



The **BEE CAUSE**

*The Official Publication of the Red River
Apiarists' Association*

March 2001

Free to Members

Volume 3: Issue 3

important Dates:

Next Meeting Date is:
13 March 2001
7:30 PM Upstairs Meeting Room

Speaker 1: Mr. David Osterman
will discuss Bee Research in
Manitoba

Speaker 2: Mr. Rhéal Lafrenière
will do a presentation on spring
management

Meeting Location:

River Heights Community Centre
1370 Grosvenor St.
(Intersection of Oak & Grosvenor
Door Prizes will be offered,
Guests are welcome and free
coffee will be available.

The Bee Cause Newsletter is published by
the **Red River Apiarists' Association** eight
times per year excluding Jun, Jul, Aug and
Dec.

Membership in the **Red River Apiarists'
Association** is \$20.00 per year and includes
a subscription to the **Bee Cause**.

President's Comments

Congratulations to the 2001 Executive. Although the nominations took place slightly later than usual, we are now officially back into our routine. It is also GREAT to have a couple of new faces join our leadership team. It is always nice to have some fresh ideas. The executive will still be looking for more feedback into the plans we have made for the upcoming meetings. Don't hesitate to let any of us know your suggestions.

As we move along into March, we all very anxious to recheck our colonies for successful over wintering. As we heard back in January, treating with Apistan in the Fall may not entirely ensure survival of the colonies infected with *Varroa*. It appears that the population has been stressed during the honey flow and are going into winter in a very tired state. Thus despite the treatments, and ample food, they still do not survive. It is very clear to me that the Spring treatment is critical to get the upper edge. It is also quite evident that we all must check our colonies for infestation.

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As some of our members indicated, an easy method is to pull out capped drone brood. If you discover any little friends on the brood, you must take action. Appearance of five mites per drone cell is a sure sign of a short life for your hive.

Thanks to those entering the draw for the Glass Bee Hive Jar door prize,

Just a reminder, if you have a favourite topic for our meeting, let any of the Executive know. We can discuss how or when to fit it into our plans. Our next meeting will look at Spring Preparations needed to give our bees a good start for the year.

See you at our March 13th meeting!!!

Jim Campbell

Retirement Sale

Allen Dick of Swalwell Alberta, owner of one of Canada's largest beekeeping operations with more than 6,000 hives has just announced his retirement. Allen's entire operation is up for sale. Included are 3100 wintered hives of bees and more than 7,000 supers with frames and foundation.

The complete list of equipment with prices can be viewed on Allen's web page at <http://www.internode.net/HoneyBee/Sale/>

Red River Apiarists' Association Minutes of the Executive Meeting Feb. 20, 2001

The **executive meeting** of the Red River Apiarists' Association was held at Perkins restaurant, Kildonan Crossing, 1615 Regent Avenue with Jim Campbell, Dennis Ross, Doug Henry and Ron Rudiak present.

Jim Campbell called the meeting to order at 3:05 PM.

Minutes from the Feb. 13 regular meeting were reviewed.

Committee Reports:

Financial Report:

Dennis Ross reported that the RRAA has a bank balance of \$3488.00. The committee will send out membership renewal forms with the March issue of the *Bee Cause*.

March Meeting:

Jim reported that David Osterman has been contacted to give a report on bee research projects in Manitoba. Several requests have been received for the March meeting to include Spring Management as part of the program. Rhéal Lafrenière will present this portion of the meeting. If we start promptly at 7:30 PM there should be enough time for questions. Loonie draw will be a colorful honey bear honey pot. Proceeds from loonie draws are used to help defray meeting expenses (meeting room & coffee). Prizes are donated items.

Manitoba Honey Show:

Jim Campbell will be looking for a person to chair the 2001 Honey Show.

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Old and New Business Newsletter:

Jim and Ron will forward articles to Doug Henry as they are finished to include in the *Bee Cause*. Doug has to have the mailing list available in time for mailing out the March issue.

NZ packages and queens will be available this spring from areas which are not known to have Varroa mites.

Moved by Ron Rudiak, second by Dennis Ross, to advance the newsletter editor \$150.00 for printing, envelopes, postage, etc. **Carried**

"So, you want to become a bee-keeper", a handout for prospective beekeepers, is to be completed by Ron.

Advertising rates for 2001:

Classified ad - 50 words (or less) no charge for members for selling their used equipment or bees.

Classified ad - 50 words (or less) non-members \$10.00 per insertion; 1/4 page ad - \$20.00 per issue

Web page: The committee discussed what would be a useful format for Manitoba beekeepers and how best to implement it. There are a lot of archived articles and current material that should be made available for everyone to use.

The meeting adjourned at 4:15 PM

Ron Rudiak (Secretary - RRAA)

Red River Apiarists' Association Minutes of the Regular Meeting February 13, 2001

The **regular meeting** of the Red River Apiarists' Association was held at the River Heights Community Club on February 13, 2001.

Jim Campbell called the meeting to order at 7:30 PM with 29 members and guests present.

Minutes of the Jan. 9 meeting were approved as circulated in the February issue of the *Bee Cause*.

Committee Reports:

Financial Report:

Dennis Ross reported that the RRAA bank balance was \$3251.00 on January 31, 2001.

MBA report:

Jim Campbell's report on the MBA convention will appear in a future newsletter. Jim also reported on the recent Manitoba Honey Co-Op meeting held in Russell. Rhéal Lafrenière reported on the presentation by Cynthia Scott-Dupree, describing work now being done to uncover causes of recent honey bee losses in France. One of the materials under review is Gaucho, a systemic insecticide, widely used to prevent insect damage to growing plants, especially canola and maize.

Helix, which is similar, should be licensed for use this year in Canada. Although not identical to Gaucho, it is from the same family of chemicals. Rhéal also outlined the presentations about TM resistant AFB.

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Honey Show:

Jim Campbell reported that the space has been reserved at the St. Vital Shopping Centre for the Manitoba Honey Show. Date of the Honey Show will be October 26, 27 & 28, 2001.

Election:

Herb Schon presented the report from the election committee and chaired the election. Elected were:

President - Jim Campbell
1st vice pres.- Rhéal Lafrenière
2nd vice pres. - Gilles Lantagne
Treasurer - Dennis Ross
Secretary (and reporter) - Ron Rudiak
Newsletter - Doug Henry
MBA Representative - Jim Campbell

Motion to adjourn the meeting at 8:15 PM Carried

Program: Zenon Sosnowski, MSc., PhD presented information on the uses and benefits of propolis, especially that which is produced in Manitoba, Saskatchewan and North-eastern Ontario.

The **door prizes** (Loonie Draw) were won by:

Doug Nichol - Skep Jar
Rhéal Lafrenière - Fanny Pack

Ron Rudiak (Secretary - RRAA)

New Zealand Bees On The Way

After much discussion and arrangements, it looks like Canada will be receiving package Bees from New Zealand for the 2001 honey season.

Last fall, Varroa was found on bees from New Zealand. For several years, there has been no evidence of this pest. Varroa has been found on the Northern portion of the North Island. Once found, a barrier zone was created along the Southern portion of the Island. It appears the South Island is still pest free.

The Canadian Honey Council has been very active in co-ordinating efforts across Canada to secure a supply of Bees. Several provincial groups had agreed to importation, provided a suitable protocol was developed to protect the Canadian Industry. In addition, the Canadian Food Inspection Agency has been working closely with New Zealand authorities to ensure clean supplies are available. The other issue under consideration was the location for transshipment of bees. Hawaii was not too ready to run the risk of having these bees land at their airport, on the way to Canada.

So far, it looks like there has been considerable effort on the part of the New Zealand authorities to arrange for a supply of clean bees. The suppliers are preparing to secure stock from unaffected areas. Although it is not known just how much stock will be available, most Canadian outlets are already taking orders.

Bee Propolis

Past to Present

Vespa

<http://www.vespower.com/propolis.htm>

Propolis has been used by man for thousands of years and recently has enjoyed a boom in popularity. Bees have used propolis for millions of years, and humans have used it for thousands. Both species find it immensely useful and beneficial. Much of the bees' success in surviving through the ages may be accredited to propolis. As humans, we may yet discover we've only just scratched the surface to the benefits of this resinous wonder.

The Greek physician, Hippocrates, prescribed the use of propolis to help heal internal and external sores and ulcers. Ancient Egyptians depicted propolis-making bees on vases and other ornaments, and used the resinous substance to alleviate many ailments. Pliny, the Roman scholar, wrote much on the use of resins such as propolis in his massive book, *Natural History*. He touts the abilities of propolis to reduce swelling, soothe pain, and heal sores, to name a few.

In *The History of Plants* written by John Gerard in 1597, propolis was noted for its ability to provide swift and effective healing for many conditions. During this era, propolis was used in many different healing ointments.

Propolis is a sticky resin which seeps from the buds of certain trees and oozes from the bark of other trees. Although propolis is vitally important to the colony, there are usually just a few propolis gathering specialists in the hive.

The bees gather propolis, sometimes called "bee glue," and carry it home in their pollen baskets. There they are met by one or two other worker bees who help them unload. These workers take the resinous material and add salivary secretions and wax flakes to it, then use the new product for numerous protective purposes as bee propolis. The bees use it to coat the inside of the hive, including the passageway and the brood chambers.

Propolis protects the hive in two ways: first, it reinforces the hive itself; second, it protects the hive from bacterial and viral infection. And it is these latter properties which man has found so helpful through the centuries.

The reason propolis is such an effective protector is related to the diversity of flavonoids. Propolis consists of approximately 55 percent resinous compounds and balsams, 30 percent beeswax, 10 percent aromatic oils, and 5 percent bee pollen. Other constituents include flavonoids, amino acids, B vitamins, and most importantly, antibiotic substances.

Often called "nature's penicillin," bee propolis has effective antibacterial, antiviral, antiseptic antifungal, and antibiotic properties. These protective and healing properties have been conclusively demonstrated in numerous studies all over the globe.

Tuberculosis

In the former Soviet Union, V. H. Karinova and E. I. Rodionova conducted a study on 135 patients suffering from various forms and stages of tuberculosis. Their patients' ages ranged from 6 years to 50. Patients were given bee propolis three times daily for 4 to 10 months depending upon response to treatment. By the end of the study, all but 12 of the patients had improved dramatically, including some patients going into regression. The 12 who did not respond favourably all suffered from kidney tuberculosis.

Ulcers

In Romania, Drs. A. Vasilca and Eugenia Milcu conducted a study on the therapeutic properties of propolis on ulcers. Thirty four patients with chronic ulcers were given extracts of propolis daily for two weeks. The results were impressive, with 28 patients completely recovering and 6 cases dramatically improving. Tissue biopsies were conducted on some of the patients, which confirmed the regenerative effects of bee propolis.

Mitosis

Medical researchers N. Popovic and N. Oita of Rumania published a report on the effects bee propolis has on mitosis (the process of cell division). They reported that a tissue never becomes entirely malignant; it always contains some normal cells, but the activity of the normal cells is affected and even repressed by malignant cells. Bee propolis favors the activity of normal cells, which helps the tissue to re-establish its normal condition. Constituents of propolis have a mitodepressive effect (depression of the proliferation of cancerous cells) on cells deranged by malignancy.

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Colitis

In Bulgaria, Dr. S. Nikolov, et al, investigated the efficacy of bee propolis in the treatment of acute and chronic colitis. Forty-five patients, both men and women aged 20 to 65 years old and suffering from either acute or chronic colitis, took part in the study. They were given extracts of bee propolis three times a day before meals. In 43 of the patients results were positive, with 26 showing very good response, 12 showing good response, and 5 showing satisfactory. Only two patients showed no improvement. In most cases, pain began to diminish in seven days, disappearing on the nineteenth or twentieth day.

Immune System

Perhaps the most broadly investigated and widely accepted attribute of bee propolis is its immune-boosting activity. It is a natural, broad spectrum antibiotic that activates the thymus gland. Bee propolis not only prevents infectious diseases, but clears them from the system, as well.

As demonstrated in numerous experiments, propolis has the ability to directly destroy bacteria, viruses, and fungi, even penicillin-resistant staphylococcus.

Bee propolis is formidable against viruses. This trait is attributed to the bioflavonoids present in propolis, which have a protective effect against viral infections. Viruses are enclosed in a protein coating. As long as it remains unbroken, the infectious and dangerous material remains imprisoned and is harmless to the host organism. Unfortunately, within the host there are enzymes which remove the protein coating, thus releasing the harmful material to wreak havoc within the system. With the presence of bee propolis in the system, however this doesn't occur. The bioflavonoids inhibit the enzymes from removing the protein coating, keeping the viral material locked inside. These same flavonoids maintain the protective coating around the virus, thus rendering it inactive. With the presence of the bioflavonoids, the host virtually becomes immune to the virus.

Another way in which propolis aids the immune system is its ability to strengthen phagocyte activity. Phagocytes are cells that are able to surround, engulf, and digest micro-organisms and cellular debris. This increase in activity with the introduction of bee propolis was observed and documented by a number of Soviet and European scientists.

The Power of Propolis

The power of propolis is wide-ranging and of immense benefit to humans, as well as to its creator, the little honey bee. People suffering from high levels of blood fat can benefit from taking bee propolis. At the Worker's Hospital of Lian Yun Gang, Jiangsu Province in the People's Republic of China, Dr. Fang Zhu chose 45 patients suffering from hypertension, arteriosclerosis, and coronary heart disease and gave them 300 mg of bee propolis three times a day for 30 days. At the end of that period all patients showed a significant reduction of blood fats and improvement in related disorders.

Another benefit of propolis is its inhibitory effect on certain prostaglandins, which it accomplishes by locking the enzymes that form specific prostaglandins. This can be of immense benefit to those suffering from aches and fever, which are caused by prostaglandins. Bee propolis acts in nearly the identical way aspirin does by blocking the same enzymes, yet without the negative side effects you can get with aspirin.

This enzyme-blocking, prostaglandin-inhibitory effect is also beneficial to the mouth and throat. For instance, a leading cause of dental problems is the erosion of the gums and tissues that line the tooth sockets. Inflammation and infectious bleeding can cause a weakening of the bone structure and tooth loss. But propolis, by blocking specific enzymes, prohibits the formation of the prostaglandins which cause the inflammation, bleeding, and eventual decomposition. At the same time, propolis actually stimulates other specific enzymes which strengthen the walls of the blood vessels in the gums, thereby having a twofold effect on the mouth.

When inflamed and sore, the throat responds favourably to propolis, and for the same prostaglandin inhibition reasons. By inhibiting prostaglandin formation, inflammation recedes and diminishes.

Another attribute of bee propolis is its ability to correct and stabilize proper protein metabolism. A team of physicians at the Institute of Radiology at Serajevo, Yugoslavia treated patients who were suffering from radiation complications. These patients had serious liver damage caused by improper protein metabolism and X-rays. The patients were given bee propolis for two months. Another group of patients, also suffering from radiation complications, were

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given a placebo. At the end of two months, those taking bee propolis had significantly improved, with some patients' symptoms completely disappearing. No improvements were observed in the group given the placebo.

Recent Findings & Facts About American Foulbrood

Deutsches Bienen Journal (German Bee Journal)

by Roland Otto - translated by Ted Scheuneman
AFB, paenibacillus larvae, is a bacteria species that can show up in 2 forms; in the growing, multiplying form and in the dormant form (spore). In the multiplying form it lives and multiplies in the gut of a living bee larva. In this life form it is just as sensitive as many other bacteria. Heat higher than 70 deg. C kills it in a few minutes.

In comparison, the dormant form (spore), the organism is extremely hardy. The bacillus changes into this life form when its' living condition becomes unfavorable. For example, when the bee larva dies. The spores are able to survive for long periods of time. As soon as the living conditions again become favorable, the spores germinate and begin to multiply rapidly.

Table I to III gives a synopsis of the resistance capability and disinfection methods of AFB. The size of foulbrood spores is 1 um X 0.5 um (1 um = 0.001 mm) Just one scale in one cell harbours as many as 2,500,000,000 (2.5 billion spores)

TABLE I

Age of larva(e) AFB spores to infect bee larva(e)

A few hours	10
One day	50
Two days	10,000
4 - 5 days	10,000,000

TABLE II - Life span of AFB spores

In honey at 20 deg. C	over 1 year
Sun's UV rays	4 - 6 weeks
Frost	Not detrimental
Buried	60 + years

TABLE III - Disinfection Methods (AFB spores)

Dry Heat

100 C 8 hours 30 min

230 C 20 min. 97 C

Water

80C 3 hrs.

97C 45 min.

120C 30 min.

Wax

110C 30 min.

Honey

120C 30 min.

Sodium Hydroxide - KOH (Caustic Soda) in water

8 % at 37 C 30 min.

2 % at 20 C several hours

Note 1 The tremendous tenacity of the AFB spores makes it obvious that a contaminated apiary needs a great deal of tedious effort to eliminate the disease. Foulbrood spore are only able to multiply in young bee brood. A developing larva will become infected when nurse bees supply contaminated food to the developing brood.

It is awesome to imagine how many spores the cells of only one slightly contaminated comb harbours. I made an effort to calculate what kind of damage the spores of only one cell theoretically can do. Removing frames with visible signs of disease (scale or sunken cappings) is an effective step toward eliminating an AFB problem in a colony.

The scale of one cell has 2,500,000,000 spores available.

One cell could contaminate (young larvae) - 250,000,000

If each colony produces 250,000 bees/year

The scale from one cell has enough spores to contaminate 1,000 colonies

Note 1 by Ted Scheuneman

A New Pest

The Africanized honey bee, popularly known as the "killer bee," is moving into South Texas and the southern United States. Scientists are not certain how far north the bee will spread, but they do know that it will cause problems wherever it resides in large numbers.

This insect, which has been migrating from South America since the 1950's, looks just like a domestic honey bee, but it is not nearly as good natured. In fact, it has a bit of a quick temper.

The domestic bee has lived in harmony with human beings for hundreds of years. It has been bred for gentleness and good honey production.

By contrast, the Africanized bee is a "wild" bee that is not comfortable being around people or animals. Any colony of bees will defend its hive, but Africanized bees do so with gusto. These bees are more likely to sense a threat at greater distances, become more upset with less reason, and sting in much greater numbers.

More People Will Get Stung

More people probably will be stung by bees wherever Africanized honey bees become established. Some individuals may get stung hundreds of times in only a few moments.

The Africanized bee's "killer" reputation is greatly exaggerated, but it does have some basis in fact. In isolated instances, people and animals have been stung to death. Most often, the person who died was not able to get away from the bees quickly. Animal losses have occurred for the same reasons. Pets and livestock were tied up or penned when they encountered the bees.

However, Africanized bees do not roam in giant swarms looking for victims to attack.

Like most animals, these bees react defensively only when they feel threatened. The Africanized bee is a new insect nuisance, but it will not change the way people live and work and play. People in parts of Central and South America have lived with this bee for several decades without great difficulty.

Beekeepers Are Threatened

Beyond public safety, the Africanized honey bee will have the greatest impact on beekeepers. Commercial beekeepers could go out of business if Africanized bees drive out or breed into their domestic colonies. Because honey bees provide 80 percent of the pollination required by agricultural crops, a reduction in the number of beekeepers could lead to reduced yields in melons and other commodities as well as a decline in honey production.

Beekeepers are working closely with state and federal agencies to minimize the impacts of the Africanized bee.

Know the Bee's Behavior

Your best protection against the Africanized bee is to understand how it behaves and react accordingly.

Bees "swarm" to establish new hives in the spring and fall. Bees are most active then. You may find bees setting up housekeeping where you live literally overnight. Individual bees gathering pollen on flowers or masses of bees clinging together in swarms generally will not bother you. However, bees are more likely to be defensive after they have established a colony and started raising young.

*Article Copied from The Texas A&M University
Agriculture Program African Bee Web Page*

Beekeeping Humour

A stingy old beekeeper figured out a way to take his money with him when he died. Not that he, a beekeeper, had a *lot* of money, but what he did have was going to join him in his afterlife. He instructed his wife to go to the bank and withdraw enough money to fill two pillow cases. He then directed her to take the bags of money to the attic and leave them directly above his bed. His plan: When he passed away, he would reach out and grab the bags on his way to heaven. Several weeks after the funeral, his widow was up in the attic cleaning, and came upon the two forgotten pillow cases stuffed with cash. "Oh, that darn fool," she exclaimed, "I knew he should have had me put the money in the basement."

More Beekeeping Humour

A fellow dropped by to see his friend, the beekeeper. On the way in, he passed a pig in the yard. The pig looked fine, except it had one wooden leg. The friend asked his beekeeper buddy about this. "We had an accident last month in the shop. A bunch of wax caught on fire. We'd have lost everything, except the pig came running up to the house, squealing and squealing to get our attention. We were able to put the fire out." The friend didn't understand how this had anything to do with the pig having a wooden leg. "Oh, Yea," the beekeeper continued, "Well, you know, a pig that good you don't eat all at once!"

Items for Sale

For Sale: Limited number of healthy Nucs for sale from 15 April to end of May. Bees on 4 very good frames with brood on at least two of them. Comes complete with own year 2000 over wintered Queen. Only \$100.00
Contact Ted at 338-6066 between 1800 and 2100 hours.

For Sale: 4 frame Nucs, some with proven queens, available approx. May 15
New supers, assembled , painted, with steel rests. \$8.00
Overhead feeders \$15.00
Phone Dennis Ross 878-2924
Email: rosskr@mb.sympatico.ca

This Space is Available to Rent

Your Ad Could be Here

Classified ad - 50 words (or less) non-members \$10.00 per insertion; 1/4 page ad - \$20.00 per issue

Editor's Comments

Hi, my name is Doug Henry, the new editor of Bee Cause. First I'd like to thank Ron Wayne, the previous editor for the hard work he's done in editing this newsletter over the past years. He has done a tremendous job and I hope I can do as well. I'd also personally like to thank Ron for the his help during the transition and the passing on of necessary membership lists and associated files together with tips on how it all works together.

Since this is the first edition I've prepared please overlook the obvious mistakes and omissions. I'll try to improve as time goes on.

Please be sure that your membership dues are paid up in order to ensure you keep receiving your copy of the newsletter. A membership renewal form is attached to this page for your use if you haven't paid already.

The RRAA web site is temporarily off line. Hopefully it will be back in service by this time next month.

Well, as February comes to a close it seems the weather is finally going to warm up a bit. I'm sure our bees will be pleased if they can make it out for a cleansing flight after being confined for such a long time. See you next month.

RED RIVER APIARIST'S ASSOC. 2001 MEMBERSHIP APPLICATION/RENEWAL

Please complete and mail with your cheque, for \$20.00, payable to: The Red River Apiarists' Association.

Mail to: **Red River Apiarist's Association
Dennis Ross, treasurer,
Box 10 Group 125, RR#1,
Vermette, Mb,
R0G 2W0**

NAME: _____ PHONE NO. _____

MAILING ADDRESS: _____ E-MAIL _____

POSTAL CODE: _____ NEW MEMBER [] RENEWAL []

❁ THANK YOU ❁