

The Bee Cause



Volume 10, Issue 2

February 2013

- Next general meeting is 7:30 Tuesday, February 12th at the **River Heights Community Centre, 1370 Grosvenor Ave., Winnipeg.**
- (in room right off maindoor)

Speaker: Members Wintering Experiences plus Question and Answer session, led by John Russell, Vice Chair RRAA

The Winter Bee

compiled by Ken D. Rowses

What a better time to read about the winter bee than in the winter. Many may have known or have read about the unique characteristics of the winter worker bee, however, here is a compilation of some research material and some does and don'ts.

The honeybee workers (*Apis mellifera*) are classified as either short-lived summer bees or long-lived winter bees here in Canada and elsewhere. Gro Vang Amdam and Stig W. Omholt, 2003 studied the protein status believing it to be a major determinant of honeybee life-span, and the lipoprotein vitellogenin as playing a crucial role. They reviewed the role of the

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vitellogenin in honeybee workers, and describing the dynamics of this representative protein in the individual bee as a function of its task profile under various regimes. Their results support the hypothesis that vitellogenin is a true storage protein that is utilized for various metabolic purposes including the synthesis of brood food. Except for workers having been foragers for many days, they also suggest that the previous life histories of workers do not constrain them from becoming winter bees as long as they get ample food and time to build up their protein reserves before wintering. Their results also indicated that it may not be necessary to introduce the ovary as a storage organ for vitellogenin in order to generate normal winter bees.

Winter bees are also termed "Resting" bees. To achieve the longer life span they conserve protein. Maurizio (1950) induced "winter" bees during summer by restricting the queen from producing brood. This adaptive shift to extended longevity was in response to the cessation of pollen income into the colony also found by (Mattila and Otis 2007), which "tells" the younger bees in the colony to conserve protein.

So let's see how this breaks down. Looking into the Bee roles can show where their wintering status fits. They forage for

food as **forager bees**, then process collected food and convert it into new bees as **nurse bee**. Community functionality also requires a number of other jobs largely by "**middle aged**" bees, such as nectar storage, comb building, cell cleaning, guarding, air circulation and gluing to name a few.

To bridge between seasons or be able to survive shortages of food they convert to "**resting**" bees, and here load up on the lipoprotein vitellogenin and move into a cluster. Clustered they winter in what is considered a semi-hibernative state (**a torpor state**). The bee dictionary defines torpor to be a state of motor and mental inactivity with a partial suspension of sensibility. We all know that bees still move and have a mental functionality to disturbances and pests even in the reduced active state.

Clustered resting bees (technically diutinus bees) are topped up with storage proteins utilizing these reserves in a fraction of that of other worker bees. With vitellogenin they apparently do not have to process pollen until there is a shift to egg laying and brood rearing. With this low protein utilization there is less need to defecate.

In our northern hemisphere worker bees spend a longer time as winter bees than in warmer regions. This can be shortened with disease and poor nutrition.
(continued on pg 4)

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Presidents Comments -- February 2013

We are well underway for a new year, as our club welcomes two new members, Armand and Art onto the 2013 Executive. Thanks to all who attended the Annual Meeting last month, and a special thanks to Ron Rudiak and Brian Smith for their services. We now look forward to ways of celebrating our 50th year.

What a cool winter, and yet bees were flying January 28 when temperatures were minus 15 Celsius. Sun's rays warmed up some South-facing hives, and fortunately many bees found their way back home. A few days later, at minus 30, the top entrance was surrounded by hoar frost. These changes must drive our girls crazy.

Crazy also describes my preparations to leave for warmer climates. With flight plans set for Tuesday 15 January, who would have guessed an opportunity to speak to our city leaders would occur when I should be packing. The Standing Policy Committee on Protection and Community Services held policy reviews on Monday January 14, 2013.

A few quick calls to RRAA members met with good responses. John Russell agreed to contact some members to see if they could attend. Jim Campbell offered to appear as a delegation. His report appears elsewhere in this newsletter. As Jim and I sat through several delegations, we both kept an eye on our watches while our parking meters ticked away. Deciding to get other things done, the lunch hour seemed to be a reasonable break. However, arriving back at about 1:00p.m. I discovered nearby parking spaces were limited, thus joined the session just as my name was being called.

The Committee changed the agenda order, likely recognizing the media supper hour broadcast needs. While I recommended more deliberations on the bee bylaw, French CBC was interviewing Jim, and then, they wanted my comments. A busy time!

Oh well, Life can be busy, yet soon we will be thinking of checking bees to determine if they are needing pollen supplies, or maybe feed. Hopefully we can discuss these at our next meeting.

Jim Campbell for Charles Polcyn

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**Minutes of the RRAA General Meeting
River Heights Community Club – January. 8, 2013**

7:30 PM: Charles opened the meeting with a list of agenda items. Charles informed members that Ron Rudiak is following treatments for Lime Disease. Ron will share his experiences and his suggested precautions at a later meeting.

Minutes: Charles asked if any changes were required. Moved by Ken Fehler seconded by Gilles Lantagne to approve the minutes of Nov 13 2012. Any carry-over business from last meeting. None identified.

Correspondence/Business: Staples offers coffee service in single serve pouches.

Charles reads a letter from a Stonewall beekeeper wondering if he will be able to place some hives on his land within city limits. Charles informs us that no bylaw approvals yet, maybe after next city meeting.

Other items: Seed Manitoba magazine shows plants good for bees. Bee venom good for aging facial skin, acts like botox. Jar of fake honey sold in Winnipeg. Our government needs to act.

Election of executive officers for 2013: Charles asks for other nominations from the floor. None made.

Charles asks for a vote to accept the Nomination Committee proposals. Motion made and carried.

Newly Elected: 2nd Vice Pres: Armand St Hilaire and Secretary: Art Quanbury

MBA Report: Jim Campbell is at MBA Directors meeting in Neepawa today. Jims' notes: Due to SHB from the US there is discussion of establishing a quarantine zone along the Manitoba-USA border. The MBA annual symposium and conference will be in Winnipeg March 1-2. Cost \$195.

Treasurers Report: John Speer reported that after the \$2000 donation to U of M our balance stands at \$3200. RRAA memberships are now due for 2013.

Newsletter Report: -Article about horse injury. Ken Rowes keeps finding these very interesting articles for our newsletter.

Decal Choice: After much discussion on the colour and style it was proposed by Ken Rowes and seconded by Kim Kennedy to adopt design numbers 3-4 and 6. Carried

RRAA Anniversary: A 50th Anniversary Committee was formed to organize a special celebration. Members appointed: -Charles Polcyn, Jim Campbell, and Ken Rowes. Suggestion-at the May meeting, in a small hall,

Coffee Break: Ken Fehler brought his famous honey flavoured smoked pork sausages along with cheese and crackers. PRETTY GOOD KEN! Last meeting we had honey flavoured jam, now we have honey flavoured sausages. Maybe a precedent has been set!

Program: Presentation by Ken Fehler: -Ken checked his 100 hives and may have lost 4 hives. Ken adds sugar patties as needed over the winter. -Sugar patty recipe: 10kg sugar, 1 tbsp Honey Bee Healthy, 1 kg icing sugar, 3 to 4

lbs honey. Mix well and add water if needed to make a consistency of a firm patty, not sticky. Add to hives on a warm day.

Loonie Draw: Jar of acacia honey - Waldemar Damert, Jar of Tennessee honey - Gilles Lantagne, Calendar and pens - Doug Beckingham, Calendar - Keith Bamford, Candles - Kim Kennedy, Bee gloves - Mike Grysiuk Sr. Thanks to everyone for participating and those donating the fine draw items.

Recorded by: Armand St Hilaire
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MBA Report - January 2013

Jim Campbell, MBA Representative

Manitoba Beekeepers' Association (MBA) held their first directors meeting of 2013 at Neepawa, where elections of executive positions took place. Returning directors welcomed two new members: Philip Waldner, East Selkirk, and Mark Friesen, Morden.

Allan Campbell was re-elected President for 2013, and Bryan Ash continues as the Canadian Honey Council Director.

MBA members prefer to receive invoices for their yearly fees, as this makes record keeping easier for income tax purposes. It also helps those using accountants to keep the books in order. With this in mind, Invoices for 2013 were distributed via E-mail and Canada Post beginning 21 January. This process appears successful, as payments started rolling in to the MBA treasurer by the weekend.

MBA were among several other commodity groups attending the 29th Annual Meeting of Keystone Agriculture Producers (KAP) Association meeting in Winnipeg. At this meeting, time is dedicated to discussion and approval of resolutions covering everything from water retention management to handling off road vehicle damage to cropland.

Meanwhile, MBA is beginning work on its' own resolutions from the 2012 meeting. These resolutions are being tracked on the manitobabee.org web site so anyone can check on progress at their convenience. MBA is currently reviewing the equipment values for 2013 as they set the Wildlife Damage Values, for the upcoming Bear damage season, used by the Manitoba Agricultural Services Corporation (MASC).

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Availability vs. self-centeredness. Making ones own schedule and priorities secondary to those to serve bring rewards of abundance and stability. You can see why each bee in a colony actively function for the whole colony being available for the necessities of the hive such as sacrifice to defend, forage and process it's 'groceries', and maintain its residence. This kind of availability in our own families is a character of true success,

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(from pg 1) Nelson, et al 2007 found that bees with low vitellogenin levels began foraging earlier and more for nectar than pollen, thus aging sooner. Schmickl & Crailsheim 2004 found older bees gather the pollen. The nurse bees process it into protein-rich jelly feeding it back to the foragers. The forager immune system and antioxidant system is dependent upon the vitellogenin and in turn their life span depends on how well they are fed. Thus a low protein level in a colony will initiate premature ageing of bees and also depress the immune system of the colony making them all susceptible to disease.

Feeding bees protein supplements or sugar syrup must be of good quality or it can be toxic to bees. Manning 2008 warned that foragers can be poisoned by mycotoxins (fungal toxins) in fermented nectar or sugar syrup.

Parasites and pathogens have impacted the well being of colonies especially wintering ones. Varroa and Tracheal mites including Nosema apis and Nosema ceranae have weakened bees suppressing their immune systems as well as creating points of entry for pathogens.

Can we say that the mites do not kill a colony but rather impact the bees for fatal viral infections?

Dictionary.com defines a virus as any of various extremely small (20 -300 Nan omicron diameter), often disease-causing agents consisting of a particle (the **virion**), containing a segment of RNA or DNA within a protein coat known as a **capsid**. Viruses are not technically considered living organisms because they are devoid of biological processes (such as metabolism, respiration) and cannot reproduce on their own but require a living cell (of a plant, animal, or bacterium) to make more viruses. Viruses reproduce first either by injecting their genetic material into the host cell or by fully entering the cell and shedding their protein coat. The genetic material may then be incorporated into the cell's own genome or remain in the cytoplasm. Eventually the viral genes instruct the cell to produce new viruses, which often cause the cell to die upon their exit. Rather than being primordial forms of life, viruses probably evolved from rogue pieces of cellular nucleic acids. The common cold, influenza, chickenpox, smallpox, measles, mumps, yellow fever, hemorrhagic fevers, and some cancers are among the diseases caused by viruses.

So what pathogens are we concerned about?

The Canadian Honey Council in IPM for Healthy Bees presents excellent coverage on varroa and tracheal mites, American foulbrood and nosema (nosemosis disease caused by two microsporidian parasites Nosema apis and Nosema ceranae. The concern must also extend to those latent viruses which can flare up when colonies are burdened with the mites or some other stress like poor nutrition? Other viral infections are Israeli Acute paralysis Virus and Sacbrood Virus and chalk brood.

Sacbrood is common and generally associated with poor weather and nutritional stresses. Dall 1985 found it in pupae through to the adult bee. Talking with Manitoba beekeepers I have heard it is around.

Larvae observed stretched out dead on their backs with heads upturned are signs of its presence. Obviously it is spread by workers who clean and nurse the hive removing the larvae, subsequently infecting forages through saliva, jelly and stored pollen. Baily 1972 found that queens can transmit Sacbrood to their eggs as well as any parasite like mites. This virus cultures in the brains of infected bees apparently not killing the host initially. However, continues causing abnormal earlier foraging diverting solely to nectar and not pollen collection. The ultimate fate resulting in shorter life spans for these infected bees.

We learned in our October and November newsletters the thermodynamics of bees. Here we find that infected bees struggle with this especially near 2 degrees C as resting winter cluster bees. Bees at the outside of a cluster hold their body temperature to a minimum of 5 degrees Celsius, below they are too cold to initiate shivering and die.

Factors that reduce the bee to function thermodynamically warming its thoracic flight muscles will be in jeopardy. Any or all impacts of ageing, poor nutrition, or diseases hinder the thoracic muscles, circulatory system, and the nerves in the bee's ability to manage energy conversion. Bees infected with Sacbrood virus chill more quickly and die once cooled below brood nest temperature.

So in wintering bees we find a portion die, possibly due to the reasons above. Impacts include mites, nosema, viruses, pesticides (possibly in the pollen stored), and poor nutrition reduces colony build up for strong winter survival. Generally resting bees have few external stresses and invest in body maintenance keeping their vitellogenin and glycol levels high with their immune system strong, thus providing a resistance to starvation, thermal, and oxidative stresses.

Action: (does & don'ts)

- 1 Reduce mite levels using any method especially in late August before wintering and keeping viruses in check too.
- 2 Monitor nosema and treat as soon as possible and in fall eliminate colonies that do not build well.
- 3 Colonies that are not strong or with spotty brood, kill or requeen. Sick colonies may be removed to another location reducing possible spread of infection.
- 4 Maintain strong colonies providing maximum feed and pollen especially in late summer for wintering bees. Think of a bee yards with plenty of spring and fall pollen sources.
(continued on pg 6)

**Editor's Note by Ken Rowes**

Below 30 Celsius has made it a harsh winter. My records in my yard show a total of 41.95 inches of snow since September (Oct.= 5.75, Nov = 12.125, Dec = 9.255, Jan = 14.82), so outdoor wintering may be benefiting from this snow covering with the low temperatures. In 2011 we had 14.01 inches by December end.

You will note on page 8 the RRAA has 3 logos finally settled upon by vote at the January meeting.

Following the theme of understanding the bees, I have put together information about the winter bee. By no means is it complete but it covers much of the literature over the last few decades. I hope you find it a benefit and interesting to your trip along your bee lane adventures.

Karl von Frisch in Bees, their vision, chemical senses and language (1950) pointed out that bees take up larger volumes of solution if the sugar concentration is high. The sweeter the taste, the more they pump into their stomachs.

He used a salt infusion that bees did not like. He found between years 1929—1930 that a half-molar sucrose solution (0.015 molar NaCl) the bees took up less than they took up from pure half-molar sucrose. The difference disappears when he used as little as 0.0075 molar NaCl.

He concluded bees are more sensitive than humans to salt.

Sugar was rationed during war time but beekeepers had a reduced purchase rate. Karl suggested they use octoacetyl sucrose in the sugar - fine for bees, distasteful to humans. The trade name Octosan proved especially suitable for the purpose because it was a chemical compound of sucrose and acetic acid, and therefore quite harmless to both bees and humans. Moreover, during the honey-ripening process in the beehive it decomposed after several weeks, so that its bitter taste was not imparted to the honey.

He found that hungry bees will tolerate more bitterness, but they will not take higher concentration of salt. Insects were found to distinguish four qualities of taste (sweet, bitter, salty, and sour).

Application: red clover was not popular for bees to pollinate. Red clover flowers were put into sugar-water so that after several hours the odour of the clover was taken up by the solution. Removing the flowers and feeding bees many of the bees flew to red clover plants the next day. Thus the seed set of this red clover improved.

Good honey sources are transmitted to hive bees by dance and the scent being carried.

CLASSIFIEDS

1 For Sale: Complete honey extracting line 48 Frame extractor, uncapping table, sump, tank, pump, pipes.

Contact Lance at 204-712-6783,
lancewld@gmail.com

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

The Bee Cause is the official publication of the Red River Apriarists' Association for distribution to its members and their colleagues in the bee-keeping 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 Apriarist 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 Apriarists' 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

Glenn & Margaret or margandg@mymts.net

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

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

5 Wanted: Looking for good used Cowen type horizontal 28 to 60 frame extractor, plus sump and pump. Call **Don Friesen**, Rosenfeld, at **204-746-8863** or e-mail stonefield71@hotmail.com

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

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

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

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

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

11 Student for work. Dear Members and Associates,
 My name is Tannis Macdonald and am a current student in the Commercial Beekeeping Program at Grand Prairie Regional College (2013). I contact you today to inquire as to whether you may be aware of any opportunities for the paid work experience portion of my education. Within this work experience I would be required to experience all aspects of a beekeeping operation; hive to packaging/market.

The first portion of the practicum to begin at the end of March or start of February to mid-June. I would then return to campus for queen rearing in the last two weeks of June. The second portion would be July to mid-September and then return to campus to finish my studies. The program aims for 23 weeks at 40 hours per week or a relative equivalent. Due to seasonal demands it is understood that hours can fluctuate, up or down, to meet operational demands. Start and end dates would be negotiated between student and employer.

I thank you for your consideration and would sincerely appreciate any offers and/or leads you may be able to provide. I grant permission to forward this e-mail to anyone you believe may be interested in such an arrangement.

Best regards,
 Tannis Macdonald
 604-340-9934

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(Winter bees from pg 4)

5 Instilling vigour in your colonies will (continued on pg 6) (from pg 4) strengthen them genetically so bring in new queens.

I have beekeeper friends who have moved disease free colonies between apiaries to mate queens for this purpose.

6 Avoid disturbing the wintering cluster. Provide the colony with ample sugar syrup and pollen or pollen substitute before going into winter. Disturbing the cluster can add extra stress or ware on bees.

7 In clusters the colony reduces its oxygen requirements and produces a semi-anoxic state that can be put off balance when opened or disturbed. That said I have ignored my own feeling and with mite counts in my wintering room above the threshold applied an oxalic acid dribble. The mite drop count increased but not the number of dead bees, yet.

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Manitoba Grasshopper Forecast for 2013

By: John Gavloski; Entomologist; Manitoba Agriculture, Food and Rural Initiatives
 Box 1149, 65-3rd Ave. NE, Carman, Manitoba, Canada, R0G 0J0

Grasshopper surveys have been conducted in Manitoba in various degrees of detail since 1931. The current grasshopper forecast is based on counts of grasshopper populations in August (which estimates the egg-laying population), weather data (which helps estimate whether those female grasshoppers present are capable of laying their optimum level of eggs), and recent trends in grasshopper populations. In some years, natural enemy populations may significantly affect the number of grasshopper eggs that survive and hatch, and such data may be pertinent to the forecast as well. Counts are generally done in or alongside crop fields in Manitoba. The goal is to estimate levels of the 4 species of grasshoppers that have potential to be pests of crops in Manitoba.

Purpose of a grasshopper forecast

Although all stages of grasshoppers, except the egg stage, feed on plants, it is the older grasshoppers of certain species that later in the season can do the most damage to crops. In annual cropping systems, the young stages (continued on pg 7)

(from pg 6) of these species are often highly concentrated around field edges early in the season, particularly around fields that had sparse green vegetation late in the previous summer. If grasshopper populations get quite high, these younger, concentrated populations of grasshoppers are much easier to control than older and more dispersed populations later in the season.

Knowing the risk of grasshoppers being a problem the following season alerts farmers and agronomists to the importance of monitoring field edges and vegetation surrounding the fields in late-May and June for these younger grasshoppers. This information can also help farmers choose crops and plan seeding practices for the following year.

How the forecast is done

Knowing how many grasshopper eggs have been laid in the soil in late-summer can help predict what the population will be like the following year. Although grasshopper eggs can be counted by digging soil and shaking it through sieves, this is a very labour-intensive and time consuming process. Doing counts of the adults that are laying the eggs in late-summer can be done relatively quickly. This, combined with weather data during the egg-laying period, gives an estimate of the eggs that were laid and the risk level of grasshoppers the following year.

Interpreting the grasshopper population map

The grasshopper population map for Manitoba is based on counts of adult grasshoppers per m² done by farm production advisors, agronomists, and entomologists in August 2012. Grasshopper counts from 132 locations in Manitoba were used to produce the map. The legend on the map shows the average grasshopper counts in an area, and relates these to risk for many of our crops. Factors affecting grasshopper development, survival and behaviour will determine whether these August populations are likely to increase, decrease, or remain fairly stable for the next year and are also important factors in the overall forecast for 2013. The small circles on the map show where data was collected. White areas on the map are areas where data was not collected.

The Grasshopper Forecast for Manitoba for 2013 What the grasshopper population map shows

Most of the surveyed area (109 out of 132 counts) rated as very light risk, having counts from 0 to 4 grasshoppers /m². Twenty counts were in the light risk category (>4-8/m²). Two counts were in the moderate risk category (>8-12/m²); a count of 9/m² west of Clearwater, and 10.6/m² near Plum Coulee. The only count greater than 12/m² was a count of 12.5 grasshoppers per m² several miles south of Crystal City.

Recent trends in grasshopper populations

Grasshopper outbreaks usually develop after a few years of conditions that are favourable for a steady increase in

numbers of those species of grasshopper that can become pests of crops. Comparing the current August grasshopper counts with those of previous years can determine if the populations tend to be rising or falling.

Grasshopper risk was quite low in the surveys done in 2010 and 2011, with no areas in the moderate or severe categories, and most areas in the very light risk category. Grasshopper populations were slightly higher in 2012, with a higher percentage of the surveyed area in the light risk category, and a couple of small areas in the South-Central region of Manitoba in the moderate risk category.

Potential affects of weather from August and September 2012 on the grasshopper forecast

The weather data used to forecast grasshopper abundance for 2013 is shown in Table 2. This data is from 15 sites located across the agricultural region of Manitoba.

The daily maximum temperatures were higher than normal in August and September of 2012. There were generally fewer days with rain and less total rainfall than normal. September was very dry, with levels of rainfall much less than normal.

Warm and dry weather in late-summer will mean that there has been more opportunity for the potential pest species of grasshoppers to lay their maximum amount of eggs.

Summary

The grasshopper populations were generally very-light to light across most of Manitoba during the August survey. Weather in August and September was quite favourable for the grasshopper populations that were present to lay eggs. Because of the low counts of grasshoppers, the overall risk of economical populations of grasshoppers developing in 2013 remains low. However, if weather is favourable for grasshopper survival and development there may be localized areas where grasshoppers are a concern to crops.

When they have the opportunity, farmers and agronomists are encouraged to monitor grasshopper populations along roadsides, field edges, and other areas where populations tend to be concentrated or at high levels early in the season. This monitoring should begin in late-May or June. Given that there were good conditions for egg laying last year, warm and dry conditions next year could result in grasshopper populations starting to build.

For more information on the grasshopper forecast or monitoring for grasshoppers, please contact John Gavloski at (204) 745-5668. The protocol for doing the grasshopper counts for this survey can be found at: <http://www.gov.mb.ca/agriculture/crops/insects/fad95s00.html>

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Benevolence vs. selfishness bees unselfishly care for each other in a hive. Selfishness seems to be conquered naturally when they truly care about each other. When they seek the good of others they desire to protect, rather than harm. Benevolence in the hive is focusing on each others inner needs. What a natural model for ourselves.

Urban Bee Policy debated

By Jim Campbell, RRAA Executive

Red River Apiarists' Association (RRAA) members signed up as delegations commenting on the City of Winnipeg's recent Urban Bee Policy recommendation.

The Standing Policy Committee on Protection and Community Services held a public session on Monday January 14, 2013 at City of Winnipeg Council Chambers. The agenda covered many items ranging from 2013 Preliminary Capital Budget to the Review of Honey Bees. Despite the heavy agenda, yet concerned about the report, Charles Polcyn, RRAA President, and Jim Campbell, RRAA MBA Rep. signed up as delegations to the meeting, which began at 9:00 a.m. Monday.

On March 13, 2012, the City Centre Community Committee recommended to the Standing Policy Committee on Protection and Community Services (PCS) that the Winnipeg Public Service (WPS) be requested to review the Exotic Animal By-law No. 3389/83 for potential by-law changes to allow the harbouring of honey bees in the City of Winnipeg. On April 2, 2012, PCS referred the recommendation to WPS for report back at its September 6, 2012 meeting, at which time the matter was laid over for up to 90 days. On November 19, 2012 PCS granted an extension of time to its January 14, 2013 meeting.

The WPS recommendation concluded hobby bee keeping in Winnipeg not be expanded. The report went on to explain that although the practice appears quite simple, the number of health, nuisance, and property valuation concerns is quite complex. People may fear allergic reactions, may not enjoy backyard due to nuisance bees, house sale may not materialize if hives next door, potential for more buffer zones, and possible cost of enforcement were cited.

During their presentations, just after 1:00 p.m., both Campbell and Polcyn detailed the many benefits of having managed pollinators improve the appearance and productivity of backyard, neighbourhood and community flower, fruit and vegetable gardens. This could outweigh potential risks for lost property sales. More populated cities such as Vancouver, New Westminster, Surrey, Richmond and Burnaby don't appear to have a similar concern noted Campbell.

Campbell also refuted the concern for increased buffer zones, as mosquito spraying is typically done at night when bees are inside their homes. This comment was similar to Councilor Gerbasi (Fort Rouge) earlier in the day, when she noted buffer zones are already in existence, so this is nothing new for citizens of Winnipeg. Campbell and Polcyn concluded their individual talks by noting if the bylaw couldn't be expanded, it be laid aside pending further consultation. Since the PCS agreed to lay this item aside, beekeepers will now have to await further details on

when this item will be publicly presented again.

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Canadian Pollinator Conservation 2013: Next Steps

Wednesday April 10, 2013, 9am-4pm
Room 108 Koffler House, University of Toronto
Cost: \$40, including lunch

What is the status of pollinators in Canada? What is being done to help at-risk pollinators? What are the next steps and how can we work together to achieve them?
Join government agencies, land managers, NGOs, conservation authorities, industry representatives and academics in a meeting to discuss the next steps in pollinator conservation in Canada.

Topics will include current hands-on conservation work in Canada including large-scale restoration projects, the status of pollinators in Canada, and policies related to species protection. Visit the web-sites below for the list of speakers, to be announced shortly.

Register on-line at <http://pollinatorpartnership.ca/nextsteps.htm>. Deadline for registration is April 2, 2013. For more information, e-mail PollinatorConservationCanada@gmail.com or visit www.pollinatorpartnership.ca or www.wildlifepreservation.ca.

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Finally

Red River Apiarists Association Vote of Acceptance Logos

The circle representing continuity, the hexagon structure of strength, and the bee the focal point of the organization. The three formats allow for black white printing with clarity the others for clothing and signage use.



Research Donation Finalized

Jim Campbell, MBA rep

Red River Apiarists' Association (RRAA) has recently made a sizable grant towards Honey Bee Research being done at the University of Manitoba (U of M).

In mid December 2012, RRAA donated \$2000 as a grant to U of M, as directed by members of the bee club. At their regular meeting of RRAA in September, members approved the plan to support a honey bee research project at U of M. Discussions with U of M on how to proceed, were hampered somewhat, as Dr. Rob Currie is currently on a one year sabbatical leave for research. Meanwhile, Dr. Currie's students are already in the second year, of a three-year Manitoba Beekeepers' Association project, aimed at keeping bees healthy by evaluating a number of varroa treatment products. This project fit the RRAA plan, as results directly benefit all Manitoba's beekeepers.

Arrangements were finalized with Entomology Office staffs, which were pleased to accept the support from RRAA, and agreed to ensure the cheque would be deposited to the correct research account before the end of December. Rob was able to help the process and assisted in preparing the necessary documents. Rob also expressed his appreciation for the endorsement and grant from RRAA.

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New study shows pollen counts will more than double in 28 years

ANAHEIM, CA. (November 9, 2012) – With this year's unseasonably warm temperatures and extended seasons, many have coined 2012 as being the worst for allergies. But if you thought your symptoms were worse than ever, just wait until the year 2040.

According to a study being presented by allergist Leonard Bielory, M.D., at the Annual Scientific Meeting of the American College of Allergy, Asthma and Immunology (ACAAI), pollen counts are expected to more than double by 2040.

"Climate changes will increase pollen production considerably in the near future in different parts of the country," said Dr. Bielory, ACAAI board member and fellow. "Economic growth, global environment sustainability, temperature and human-induced changes, such as increased levels of carbon dioxide, are all responsible for the influx

that will continue to be seen."

In the year 2000, pollen counts averaged 8,455. Fast forward to 2040, and these counts are anticipated to reach 21,735. Researchers predict counts in 20-year increments up to the year 2100, and are incorporating various climatic factors in their models including weather patterns, changes in precipitation and temperature. The study, taking place at Rutgers University in New Brunswick, N.J., is ongoing to analyze various allergenic plants being grown in climate chambers mimicking future conditions.

While pollen counts will progressively increase over the years, the study also found the sneezing season will begin earlier every year.

"In 2000, annual pollen production began on April 14, and peaked on May 1," said Dr. Bielory. "Pollen levels are predicted to peak earlier on April 8, 2040. If allergy sufferers begin long-term treatment such as immunotherapy (allergy shots) now, they will have relief long before 2040 becomes a reality."

An earlier report by the same researchers demonstrated an increase in ragweed pollen in a section of the country, from Texas to the Canadian border, over the past 25 years. This was associated with an increase of ragweed pollen by two to three weeks as one moves north.

ACAAI allergists recommend allergy sufferers begin treating their symptoms with over-the-counter or prescribed medications two weeks before symptoms usually start. While there isn't a cure for allergies, immunotherapy is the only treatment that can prevent disease progression. It can also result in health care savings of 41 percent. For allergy sufferers looking to combat seasonal symptoms, ACAAI suggests:

- Know your triggers. You may think you know that pollen is causing your suffering, but other substances may be involved as well. More than two-thirds of seasonal allergy sufferers actually have year-round symptoms. An allergist can help you find the source of your suffering and treat more than just symptoms.

(continued on pg 10)

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- **Work with your allergist to devise strategies to avoid your triggers, such as:**
- **Monitor pollen and mold counts — most media report this information during allergy seasons.**
- **Keep windows and doors shut at home, and in your car during allergy season.**
- **Stay inside during mid-day and afternoon hours when pollen counts are highest.**
- **Take a shower, wash hair and change clothing after being outdoors working or playing.**
- **Wear a mask when doing outdoor chores like mowing the lawn. An allergist can help you find the type of mask that works best.**

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A Honey Recipe

Trail Mix Yogurt Parfait

1/2 Cup	Plain Yogurt	125 ml
1/2 Cup	Sliced or diced favourite fruit	125 ml
1/4 Cup	Peanut Trail Mix	50 ml A combination of peanuts and dried fruit
1	Tbsp Peanut butter	15 ml
2	Tsp Honey	30 ml

Directions

Spoon Yogurt into parfait cup. Top with fruit then sprinkle with peanut trail mix. Microwave peanut butter and honey on medium until melted. Drizzle while warm over parfait.

Makes one serving but can be doubled.

Red River Apiarists' Association Winnipeg, Manitoba 2013 MEMBERSHIP APPLICATION

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

Name _____ Tel. _____

Address _____

City _____ Prov. _____ Postal Code _____

E-mail address _____

Signature _____

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

Other. Please specify. _____

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

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

Make cheques payable to Red River Apiarists' Association.

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