural areas.

Generally, charitable donations not claimed in a given tax year can usually be carried forward for up to five years, for use toward a tax credit for individuals or a deduction for corporations.

However, for donations of such land, Flaherty's budget proposes to double the maximum carry-forward to 10 years — a line item also expected only to reduce federal revenues by a "small amount," starting in 2013-14.

Farmer/fishers

For farmers who carry on both farming and fishing operations "in a combination," Tuesday's budget proposes to simplify tax rules dealing with an individual's \$800,000 Lifetime Capital Gains Exemption (LCGE) and with rollovers of capital gains in intergenerational transfers from a parent to child.

For those purposes, the government proposes to "generally" treat a taxpayer's combined farming and fishing business as it would treat separate farming and fishing businesses operated by (Cont'd on Pg 8)

(From Pg 7) the same taxpayer.

Thus, starting in the 2014 tax year, the new rule would extend eligibility for the intergenerational rollover and the LCGE to an individual's shares in a corporation or interest in a partnership, where the corporation or partnership carries on both a farming business and a fishing business.

The move, the government said Tuesday, "will ensure consistent treatment for taxpayers who conduct farming and fishing activities in different legal forms."

Broadband, beer, BSE

Among other moves of interest to farmers and agrifood producers in Tuesday's budget are:

- establishment of a private-sector steering committee for development of a domestic and international "Made-in-Canada" consumer awareness campaign, with details to be announced "in the coming months;"
- legislation to address "price discrimination" between goods in Canada and the U.S. where not justified by higher operating costs in Canada, and authority for Canada's Commissioner of Competition to enforce it;
- \$205.5 million over five years for the Canadian Food Inspection Agency, Health Canada and the Public Health Agency of Canada, to continue "routine" programming aimed at minimizing likelihood of exposure and spread of bovine spongiform encephalopathy (BSE) within Canada's cattle herd;
- \$153.6 million over five years to "strengthen" the Canadian Food Inspection Agency's food safety programs;
- \$30.7 million over five years, including \$5 million in each of 2014-15 and 2015-16, to set up a national Food Safety Information Network, sharing standardized food safety data and analysis and linking provincial and federal food safety authorities and private food testing labs;
- \$305 million over five years to "extend and enhance" broadband service to a target speed of five MB/second for up to 280,000 more households in Canada, which would represent "near universal" broadband access;
- updating the compositional standards for beer (and, later, other products) under the Food and Drug Regulations, to better account for new styles of craft beer on the market, citing red tape encountered in the recent attempts to launch Pump House Brewing Co.'s Blueberry Ale and Rickard's Cardigan Seasonal Spiced Lager;
- a pledge to "enhance funding" for Nutrition North Canada, which subsidizes retailers in 103 remote and isolated communities for the cost of stocking perishable "nutritious" food; and
- adjusting the rate of excise duty on cigarettes, effective after Tuesday, to account for inflation since 2002 (which translates to a duty increase of just over \$4 per carton), and automatically adjusting it every five years from now on in keeping with the Consumer Price Index. — [AGCanada.com](http://www.agcanada.com) Network

See full article here: <http://www.agcanada.com/daily/flahertys-budget-to-expand-livestock-tax-deferrals-to-bees>

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Health Canada

14 January 2014

Update—Pollinator Protection and Responsible Use of Treated Seed—Best Management Practices

New 2014 requirement

When using a seed flow lubricant for planting corn or soybean seed treated with neonicotinoid insecticides clothianidin, thiamethoxam or imidacloprid, only the Fluency Agent by Bayer CropScience is permitted to minimize the potential for abrasion that produces insecticidal seed dust. Talc and graphite are not permitted to be used as a seed flow lubricant for corn or soybean seed treated with these insecticides. Carefully follow the use directions provided with the Fluency Agent by Bayer CropScience.

Communication and cooperation among growers, custom operators and beekeepers on the timing of planting treated seed and the location of hives can help reduce the risk of bee incidents. This communication will enable growers to know which fields have hives located close by and provide advanced notice to beekeepers of planting intentions, allowing beekeepers to ensure hives are located strategically, take actions to temporarily protect or relocate hives where feasible, and ensure clean water sources are provided.

Beekeepers should inform growers of hive locations.

Growers should inform beekeepers of timing of planting treated seed and pesticide applications.

Recognize pollinator habitat and take special care to reduce dust exposure

Bees collect pollen and nectar from flowering crops, trees and weeds, as well as water from puddles and moist soil in or beside fields. Pollinators can be exposed to treated seed dust when it is carried in the air or deposited on food and water sources.

During planting season, weeds, such as dandelions, and flowering trees, including maples, willows, hawthorns, apples, etc., are important pollinator foraging resources.

Dust emitted through planter exhaust may be transported under all weather conditions. Pollinator exposure may be increased under very dry and/or windy conditions that favour dust transport. Avoid planting treated seed under these conditions if flowering resources, standing water or bee yards are located downwind, and follow best practices to reduce dust exposure.

Control flowering weeds in the field before planting so that pollinators are not attracted to in-field forage.

Report suspected pollinator pesticide poisonings

For suspected pollinator poisonings related to planting of treated seed or pesticides, contact the appropriate federal/provincial authority. See the Health Canada's pollinator protection web page for appropriate federal and provincial contacts and additional information. www.healthcanada.gc.ca/pollinators.

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**Red River Apiarists Association
Statement of Operations for 2013 (Un-Audited)**

REVENUE	2012	2013
Memberships	\$1720.00	\$1500.00
Honey Show	\$ 850.00	\$1250.00
Donations	\$ 346.51	
Raffles (Looney Draw)	\$ 202.90	\$ 240.55
BeeCause Ads		\$ 10.00
T-Shirt Sales		\$ 204.00
Bank Interest	\$ 78.39	\$ 46.29
Total Revenue	\$3197.80	\$3250.84
EXPENSES		
Bee Cause Printing/Postage	\$ 619.87	\$ 603.84
Newsletter Advance (2014 expenses)		\$ 500.00
Meeting room	\$ 540.00	\$ 695.00
Insurance	\$ 100.00	\$ 100.00
Bank Service Charges (+new checks)	\$ 45.82	\$ 119.89
Social Nite	\$ 89.50	\$ 314.71
RRAA Website	\$ 377.37	\$ 377.37
Donations (U of M)	\$2000.00	
Honey Show(s)	\$ 731.18	\$ 670.93
Field Day (port-a-pottys)	\$ 210.00	
RRAA Logo T-Shirts		\$ 319.56
Total Expenses	\$4713.74	\$ 3701.30
Net Profit	Loss < \$1515.94 >	< \$ 450.46 >
Closing Surplus	\$3287.64	\$2837.18

Honey Show(s) Statement for 2013

EXPENSES	
Gift Certificates - Day of the Honey Bee	\$ 100.00
Gift Certificates - Honey Show	\$ 50.00
Special T-Shirts	\$ 520.93
Total Expenses	\$ 670.93
INCOME	
Table Rentals	\$ 500.00
Donation MBA	\$ 450.00
Donation Bee Maid	\$ 300.00
Total Income	\$1250.00
<u>Profit</u>	<u>\$ 579.07</u>

Apiary Inspection/Monitoring Services planned to return for 2014

The Manitoba Beekeepers' Association directors agreed to administer and manage the Honey Bee Apiary Inspection and the Honey Bee Diagnostic programs for the industry.

Beekeepers across Manitoba questioned why apiary inspection and bee diagnostic services weren't available during 2013. At the last MBA Annual Meeting, it was confirmed the province plans to transfer this responsibility to industry. Concern for Bee Health is a priority of MBA directors, and thus at their meeting of February 10, directors agreed to administer and manage the 2014 programs.

Funding for the programs will come from MBA's success at obtaining a grant from the province. Although there is indication a grant is possible, there is not a firm commitment as to when the funds will be available to MBA. As the 2014 bee season is fast approaching, directors determined contracting out the services would be better than trying to manage this on our own.

More details as to how these programs will be rolled out will unfold over the next few weeks. Be assured, Producer Confidentiality will be maintained, as disease monitoring will be performed under the auspices of MBA, while the province will retain and oversee the resulting data plus enforce the Bee Act. Program summary will be presented at the fall Annual Meeting, similar to what has taken place for the past number of years.

In the meantime, should you wish to help with the inspection services, or know of someone looking for casual summer work, please let MBA directors know.

James Campbell, MBA Secretary

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Red River Apiarists' Association Winnipeg, Manitoba 2014 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)

RRAA membership fee (cheque payable to RRAA or Red River Apiarists' Association) @ \$25.00/year
NEW: Optional Beekeeper Liability Insurance (details on RRAA web, Links, Insurance) @ \$45.00/year

TOTAL PAYMENT ENCLOSED.....\$_____

Name _____ Tel. _____

Address _____

City _____ Prov. _____ Postal Code _____

E-mail address _____

Signature _____

New Member [] Renewal [] Student U of M Beekeeping course [] [free 1st year]

Other. Please specify. _____

Newsletter Delivered in electronic pdf via e-mail [] or on paper via Canada Post []

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.

Please do not send cash in the mail