

The Bee Cause



Volume 8, Issue 7

October 2011

- Next general meeting is 7:30 Tuesday, November 11th at the **River Heights Community Centre, 1370 Grosvenor Ave., Winnipeg.**
- (in room right of main-door)
- **Speaker:** An open discussion on 2012 meeting topics for next year, a summary of this year's honey show and information on the progress of adjusting the City of Winnipeg's bylaw on beekeeping inside the city boundaries

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Hygienic Bees and Behavioral resistance to American foulbrood

How to test your colonies

By Jeanette Momot **Thunder Bay Beekeepers Association**

American foulbrood is a highly infectious disease of honeybees caused by the spore-forming bacterium *Paenebacillus larvae* subsp. *larvae*. The spore is a resting stage of the bacterium, and can be present in old beekeeping equipment and remain infectious for 70 years or more if the equipment were from a colony that had succumbed to the disease. In the early 1900's it was

rampant in North America, and was a serious threat to the beekeeping industry. A colony infected was usually doomed. (It was because of this disease **that** apiary inspection programs were started by many agriculture departments, and colonies found to be infected were killed and burned to prevent the spread of the disease by either robbing bees or equipment transfer by beekeepers unaware of the problem. The burning of diseased colonies continues to be the practise in many places.)

However, occasionally a colony was found to survive the disease, and the question arose whether there might be resistance to it. In 1935, twenty-five of these supposedly resistant colonies were gathered together in Iowa by researchers O. W. Park, Floyd Paddock and Frank Pellet. These colonies, as well as six control colonies, were tested by inserting a piece of comb containing 75 larvae dead of American foulbrood into the brood nest of each colony. The test comb replaced a like-sized piece of comb that was cut from a brood comb in each colony. By the end of the summer, seven of the supposedly resistant colonies were free of all symptoms of the disease. The six control colonies were all heavily diseased. In other words, some of these colonies did in fact demonstrate resistance to American foulbrood.

The next question was could this resistance

be passed on to the next generation? To insure that resistant queens would mate with resistant drones, Park and Pellet raised queens and drones from these resistant colonies in an isolated citrus grove in Texas. There they mated, as bees do, in the air, away from their own hives, each queen mating with many drones. Twenty-seven colonies from that second generation stock were sent to Iowa for testing in the summer of 1936. Of those, nine were disease free at the end of the season. So the resistance could be inherited.

In 1946, W. C. Rothenbuhler became a student of O. W. Park, and continued the study of resistance to American foulbrood. By means of single drone matings using artificial insemination of queens, he was able to study the mechanism of inheritance of the resistance exhibited. He found behavioural differences between the resistant colonies and control colonies. Those colonies resistant to the disease would uncapped the dead brood, and then remove the dead individual from the cell very quickly. This was termed hygienic behaviour. The susceptible colonies largely ignored the dead brood and were called non-hygienic. Hygienic behaviour assists a colony in overcoming disease by removing the source of the infection.

Rothenbuhler and his students found that this behaviour seemed to be inherited in a simple Mendelian fashion-- one pair of recessive genes for uncapping behaviour, and another pair of (continued on pg 4)

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Presidents Comments – October 2011

The 2011 Honey Show closed on October 2, a busy day at the Forks and a beautiful day in Manitoba. Many people were at the Forks for a variety of reasons, and most of them stopped by the Honey Show. They learned a lot about bees and beekeeping, purchased some honey from the vendors from Anola and Whitemouth and were fascinated by the live frames of bees display. My thanks to the many RRAA member volunteers who answered questions from the visitors about bees and beekeeping. And my special thanks to the RRAA Planning Team who spent many hours at the Honey Show meeting the public and organizing the displays.

How do we best prepare our bees for the upcoming winter when we seem to be having July weather temperatures in October??? The bees will be spending a lot of energy looking for nectar from the non-blooming flowers. They will be getting their energy boosts from the stored honey in the hive. Thus we have to continue to feed syrup as much as possible until the cold weather arrives, and the bees begin to cluster and remain in the hive. Otherwise I will predict the high probability of starvation in February or March as the large hive populations will run out of food.

Mite populations at this time need to be reduced as much as possible. I am sure that many of you have Apivar strips in all your hives, but a treatment of Formic Acid and Oxalic Acid are good controls on lowering mite levels. Read and follow the directions that were provided to all registered beekeepers. If you have lost them, go on line for information, or contact your Provincial Apiarist office. Also fumagillen should be blended into your syrup feeding program as it helps the bees deal with the potential long confinement time and possibly helps with Nosema problems. Getting your bees ready for winter is an important part of your fall program, and if it is neglected, a price will be paid next spring.

On my recent visit to the Czech Republic I spent some time with beekeepers at the local Farmers Markets. They are encountering similar problems with overwintering bees, dealing with varroa mites, and wondering if the GM plants are causing them production problems. They are also promoting the sale of honey blends using local fruits, garlic or hot peppers as well as the traditional walnuts in honey. One beekeeper I spoke with runs over 800 hives, and averages over 70 kg per hive. He doesn't use any chemical treatments for mites and selects his queens on the basis of honey production and mite controls.

And in closing off my comments for this month, I will restate some of the questions for you to ponder as these were posed at the 2011 Honey Show. " Why do you force bees to live in small houses, why not let them live free? "; " Why not save the drones in September ??"

Yours in Beekeeping--- Charles Polcyn RRAA President.

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Minutes of the RRAA General Meeting

River Heights Community Club – September 13, 2011

7:30 PM: John Russell opened the September meeting. Presentations for the evening:

- 1) Outline of the Canadian Honey Council IPM Handbook. - Jim Campbell
- 2) A Presentation on Commercial Beekeeping in Canada – by Froilan Pacris and Patrick Bete. Both guests are from the Philippines and came here to gather beekeeping experience at the Phil Veldhuis' farm so they will be able to teach others from their experience in Canada.

Minutes: Moved by Brian Smith and seconded by Ken Rowes to approve the minutes as circulated in the Bee Cause. Motion approved with no errors or emissions noted.

Treasurer's Report: John Speer reported that the RRAA has a bank balance of \$4,500.

MBA Report: Jim Campbell reported that we were allowed an EUR (Emergency Use Registration) that enables beekeepers to use Apivar beginning on July 1 this year and extending to June 30, 2012.

Although NOD has applied for full registration of their Quick Strips PMRA will not allow any EUR for this treatment.

At the back of the room, honey jars have been made available for members to take with them for submission of their competition honey entries. Three jars are required in each category of entry.

Coffee Break: Jim Campbell brought in a beautiful tray of assorted meat and cheese to have with our coffee as we listened to the following presentations.

Program: A presentation by guests Froilan Pacris and Patrick Bete who arrived from the Phillipines to gather commercial beekeeping experience. They arrived here in May 2011 and will return home on October 11.

Jim described in detail the IPM information contained in the newly developed handbook from CHC and answered questions from the floor. Handbooks were provided for all members attending the meeting. Those not in attendance will receive their handbooks at a later date.

Loonie Draw: Prizes were awarded to: Don Gray (Chocolate flavored honey spread), John Speer (a 1GB data stick), Kerry Hourd (a desk set), Ken Rowes (a Bee Maid clip & tape measure), Duane V. (a jar of strawberry spread), Tod Christianson, Nelson Szwaluk, Gilles Lantagne and Joyce F. (Mann Lake bee supply catalogues), Alex Lloyd and Remo (book ends) and Alex Remkes (a recent issue of Bee Culture magazine). Thanks to everyone who entered and to those who donated the amazing collection of prizes.

Ron Rudiak, recorder – RRAA

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MBA Report Oct 2011

Jim Campbell, MBA Secretary

The Manitoba Beekeepers' Association (MBA) is monitoring the recent ruling on pollen in honey coming from Germany.

The European Court of Justice upheld the rights of beekeepers and consumers to keep honey free from GM contamination. Europe's highest court ruled in Brussels that honey contaminated with pollen from genetically modified (GM) crops would need full safety approval and honey would have to be labelled as GM if it contains pollen from GMO crops. The ruling was the result of a legal challenge from a German association of beekeepers who took the Bavarian government to court following the contamination of honey from a governmental field trial of Monsanto's maize. At the current time, MBA is still monitoring how this will impact honey labelling and sales, as many organizations struggle with how to proceed.

In other news, Manitoba Agricultural Services Corporation (MASC) called several honey producers to remind them of the Overwinter Bee Mortality insurance program application deadline. Producers had until end of September to finalize the exact number of colonies going into winter.

Manitoba suffered slow spring bee population build up due to wet cool weather, and now nectar was being collected in the fall, at times when mite treatments should be taking place. With this in mind, MBA submitted an Emergency Use Registration for the formic acid based Mite Away Quick Strips, however the request was rejected as PMRA wanted to keep resources focused on the full registration process.

MBA is already planning the upcoming November Annual General Meeting, plus the 2012 Convention/Symposium to be held at Fort Garry Hotel, Winnipeg, for January 26-28. Available details are posted on MBA website www.manitobabee.org.

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Health and Safety around Honeybees

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Health and Safety in Beekeeping should be approached, like any other activity, by using your common sense to think about what's involved in the job before starting. In Health & Safety terms this is known as carrying out a Risk Assessment, the purpose of which is to identify any hazards and the likelihood of something or someone being injured by those hazards. Once these have been identified a plan of action can be devised for minimizing the risk of accident or injury, and what action should be taken in the event of such an occurrence. The most common hazards connected with beekeeping are from procedures and products used in normal hive manipulations such as slips trips and falls, stings, back strains, fire, burning, poisoning and asphyxiation. It all sounds very dangerous when put like this but in reality accidents don't happen (continued on pg 4)

(from pg 1) recessive genes on a different pair of chromosome for the removal of dead brood behaviour. Both pairs of genes had to be present in a homozygous condition for a colony to exhibit hygienic behaviour and be resistant to American foulbrood. Hygienic behaviour was one of the mechanisms of resistance to American foulbrood, and although subsequent research has found that there may be other genes that modify the expression of those recessive genes, the fact remains that hygienic behaviour is heritable, and selecting for that behaviour can result in resistance to not only American foulbrood, but also other brood diseases such as chalkbrood, sacbrood and European foulbrood. Recently it has been found that hygienic colonies can also detect varroa mites on immature bees in capped cells and do remove some of them.

It is important to test for hygienic behaviour if a beekeeper wants disease-free bees without resorting to the use of various preventive drugs. There are several ways to test for this behaviour, the first being to actually administer the bacteria responsible for the disease, as was done in the early tests. This could result in initiating problems where none existed before by spreading the bacteria to susceptible colonies that would then develop the disease. The Rothenbuhler era used a small block of freeze killed capped cells of brood inserted into brood comb in place of a like-sized piece that had been cut out. Hygienic bees were found to uncapped and remove it in the same fashion as they removed the actual diseased brood, and with no chance of spreading disease. Lately, liquid nitrogen has been used to freeze circles of brood in combs, and that is fine except it is not something an average beekeeper is equipped to do. It is also costly and somewhat dangerous to the tester. He can freeze his fingers or toes badly! However, there is a simplified bioassay suggested by Newton and Ostasiewski in an April 1986 article from the American Bee Journal that is simple and easy for a beekeeper to use. It is known as the pin-killing method.

The pin-killing test is done as follows. Twenty-one sealed cells containing pupae or pre-pupae are killed by piercing them through the cell cap with a pin. If a colony is hygienic it will completely remove the killed brood in 24 hours. Non-hygienic or susceptible colonies will require three or more days to remove the dead brood, if they remove it at all. The speed of removal correlates well with the speed of removal of freeze-killed brood by hygienic or non-hygienic colonies ($r=.956$). Usually three groups of seven capped cells are selected and killed by the method described above, the site marked by leaving a pin inserted in a cell just to the left of the group of seven. Co-ordinates to the site of the pin are marked on the top and side of the frame, and numbered one, two and three. Twenty-four hours after killing the brood, each group of seven is checked. Note how many cells are uncapped, partially uncapped, and how many cells have the dead individual removed completely, or partially removed. All twenty-one need to be completely uncapped and completely removed in twenty-four hours for a colony to be considered hygienic. (Sometimes the pin doesn't kill

the individual in the pierced cell, so if just one completely capped cell remains, uncapped it to see if it is really dead). When a beekeeper first starts doing the test in unselected bees, he probably won't find many colonies that are completely hygienic, but he can pick the one that shows the best result if he wants to raise a few queens of his own. Selecting the best cleaners for a few seasons and using them as the breeders will certainly increase the percentage of colonies that display hygienic behaviour, and will result in increased resistance to American foulbrood in those colonies.

By Jeanette Momot 3/28/2010

(From pg 3)
very often, all you have to do is apply just a little common sense!

Where Risks Occur

- Apiary Location – proximity to other people, animals and property
- Access in and out of the apiary
- Opening & Examination of Stocks
- Transporting Hives
- Use of Potentially Harmful Substances
- Visitors to the Apiary
- Health Concerns
- Sting Reactions
- Honey Extraction and Preparation
- Collection of Swarms & Observation Hives

Risks from Bees

Honeybees like bumblebees, wasps and hornets have a stinger at the posterior end of their abdomen. The sting which is connected to a venom sac, is a modified egg-laying tube. So if you are stung, it was a female insect that did it. In general wasps are involved in about 70% of the stings to humans and they are often mistaken for bees because of their yellow and black bodies.

Most stinging insects can sting more than once,

the exception is the honeybee (the female worker bee) which has a barbed sting. When the worker bee escapes after stinging a person, the sting and attached venom sac are ripped out of the bee and stay in the victim's skin; the bee will die shortly afterwards.

Hazards of being stung

Generally, most stings only result in a temporary injury - pain, swelling, redness and itching around the sting site. However, sometimes the effects can be much more (continued on pg 5)



Editor's Note by Ken Rowes

The fruit is off the trees and the garden is in with two –2 C nights behind us. Fall treatments and feeding bees the issue should be.

The Honey Show was a busy with buyers and questions. The cooking it up with honey was a riveter with more questions to answer than a tank full of gas! John never skipped a stone and his hands never left the counter preparing three dishes on main course and a salad. The 3rd dish left me but—all so tasty.

You will have noticed a theme in the newsletter on safety for the beekeeper. Accidents have happened and health are jeopardized, so it is wise to review the note on the subject and know your potential dangers taking steps to avoid the hazards.

You will have noted that the classifieds have be updated - refreshed so if you are missing an ad- please send an e-mail to the editor.

Part of this meeting is for you to assist the executive in lining up speakers on topics of your choice. Please consider a question or two you might have and e-mail the editor or and executive member.

Well by the next meeting I expect all hives to be indoors or wrapped out side. Take a moment to think what you're going to do now and prepare .
Your Beefriend Ken

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1. **For sale:** 1 complete D.E. Hive. Includes, brood chamber, super, queen excluder, bottom board, inner cover and ventilated top covers. Perfect for the back yard beekeeper. \$100 OBO. Contact, **Lance W. Phone # 712-6783, Email; lancewld@gmail.com**
2. **Wanted:** honey sump or clarifier. Contact information is: **Jonathan Hofer (204) 981-6562 jonhofer1984@gmail.com**
3. **For sale:** Stainless Steel storage tank. Cylinder, 45" diameter and 55" high. Tank holds over 300 Canadian Gallons or about 4500 pounds. Tank stands 65" high. Located near Starbuck.
Phone: Jacob Hofer (204) 799-2433.

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

(from pg 4)

severe – and can even be life-threatening, depending on where you are stung and whether the injured person has allergies. Summon medical help if the sting is near the eyes, nose or throat.

Normal Reaction - Most people experience local effects like pain, swelling, itching, and redness around the sting site. Painful stings in the mouth and throat can result if you accidentally swallowed a wasp or bee (e.g., drinking a soft drink from a can that a wasp had entered).

Mild Allergic Reaction - Some people will experience swelling in a larger area, not just immediately around the sting site. They may develop hives but no systemic effects (effects in the body away from sting site like effects on breathing and blood flow). This mild allergic reaction can last a few days. The area will be sore and uncomfortable but one should not give in to the temptation to scratch the stung area. Scratching may cause a break in the skin which could lead to an infection. (continued on pg 6)

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Severe Allergic Reaction - In rare cases, a **severe allergic reaction** can occur. This situation is serious and can cause "**anaphylaxis**" or anaphylactic shock. Symptoms of anaphylaxis may appear immediately or within the first 30 minutes.

The symptoms include:

- hives, itching and swelling in areas other than the sting site,
- swollen eyes and eyelids,
- wheezing,
- tightness in the chest and difficulty breathing,
- hoarse voice or swelling of the tongue,
- dizziness or sharp drop in blood pressure,
- shock,
- unconsciousness or cardiac arrest.

The "**anaphylactic reaction**" can occur the first time someone is stung or with subsequent stings. Death can occur within 30 - 45 minutes of being stung. If you see any signs of this reaction, or even if you are not sure, get medical help immediately.

People, who have had severe allergic reactions to insect stings in the past, will probably have a similar or worse reaction if stung again. Bee sting kits may be available to allergic people through their Doctor.

(Editorial note: one can possibly slow the allergic reaction with Benadryl Allergy elixir and a After Bite Xtra topical ointment both available on the drug store shelf).

The Risks

To You The Beekeeper - There is always a risk of being stung when working around honeybees, for beekeepers it is an occupational hazard. In general honeybees, bumblebees, wasps and hornets will not attack and sting unless provoked or physically attacked (or think they are being attacked). Normal hive manipulations creates a great disturbance in the colony making the bees tetchy and prone to sting anyone in close proximity.

Honeybee colonies differ in temperament some are well behaved and will tolerate fair amounts of disturbance, while others are ready to meet the beekeeper at the apiary gate, will harass them all the time they are there, and then escort them out to the car!

To Other People – As well as the risks to the beekeeper in the apiary, there are risks to other people and property in the vicinity of the apiary. Flight paths are often quite direct and may take bees straight into areas where people are going

about their normal business. Stinging occurs when individuals try to wave away bees in a manner that looks threatening.

There is always a risk to humans when apiaries are sited near to public areas such as pathways where adults, children and animals pass. The latter two are often inquisitive and may get closer than is safe.

To Property - Honeybees must void their bowels the same as any other living creature. They do this mostly in the relative vicinity of the apiary (up to 50 metres or more) and can cause soiling of laundry, windows and vehicles.

Note: Any sting to a member of the public will be from your bees, even if it was a wasp!!

Risk Management

The risks involved in beekeeping can be minimised to an acceptable level by following a few simple rules.

Bee Prepared!

Site apiaries well away from areas where people and animals will be in close proximity.

Keep the apiary tidy and free from debris, and maintain clear access ways.

Lift only what you are comfortable lifting, get assistance if necessary.

Always wear the correct PPE (Personal Protective Equipment) such as hat, veil, suit, gloves and footwear when working in the apiary. Make sure you maintain them in good condition and ensure you are completely bee-proof before entering the apiary.

Ensure there are barriers to lift bee flight paths above areas where people and animals will be.

Avoid working on hives when bees are not likely to be in good humour e.g. too cold, colony structure upset, wrong time of day, recent disturbance.

Avoid working on hives when there is a risk of members of the public being in the vicinity.

Exercise care when using a lighted smoker particularly during long dry spells.

Always follow manufacturer's instructions and approved codes of practice when using chemicals and products for disease control and hygiene, and only use approved products.

Know what you need to do in the event of an accident, and Bee Prepared!

Be prepared for all eventualities and assess the risks before working with honeybees. If in doubt please contact the provincial apiarists for advice. Website: <http://www.manitobabeekeeperassociation.com> or the Red River Apiarist Association.

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"Some of the most valuable things in life are the things that never get used up. Indeed, things such as love, integrity, truth, compassion and wisdom become more plentiful the more they're used."

--- Ralph Marston

Safety in the Bee Yard

Copyright 1999 Carl Wenning & Tom Elston
Heart of Illinois Beekeepers' Association

Beekeeping in general is a very safe activity. Still, beekeeping presents a number of dangers of which the beekeeper should be aware. Prevention of harm is always to be valued above cure. What follows are typical hazards that every beekeeper should guard against.

Bee Stings. For most beekeepers, bee stings are merely a nuisance. Nonetheless, bee stings can be a real life-threatening hazard for beekeepers non-beekeepers alike who are allergic.

This subject has been covered in considerable detail elsewhere and will not be covered here, but non-allergic beekeepers should be certain to work and maintain bees in such a way that those who are allergic are less likely to be stung.

Burns. Though admittedly rare, burns can pose a considerable problem for beekeepers.

Burns are most likely to occur when a beekeeper comes into close contact with the heat of the smoker. It is best to purchase a smoker that has a protective grate that surrounds the chamber that contains the burning embers. Sunburn can also pose a threat to beekeepers. Skin overexposed to the sun during the course of a day may result in sunburn; skin overexposed to the sun during the course of many years may result in early aging of the skin and even a serious form of skin cancer known as melanoma.

Chemical burns are also a possibility for those working with liquid acids.

Cuts and Contusions. Cuts from hive tools are a real possibility. Well maintained hive tools are sharp, and should a hive tool slip and hit flesh when being pounded on, it can cut.

Trapping a hive tool between a component of the beehive and oneself can also lead to cuts.

Contusions are injuries that result without breaking through the skin. Such injuries can cause swelling and leave the skin bruised. Contusions may result from pinching and crushing. When moving portions of the hive, use caution. Do not drop or set down items too quickly. Beehives with a large number of supers can become unstable and fall, especially "sky scraper" hives.

When bumped or over filled with honey, these sky-scrapers may come tumbling down much to the surprise of the beekeeper. If a beekeeper is beneath the falling hive, hundreds of pounds of honey-filled frames might fall on him causing crushing, broken bones, and worse. Before any hive becomes too high

and potentially unstable, it is a wise idea to remove full supers for extraction.

Eye Damage. It is commonly suggested that ultraviolet radiation may be responsible for eye damage related to cataracts and a rare form of cancer. To avoid problems in this area, wear sunglasses that reject nearly 99% of impinging UV radiation. Wear broad-rimmed helmets to help protect the eyes and face from UV radiation and the subsequent sunburns of head and neck. Eye damage also can result from flying projectiles. Power tools used for cutting grass spin quickly and can kick up projectiles. Should a stone or similar item be picked up and thrown by a power tool, they have the potential for causing eye damage. When working with power tools in the apiary to cut grass, weeds, or wood, using either safety glasses, goggles, or a face shield is essential to protecting eyesight.

Fire. Where there is smoke there is fire. When lighting a smoker, never light it inside a vehicle. Carefully extinguish the smoker's contents when finished. When emptying a smoker, make absolutely certain that the embers are out before leaving the apiary so that a fire is not started. Be careful if driving a vehicle with a catalytic converter through dry grass and brush.

Such converters can easily set dry grass and brush afire.

Heat-Related Illnesses. Heat cramps, heat exhaustion, and heat stroke are of significant concerns for beekeepers, especially when there is a high temperature and humidity in combination. Heat-related illnesses can result mostly at these times when the heat index soars.

Heavier full-body bee suits, while providing some degree of protection against bee stings, may increase the incidence of heat-related illnesses by restricting cooling air flow around the body.

Protect yourself by working at a slower pace on hot,
(continued on pg 8)

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humid days, and periodically retire to a cool place. Eat less food and drink plenty of cool liquids.

Lyme Disease. The deer tick is responsible for transmitting Lyme disease bacteria to humans in the northeastern and north-central United States. Deer ticks are very small, and most victims who come down with Lyme disease cannot recall ever having been bitten by a tick. Deer ticks are active throughout the year, but mostly in warmer climates. Because of the deer tick's propensity for "ambushing" warm-blooded victims, it would serve the beekeeper well to keep the grass in apiaries relatively short. Other preventive measures for unkempt areas include the wearing of long-sleeved shirts and pants, tucking pant legs into boots or socks or using leg straps, avoiding tall grass and underbrush, and
(continued on pg 8)

(from pg 7) checking oneself regularly for the presence of ticks. Applying an insect repellent containing DEET also may be effective against ticks. A Lyme disease vaccine is now available. A decision for its use should be made on the basis of individual risk, taking into account both geographic location and a person's activities and behaviours relating to tick exposure.

(* **Editor's comment:** It may be wise not to use any insecticide such as DEET in defence against ticks when working your bees).

Muscle Strain. Moving hives and hive components can be back-breaking work. Deep supers can weigh as much as 70 pounds or more when completely filled with honey. Unfortunately, the human body is not well designed to lift such weights. The arms, backbone, and legs essentially constitute a lever of small mechanical advantage that can subject the back muscles to a tremendous amount of stress. Muscle strain results from attempting to lift heavy items, lifting them improperly, or simply working too hard. In back strain the muscles are either stretched beyond their usual limits, or are torn as a result of too much stress. The pain results from damage to blood vessels, which causes bleeding in the affected area. The bleeding irritates nerve endings, causing pain. Such muscle strain can result in an inability to work normally, and the resulting pain can last days or weeks. When lifting heavy hive components, use the proper lifting technique. It generally consists of planting the feet squarely upon the ground and some distance apart. Squat -- do not lean forward -- keeping the back as straight as possible. Get a good grip on the object and lift slowly; do not jerk the object upward or twist the trunk of the body as the item is lifted. Set the object down in reverse order.

Chemical or Pesticide Exposure. Beekeepers use a variety of pesticides to manage mites and the small hive beetle. Inappropriate use of various chemicals can result in exposure by any of four different ways: absorption, inhalation, ingestion or injection from puncture wounds. When handling toxic compounds, wear latex gloves to prevent absorption of chemicals through the skin. Leather or cloth gloves may absorb these toxins and, if used over a long time, may result in a long term exposure. Even if beekeepers use gloves, they should wash their hands after using these chemicals and before eating or smoking tobacco products. Touching food with contaminated hands transfers the poison to the food, which is then ingested. Keep food away from toxins. Label all pesticide containers properly, and do not use food approved containers to store chemicals. Beekeepers should be absolutely certain to follow label directions when working with pesticides. Never contaminate honey intended for human consumption by unprincipled use of pesticides.

(Editorial comment: There are other hazardous exposures to guard against such as fungal spores and bacteria on the unused equipment. Care must be taken to be up wind or wearing a face mask when cleaning as when pressure washing equipment or scorching

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Honey Show featured new entrants

Jim Campbell, Honey show reporter

The recent Manitoba Honey Show attracted considerable visitor attention with the theme "Pure Manitoba Honey-in many forms", along with several new competition entrants.

The 2011 Manitoba Honey Show took place the weekend of September 31- October 2, at the Forks Market, Winnipeg. As part of the plan to enhance and stimulate conversations with consumers, the Show featured an array of items promoting the recent innovations in honey packaging. Colorful signage drew people's attention to the beneficial uses and conveniences of honey found on store shelves "in many forms", which range from snap packs to dried wafers.

Promotion for the show was done via news releases to various Winnipeg area papers plus the Manitoba Co-operator. As a result, the cooperator conducted an interview with Jim Campbell, MBA Secretary and RRAA Executive member on 30 September describing the purposes of the show and the benefits of Honey Bees to the pollination and honey economy of Manitoba.

With a little creativity, the new table setup helped traffic flow while providing adequate access to the Competition area, the Industry space, the Observation Hive, the Product area, and the newly added "Honey Forms" promotion display.

The Honey Competition featured three new entrants for 2011, which provided a welcome sight, creating a good active competition from beginning beekeepers to those with many years under their belt. The prize winning honey frames attractively capped with beautiful white wax intrigued visitors. In another area several photographs highlighted elements of the Beekeeping industry. A new category for 2011 focused on the theme "Pure Manitoba Honey-In many Forms". At the educational element showing Honey Throughout the Year, Ken Rowes had jars with different colours reflecting the floral source nectar at different times of the season. Thanks to Donna, Ken, Sandra, Barb, Jim and Don for setting up the display, and Charles for bringing material from Bee Maid (continued on pg 9)

Live Bees in the Observation Hive continue to enthrall both young and older visitors, where beekeeper volunteers spent many hours describing the intricacies of hive life. Thanks to staff at U of M, the yellow dot on the thorax of the queen aided viewers in their quest for the queen. Thanks to John Speer, Duane Versluis, Brian & Sandra Smith, Josh Kolesar, Don Gray and Jim Campbell for informing visitors at this station. Conversations often led guests to express their concern for bee losses and the probable causes.

Interactive Demonstrations on Saturday and Sunday entertained visitors at the show by drawing attention to the benefits of our industry. Cooking and Extracting demonstrations were conducted periodically during the three-day event. Thanks to John Russell, a trained chef, taking control at the kitchen grill, while Charles Polcyn turned the manual extractor into a honey-making machine.

Meanwhile, the Hourds and Polcyns were kept busy offering samples of products, answering visitor questions, and serving their customers.

Thanks to the many volunteers helping out, the entrants for the show, MBA financial support, Bee Maid financial donation and equipment loaners. Special appreciation to the Honey Show judges: Sam Barlin, Josh Kolesar, and David Ostermann for judging the competition entries.

What a great weekend for the show! Lots of visitors and the weather was super nice!

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MANITOBA HONEY SHOW

2011 Competition Results

Class 1

Liquid Honey, White

First place: Remo Mamaril
Second place: Raymond Hourd
Second place: Charles Polcyn
Third place: Brian & Sandra Smith

Liquid Honey, Amber

First place: Brian & Sandra Smith
Second place: Charles Polcyn

Liquid Honey, Dark

First place: Brian & Sandra Smith
Second place: Charles Polcyn

Liquid Honey, BEE-GINNER

First place: Jami Worms
Second place: Mary Louise Chown
Third place: Duane Versluis
Fourth place: Remo Mamaril

Granulated Honey, White

First place: Raymond Hourd
First place: Jami Worms
Second place: Brian & Sandra Smith

Class 2

Chunk Honey

First place: Raymond Hourd

Comb Honey

First place: Raymond Hourd
Second place: Charles Polcyn

Frame of Honey

First place: Raymond Hourd
Second place: Brian & Sandra Smith
Third place: Charles Polcyn

Beeswax

First place: Raymond Hourd
Second place: Brian & Sandra Smith

Class 3

Best Taste

First place: Raymond Hourd

Photography

a) **Honey Bee Pollination**

First place: Don Gray
Second place: Brian Smith

b) **Beekeeping in Manitoba**

First place: Alex Remkes
Second place: Jim Campbell
Third place: Brian Smith

c) **Other Bees and Insects**

First place: Jim Campbell
Second place: Brian Smith

d) **Honey – In Many Forms**

First place: Jim Campbell
Second place: Brian Smith

Champion Honey Show Exhibitor

Raymond and Donna Hourd

Honey Judges:

Sam Barlin
Josh Kolesar
David Ostermann

Congratulations to all entrants!!

Manitoba Honey Show 2011



Duane Versluis RRAA promoter encouraging these two Stonewall boys wanting to start beekeeping.



RRAA 'Bee-Chef' John Badiuk



Grand Champions Donna and Ray Hourd

**Red River Apiarists' Association
Winnipeg, Manitoba
2010 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.**