

SUMMER 2023 Edition Ron Miksha, ABLB editor

When life gives you summer, make honey! That's what the bees do.

Welcome to ABee Landing Board issue Number 7: Summer 2023. I think you're going to like this. One of our most interesting correspondents, Malcolm Connell of Edmonton, is back. This time he reports on this year's Beaverlodge Beekeepers' Field Day. Malcolm brings unbridled opinion and essential facts that he collected from the field day workshops and presenters.

This issue, we also have a piece by Rose-Anne Bouffard, an extraordinary dog trainer whose canines search for bumble bees needing rescued and who is beginning to train her four-legged friends to walk among unopened beehives to sniff and identify American Foulbrood.

In this summer issue, we remind you to register for the <u>Western Apicultural Society (WAS) Conference</u>

(September 29 – October 2), a joint WAS/CDBA effort that's bringing great hands-on workshops and informative, world-class presenters to Calgary. This conference will sell out, so don't miss out. At \$150 for two days of presentations, plus an optional \$50 day of workshops, it's a bargain. Prices increase after the early bird deadline of August 28.

Also in this edition: sweet clover (two words, not one); CDBA Club news; a honey competition; and Alberta beekeeping news, science, and views.

The back page editorial briefly visits something we don't like to talk about the risky side of beekeeping. Here, we go beyond basic liability (you have bought insurance through CDBA's group policy, right?). Bee safe and bee careful this summer.

Support this newsletter with your favourite tall tales, tips and tricks by sending your stories and pictures by <a href="mailto:emailt

Summer: the promise of heat and honey

It's looking like a honey of a year. It's still dry, but alfalfa and sweet clover have 20-foot roots, reaching water under parched topsoil. After a few years of drought, the plants suffer like everything else. Until then, they can secrete lots of nectar, as they are doing this year.



Hosing hives on hot days might help.



Bees need water, too. During the winter, water helps them consume stored honey, especially if it's crystallized. In the summer, water is collected, deposited inside the hive, then evaporated – creating an air conditioner. It helps evaporation if you give the bees upper ventilation. This can be achieved at the lid or between the upper brood chamber and lowest super.

Keep your bees cool:

- Provide shade. This can be temporary, like an umbrella or shade cloth.
- Exchange metal lids for wooden ones. Metal conducts heat easily, leading to overheating.
- If necessary, top the hive with insulation.
- Be sure the bees have enough space (supers) to dissipate heat.
- Provide water. Hose the hives with cool water.
- Provide sufficient ventilation. The second photo on this page shows three vent areas, the bottom entrance, the space between boxes, and at the lid.

Alberta Blooming

World's best honey plant: Sweet clover

Every July, there is a wash of yellow along the edge of almost every highway and trail in North America. The yellow is from sweet clover (*Melilotus officinalis*) that grows and blooms all across the continent. It's wild and reseeds itself, year after year. The yellow biennial (there's a white variety, too) is one of the sweetest weeds you'll ever meet.

A European native, accidentally brought to North America by settlers centuries ago, farmers once planted sweet clover for hay. It escaped their fields and spread across the continent. These days, you will find sweet clover on hillsides and along highway roadways.



For a while, farmers planted sweet clover to enrich fields. With its deep roots, sweet clover reduces erosion and has a symbiotic bacteria, rhizobium, that adds nitrogen to the soil. At one time, millions of acres of sweet clover were grown for seed and hay. Alfalfa is better for cattle and has now replaced sweet clover.

Although the plant has been abandoned by farmers, it thrives in Alberta as a roadside nectar source for a variety of bees. How good is it? When it was sampled in North Dakota on a dry summer day (similar to what we might find here in Alberta), *Melilotus* nectar averaged 52% sugar and just 48% water. Most nectar is 20% sugar

and 80% water. You can see the advantage to the bee – each belly-load carries more than twice the sugar as typically found in other honey plants. Bees process it more easily during nectar's conversion into honey. And it takes fewer trips, filling supers twice as fast.

Sweet clover yields enough nectar to make 150 to 500 pounds of honey per acre of flowers (Pellet, 1920 and Crane, 1951). Millions of pounds of honey are lost each year in Alberta, simply because there are not enough honey bees to gather all the nectar secreted by the wild sweet clover. For beekeepers, dropping 20 colonies within a kilometre or two of a section (640 acres) of sweet clover doesn't begin to touch its potential. With this flower around, your honey crop is only limited by the weather and the quality of your beekeeping.



Here in Alberta, expect to see it blooming in late June. The yellow type is first, followed by less abundant white sweet clover a couple of weeks later. Unless it becomes really hot and dry,

these clovers will bloom into August, yielding nectar on nice days for several uninterrupted weeks.

Alfalfa and all the clovers, including sweet clover, produce a nice, mild, white honey sought after by beekeepers because it can be used for baking and cooking without adding an extra flavour, and because it

sells at a higher wholesale

price.

Hope your bees store lots and lots of sweet sweet clover honey this summer.

CALGARY & DISTRICT BEEKEEPERS ASSOCIATION: WHAT'S HAPPENING?

Your bee club, the CDBA, is starting in-person meetings in mid-September at the <u>Parkdale United Church</u>. The presenter for September 13 has not yet been selected, but you can count on a good session, as always.

Meetings will be the second Wednesday of each month from September through May. Here are the dates: September 13; October 11; November 8; December 13; January 10; February 7 (Cupid moved it from the 14th); March 13; April 10. Finally, the season will wrap up on May 8 with the Annual General Meeting.

The speaker list for will be released at the September gathering.

There will be a fall BBQ. The date isn't set yet, but volunteers are needed to help make this happen. Look for the announcement and the call for volunteers on the *cdbabeekeepers* chat forum on googlegroups.com.

CDBA Membership

CDBA 2023 **memberships** are available on the club's website at: <u>CDBA membership</u>. The executive encourages you to support your club by taking out a membership. The nominal \$25 fee helps to pay for our regular meetings and guest speakers, some free workshops, our website, and other club activities throughout the year.

Membership benefits include: monthly meetings with enlightening beekeeping presentations, the chance to purchase honeybee packages at a group rate, mentoring programs, social events (summer BBQ, winter potluck and honey competition, Bees and Beers), assistance identifying and treating bee diseases, and this newsletter. CDBA members also participate in community programs such as educational presentations to schools, horticultural societies, retirement homes, children's clubs and community centres, honeybee

Volunteer with the CDBA!

The CDBA has lots of ways for you to get involved helping the community.

Past opportunities have included the Winter Banquet; Summer BBQ; Aggie Days; CDBA Stampede exhibit; Millarville Fair; mentoring; swarm recovery; and more.

Volunteering is a great way to meet other beekeepers and learn from them!

swarm recovery and bumble bee rescues. In the past, members participated at agricultural exhibitions and fairs including Aggie Days, Calgary Stampede, Calgary Youth Science Fair, Makers Fair, Priddis and Millarville Fair, Cochrane Pioneer Days and community fall fairs.

The best value you will receive from your local beekeeping club membership comes from the fact that it is *local*. The root of all good beekeeping information is "Location, location, location." That's so important that real estate agents stole the mantra from us. You can learn some fun beekeeping stuff from YouTube or your weird uncle Al who lives in California, but nothing matches local beekeeping information and experiences! What works on Broadway won't fly in the Borscht Belt.

Don't forget to register your hives with the City of Calgary if you keep bees in the city. You will need proof of proper experience and/or education when you apply – follow this link for all the details. The CDBA offers a two-day beekeepers' course that meets the city's requirements for registering your city apiary. When applying, we have found that the city's interactive website has become more efficient than it was in the fall, but be prepared to wait on hold for a long time when you phone in to make your \$10 payment.

CDBA Days at the Hive

Calgary District Beekeepers Association facilitates the popular "Saturday at the Hive" event by connecting experienced beekeepers with beginner beekeepers who want to know more about the inner workings of a hive. This event has become so popular that the program coordinator, Michael Dabrowski, has expanded it beyond Saturdays. Keep an eye on the CDBA chat group for announcements to join these learning opportunities. It's first come, first served, so you have another reason to subscribe and follow. The CDBA takes no responsibility for safety or learning outcomes at the hosts' sites, but does try to match experienced CDBA-member beekeepers with new beekeepers.



Beekeeper Mark Soehner

Mark Soehner is one of the best at generously hosting members at his urban apiary. Mark is very open about showing his hives, discussing mistakes (everyone makes a few), and

letting visitors get close and personal with his bees.



Mark is so enthusiastic about hosting Saturday at the Hive that he graciously welcomed two separate groups of visitors this July. For his second program, in late July, Mark demonstrated the use of oxalic acid for mite control and also showed his extracting system.



Mark Soehner, left, is demonstrating an oxalic mite treatment to guests during his July 29 2023 Saturday at the Hive.

Any beekeeper with at least three years of experience can host a day at the hive. All you need are those years behind a veil, a few colonies, and a willingness to share. This is the text of an event invitation from the **Day at the Hives** coordinator, Michael Dabrowski:

The visit is limited to 12 people and is filled on a first-come first-served basis. Limits are important to observe for many reasons, so please specify if you have a beekeeping partner who you are requesting to attend. Indicate your interest by privately emailing dabrowsk@shaw.ca.

You must be a paid CDBA member to attend. Details, including location, will be forwarded to those attending prior to the date of the apiary visit. There will be opportunities to examine the hives, so bring some protective gear.

This event is only coordinated by the club. What happens onsite is between the participants and the host.

Thanks, Michael Dabrowski (403) 585-4494



WAS/CDBA Conference

Calgary District Beekeepers Association is pleased to announce that we will be co-hosting the 2023 Northern Lights Beekeeping Conference with the Western Apicultural Society. The conference will be held September 29th – October 2nd at the Grey Eagle Casino and Conference Centre.

This conference will be a great opportunity to learn and engage with experts from across Canada and the USA. We are hoping to see a great turnout from our membership. Come out and network and engage with fellow beekeepers! Early registrations are only \$150 for the 2 day conference and \$50 for the optional workshop day. Details and pricing for the final-day field trips are yet to be announced. By registering early you will help with conference planning and budgeting. This is an excellent way to show your support! Please register at: https://www.westernapiculturalsociety.org/2023conference

Additionally, the CDBA has contributed \$1500 towards sponsoring Kamon Reynolds as a speaker. Kamon is cofounder of <u>Hive Life</u>, the largest bee conference on the continent. He keeps around 250 colonies in Tennessee and <u>publishes his ideas on his popular YouTube channel</u>.

Kamon Reynolds is just one of the great presenters that participants and volunteers to the WAS/CDBA Conference will have a chance to meet. Other speakers include Andony Melathopoulos, Geoff Wilson, Juliana Rangel, Kevin Inglin, Olav Rueppell, Dewey Caron, Etienne Tardiff, Medhat Nasr, Carey Yost, Kathy Clay, Julia Common, Scott Debnam, Nuria Morfin, Ron Miksha, and of course, Manie Moore.

We hope that you are enjoying this newsletter! Feel free to share it with friends and ask them to contact us at ABeeLandingBoard to get on the distribution list.



WAS/CBDA: HONEY AND MEAD COMPETITION

Time: Entries must be received no later than 9:00 am on September 30 at the Grey Eagle Resort.

Cost: \$10/entry per class

Celebrate the annual harvest and showcase some of the best honey in the world with your entry in the honey and mead competition. Open to all registered attendees of the Northern Lights Beekeeping Conference, this is an opportunity for both new and experienced beekeepers to share the distinct characteristics and flavours that are unique to your apiary, and demonstrate your skill in preparing your honey product for competition.

Enter into 5 different classes: liquid honey light, liquid honey dark, creamed honey, cut comb honey, and mead (any type). See the full rules and regulations here for a complete description of the criteria for each class.





ABee Landing Board 🐯



Newsletter 7 – Summer 2023

Calgary and District Beekeepers Association





Howdy again! It was a Stampede to remember!

The Calgary Stampede had <u>near record attendance this</u> <u>year, with 1,384,632 visitors</u>. Jim Rogers and Eric Metcalfe will probably tell you that a large portion of those guests passed through the CDBA exhibition booth.

Everyone in our club is thankful to Jim, Eric, and the dozens of volunteers who came out to show their passion for beekeeping and help visitors learn about beekeeping in Calgary. Jim was especially busy. He took 96 photographs of bee tattoos that visitors (almost none of whom were beekeepers) sported on arms, legs, backs, and et ceteras. Beyond the call of duty, Jim! Many, many, many thanks to the volunteers!

Here are a few CDBA Stampede 2023 photos.





















... and a discrete glance at some of the tattoos that showed up at the CDBA beekeeping exhibit during the 2023 Stampede.















Special alert for tattoo artists



108 likes

jamiedonnellytattoos Bee for Gerry's first tattoo • #bee #honeybee #honeybees #beekeeper #blackbee #beetattoo #hive #beehive #tattoo #tattooer #entomology #insect #insecttattoo

Last year, tattoo artist Jamie Donnelly tweeted this beautiful image of a *Bee for Gerry*. Look at all those hashtags: #bee #honeybee #beekeeper #blackbee #hive #entomology. Unfortunately, he drew a fly, not a bee.

You know these things are permanent, right? If Gerry comes into your shop asking for a bee as their life-long arm companion, be sure you ink in a bee, not a fly. When his mistake was pointed out, the tattoo artist quickly removed his post from Twitter. I doubt that the ink came out of Gerry's arm as quickly.

Lots of folks confuse bees and flies. If you're an aspiring tattoo artist, you are probably not an entomologist. To help you out a little, remember that flies have only two wings, huge eyes, short antennae, and skinny legs. Bees have four wings, modest eyes, long antennae, and legs that returned from a few weeks on the gym's leg press machine. And bees are fuzzy and cuddly, too.



Workshop:

From Extraction to Winning Honey Gold

On the evening of August 15, Linda Symmes and Courtney Robinson, who are guiding honey judging and honey competition entrants for the 2023 WAS/CDBA Conference, organized and hosted an event of great interest to aspiring ribbon winners competing in honey judging programs. Two of our district's best beekeepers, Ken and Lorraine Crebbin, led the workshop.

The Crebbins came to the SAIT Campus to demonstrate the proper handling of honey, with an emphasis on preparing samples for honey judging competitions.



Ken used the guidelines for honey judging (you can find that information here) as his outline for the workshop. For liquid honey entries, Ken walked through the seven key elements that are checked by judges: quality of the container, viscosity, freedom from crystallization, cleanliness and freedom from foam and air bubbles, the elusive quality of 'brightness', honey flavour and aroma, and accuracy of fill. It was interesting to note that the quality of flavour and aroma does not refer to the floral source of honey – some judges may prefer strong-flavoured honey, others mild. To be fair, caramelization, sourness, and fermentation are judged, not taste.

In addition to discussing the finer details of competitive preparation, Ken took time to address other questions posed by the 24 participants (some of whom are CDBA Board members). Ken and Lorraine Crebbin have decades of beekeeping experience so they offered advice on harvest and comb management, which are integral to producing show-quality honey.



In honey judging competitions, liquid honey can be entered according to colour (with 50mm Pfund as the dividing point). For borderline entries, judges have the final word in separating the dark and light categories.

At most competitions, comb and <u>creamed honey</u> are also categories. Lorraine explained the creaming process, which can be time-consuming but produces a wonderful product. The key elements are honey humidity, temperature, and stirring in very high-quality 'seed' honey to start the creaming process.

During the evening, the most frequently repeated message from Ken was "Keep it clean." In all stages, keep everything you do as tidy and speck-free as possible. After all, you are producing food. If you want to go the extra steps and enter honey into contests, every bit of black charcoal



from your smoker and every piece of lint from clothing must be carefully banned or removed.

To prepare for a contest, attention to detail and cleanliness are paramount. Here are some of the many pointers given by Ken for producing competitive honey:

If you are experienced, **don't use a smoker** – the smell and bits of smoker ash may end up in the honey.

Look for perfect glass jars. Serious competitors may examine a thousand jars to pick out three perfect ones.

Use new combs from foundation so the honey isn't stained from dark, pre-used frames.

When filling, **put a glass rod into the jar** and trickle the honey down the rod. This reduces air bubbles.

Uniform fill among your three entry jars might be achieved by **weighing each full jar** to the nearest gram.

Preparing honey for show is serious business, but shouldn't stop anyone from participating. If you get unfavourable feedback from judges, thank them and learn from their comments. All entries are anonymous so no one is picking on you – just your honey.

The event organizers, Linda and Courtney, want to express special thanks to SAIT and the workshop sponsors, Richard Packaging and Schneider Electric.

All proceeds from the workshop were added to the prize money for the WAS Northern Lights Conference honey competition, which you can enter by visiting https://www.westernapiculturalsociety.org/2023conference

If you have already signed up to attend the conference, but didn't indicate that you would like to enter the honey competition, simply go back to the conference registration page, enter your name, and skip down to the competition section.

- reported by Ron Miksha

Alberta Bee Clubs

Links to some of Alberta's clubs:

- ABC: The Alberta Beekeepers Commission
- Calgary District Beekeeping Association
- Edmonton District Beekeeping Association
- Grande Prairie Beekeepers Club
- Red Deer & Area Beekeepers Association
- <u>Strathcona County Beekeepers Association</u>

Edmonton District Beekeeping

EDBA MEMBERSHIPS:

Meetings for Edmonton-area beekeepers are held seven times throughout the year and include informative and timely guest speakers as often as possible. Members are kept up-to-date on the latest advancements in bee health and beekeeping, and can get support from fellow beekeepers. If you are interested in becoming a member or renewing your membership, please contact the EDBA treasurer at: EDBAtreasurer@gmail.com. The cost is \$25/yr. Cash, cheque, or e-Transfer accepted.

About a dozen Edmonton-area swarm catchers are listed at this site: <u>Swarm catchers 2023</u>. EDBA also provides <u>this page of advice</u> for beekeepers wanting to capture swarms by themselves.

Two of EDBA's most experienced beekeepers once again trained new beekeepers in the spring of 2023. In its 8th year, the one-day course offered by Malcolm Connell and Craig Toth is not part of EDBA, but with their mentorship program and years of experience, this is a great course.

The complete one-day **course costs \$140.** Look for an announcement about new courses this autumn.

You can register for the Edmonton course at www.naturalelementshoney.ca

Notice regarding bee importations

From the office of
Samantha Muirhead, Provincial Apiculturist
Alberta Agriculture & Irrigation
Crop Diversification Centre North
17507 Fort Road NW Edmonton, Alberta T5Y 6H3
Phone: 780-415-2309

Dear stakeholders,

The Canadian Food Inspection Agency (CFIA) will be undertaking a new risk assessment to evaluate the risks associated with the importation of honey bee packages from the United States. The risk assessment will be conducted based on guidelines provided by the World Organisation of Animal Health (WOAH) and is expected to be completed by early next year. Should you wish to submit any new scientific information related to the health of honey bees or control programs in place to control disease agents and pests in Canada or in the United States, please send these to the CFIA at cfia.AIED-DIEA.acia@canada.ca, by August 31, 2023, at the latest.

The CFIA is committed to its mandate to protect animal health, which includes the health of the Canadian bee population. The CFIA will continue to engage with the Canadian Honey Council, the USDA, provincial governments and apiculturists and a wide range of other stakeholders with respect to Canadian honeybee health.

In addition, the CFIA continues to put significant effort into identifying and evaluating potential new sources of packaged bees and queen bees internationally. Canada currently allows imports of honey bee queens from the United States, Chile, Australia, New Zealand, Denmark, Ukraine, Italy and Malta, and honey bee packages from Ukraine, Italy, Chile, Australia and New Zealand.

The CFIA encourages the sharing of this notice with all stakeholders.

It's honey, Honey

Our series, "It's honey, Honey" focuses on backyard urban beekeeping as performed by an experienced Calgary beekeeper. Mark is quite active in our bee club, contributing with Saturday at the Hive and volunteering in a wide variety of roles, including auditing CDBA's financials. The retired firefighter is an award-winning honey producer and accomplished beekeeper.

By Mark Soehner Summer 2023

I wrote in the prior issue that in October 2022 we had a speaker who suggested closing the hive to prevent heat loss in Winter. I did that. And in that prior issue I told you of my catastrophic loss of several hives, as a result of that action.

My full loss is now known: 5 of 7 hives died.

SO DO NOT CLOSE YOUR TOP ENTRANCE/EXIT. YOUR BEES WILL DIE FROM TOO MUCH CONDENSATION. An open top vent is needed in winter to prevent moisture buildup.

To recover, in early June 2023 I purchased two queens and made two splits. Now I have four hives in Haysboro.

I am back now from a road trip to Ontario with the truck and trailer. I returned for the tail end of Stampede.

I have offered a "Saturday at the Hive" session 22 July 2023 and again 29 July 2023. I talked about what went wrong in my apiary and the steps I have taken to recover from my loss. I've also demonstrated the use of an oxalic mite treatment and my extracting system.

Mark Soehner

[Editor's note: Mark is an experienced beekeeper and expresses his own opinions and discoveries, which are not necessarily those of the CDBA.]



Notes from Dr. Olav Rueppell's Bee Lab at the University of Alberta

Editor's remark: Dr. Rueppell's research lab is at the University of Alberta. Here he shares some of his important work that affects the health and success of bees in Alberta. In this brief piece, ABee Landing Board is highlighting one recent study coauthored by Olav Rueppell. Olav will be presenting at the WAS/CDBA Conference in September.

The many benefits of hygienic selection

"Our new collaborative work with the group of Victoria Soroker of the Agricultural Research Organization in Israel is showing that selection for hygienic behavior in honey bees has multiple benefits. Not only is social immunity enhanced, but this also translates into lower Varroa mite loads and better individual immunity."

We sometimes see trade-offs in breeding bees for one particular genetic trait. But as Rueppell and his fellow authors show, hygienic behaviour does not necessarily carry a non-beneficial cost to honey bees.

From the paper: "To determine whether selection for hygienic behavior at the colony level is associated with trade-offs in honey bee viral infection and immune function, we compared Varroa populations, viral loads, and individual immune function between honey bee colonies that were bred for high and low hygienic behavior. Specifically, we measured Varroa infestation, Deformed wing virus DWV-A, DWV-B, Acute bee paralysis virus (ABPV), and Israeli acute paralysis virus IAPV viral genome levels in bee samples from artificially inseminated queens in our bi-directional selection program for hygienic behavior in Israel...

"...results indicate no trade-offs in breeding for hygienic behavior. Hygienic honey bees were associated with reduced Varroa populations and reduced DWV prevalence or load at the colony level... In sum, we demonstrate multiple health benefits of breeding for honey bee hygiene." Find more here.

Drone reproductive health

We are all concerned about the queen's health, but what about the king? Adrian Fisher II and Juliana Rangel have tackled drone reproductive health in a <u>recent</u> <u>paper</u> published in *Apidologie*. Their paper is a review of about 150 related papers. It summarizes and analyzes results in an easy to follow, informative way.

The authors describe how environmental factors including nutrition, temperature, season, and age may influence drone reproductive health. They also review studies that describe other factors, such as pesticide exposure during and after development, that may also influence drone reproductive quality. Since sperm development in drones is completed during pupation prior to adult emergence, attention needs to be paid to these factors during drone *development*, not just during *adulthood*.

Recent reports suggest that queen spermathecas are not as well populated as in past decades, perhaps a result of poor drone functionality.

The principle investigator, Dr. Juliana Rangel, will be presenting at the WAS/CDBA Conference this fall.

A Bee Walked into a Hive. . .



Milbrandt has a great sense of humour and a gift for wordplay. Bees, honey, and combs are naturally punny. What could go wrong?

What if scientists added dog DNA to Royal jelly?

We would have mutted Queens.

When stung, the bee marks you with a scent... shouldn't it be called being "stunk" instead?

One night two guard bees go out to patrol the landing board. They look up and see the <u>northern lights</u>. One says, "I wonder if they're heavy?"
Other bee says, "I think they're pretty light."



HONEY RECI-BEES quest post by Ron Miksha

When my family is out of town, I like to treat my sugar bugs to a couple scoops of vanilla ice cream, drizzled in fresh clover honey. Even I can prepare this recipe. And what a refresher on a hot summer's day!

RON's HONEY and ICE CREAM

2 scoops of vanilla ice cream2 tablespoons of your best white clover honey

Kerplunk the vanilla ice cream into a serving bowl. Drizzle on honey until your teeth start to hurt.



PREPARING HONEY FOR ICE CREAM

1 frame of honey
Using a spoon, scrape the honey into a big bowl. Wax will float to the top.
Remove it and make <u>Dzierzon candles</u>.
Drizzle the honey on the ice cream.

If you are feeding children, consider preceding this recipe with carrots and peas or some other unsavoury healthy meal that they will enjoy.



Provincial Apiarist Insight

Samantha (Sam) Muirhead is Alberta's chief apiarist. Sam's work concerns a range of issues important to Alberta beekeeping, especially regarding bee health. To reach Sam, contact her office via phone or email.

Phone: <u>780-644-8746</u> or dial toll free <u>310-0000</u> before

the phone number (any where in Alberta)

Email: bee@gov.ab.ca

Here is a summary of the role of the Provincial Apiculturist. Help make her job manageable by knowing and following this important information.

The <u>Bee Act</u> – in conjunction with its <u>Regulation</u> – forms the framework for regulating the health of Alberta's beekeeping industry through registration, inspections, and movement of bees and bee equipment. The Office of the Provincial Apiculturist administers the Act and Regulation to respond quickly to threats of disease outbreaks and other emergencies that could affect honey bee health in Alberta.

Responsibilities of the Apiculturist Department

In administering the *Bee Act* and its Regulation, provincial apiculturist responsibilities include:

- beekeeping registration
- <u>inspection services</u> that include:
- permits for interprovincial movement of bees, queens and used equipment;
- bee health diagnosis;
- honey bee colony and equipment inspection;
- abandoned equipment or colony inspection.





Calgary, Canada | Friday, Saturday, and Sunday
September 29 - October 1, 2023

Everyone likes a good conference. Western Apicultural Society (WAS) is coming to Canada for the first time in a couple of decades. We have partnered with the Calgary and District Beekeepers Association (CDBA). Please join us in Calgary this fall for a yahoo-ing good international conference!

Save the Date: September 29 – October 2!

Over its 45-year history, WAS has built a large community of beekeepers from 14 western states, 3 provinces, and the great Yukon Territory. Members meet to educate and encourage beekeepers who often endure similar western challenges — mountains, frequently sparse rainfall, irregular Pacific currents, distant marketing, and scattered customers. This year, the annual WAS Conference is taking the uniqueness of geography a step further with a focus on **The North**. The theme, Northern Lights Beekeeping, will focus on beekeeping in the land of long summer days and cold winter nights.

Although many presentations will include universal aspects of care, production, and marketing, several popular speakers with specifically northern beekeeping experience will be entertaining and educating us. The conference includes two days of presentations, a day of workshops, trade show, banquet, local tours, mingling, and endless bee-talk.

Thanks to volunteers, sponsors, and donations, the conference is designed to deliver a fun atmosphere with engaging presenters, interesting workshops, and opportunities to meet old friends and make new ones.

In addition to a Friday full of workshops (3D-printing, winter preparations, wax working, disease control, and more), the growing speakers' list now includes <u>Andrew Munn</u>, <u>Andony Melathopoulos</u>, <u>Dewey Caron</u>, <u>Etienne Tardif</u>, <u>Geoff Wilson</u>, <u>Julia Common</u>, <u>Juliana Rangel</u>, <u>Kamon Reynolds</u>, <u>Medhat Nasr</u>, <u>Nuria Morfin</u>, <u>Olav Rueppell</u>, <u>Ron Miksha</u>, <u>Shelley Hoover</u>, and more presenters added each week. <u>See the list on the WAS Conference website</u>.

Thank you to the growing number of sponsors and trade show vendors, which now includes Alberta Beekeepers Commission, Andermatt Canada, Beaver Plastics, Calgary and District Beekeepers Association, Community Natural Foods, Mattamy Homes, NOD Apiary Products, North of 60 Beekeeping, Perry Mankatta, Richards Packaging, and Schneider Electric, United Beekeepers of Alberta, and Worker & Hive.

Two full days of hobnobbing with beekeepers will cost just \$150 if you register early. An extra \$50 buys you a pass for the workshop day. More detail and pricing on the final day field trips is yet to be announced. By registering early you will help immensely with conference planning and budgeting. *The Early Bird prices end August 31!*

This is an excellent way to show your support! You can register here: Register for the Conference!





Tech Transfer Program

From the Alberta Tech Team to You:

Take action! Monitor your hives for Varroa

There is a high chance that you WILL have Varroa mites in your hives this year, but that does not mean you will lose every colony as a result. While a colony may be able to survive in the presence of mites, it is the association of mites with viruses



that poses the greatest threat to the colony. Varroa mites transmit viruses which pose a serious threat as they may be able to kill a colony at a lower threshold than without viruses. Many honey bee viral infections do not present visual symptoms, which allows viral infections to go unnoticed by beekeepers. While mite loads can be simply monitored by beekeepers in the field, assessment of viral levels is costly and requires sending bees to a lab. Several studies have linked viral infections to reductions in colony overwintering survival and individual bee lifespan, but due to the diagnostics cost and the labor involved, monitoring for viral levels is not a common practice in beekeeping operations.

It is fairly quick and easy to sample a hive for mites. There are several methods you can use, but the most widely used field assessment methods for mites is the "alcohol wash" method.

See our <u>Varroa Mite Sampling Guide</u> for details on how to do this. AND check out our Ultimate Key to Honey Bee Viruses booklet <u>here</u> to learn more about some common honey bee viruses in Alberta.

Why you should monitor!

- Monitoring will tell you if, when, and how you should treat for mites.
- You can determine how well your treatments are working and if you need a follow up treatment.
- You can track your levels from season to season and year to year.
- Because of the association of varroa and viruses, knowing your mite levels can give you insight into the colony's viral levels.
- AND you can submit your data anonymously to our Varroa Mite Tracker and see the levels across the province!

Varroa Mite Tracker is back! Beekeepers can submit their varroa mite levels on our website and then view the averages by county on an interactive map!

How to submit data:

- Use the ALCOHOL WASH OR SUGAR ROLL METHOD to determine the varroa mite levels in your colony. If using sticky boards, please convert your mite counts using the rubric on the form. You do not need to sample every colony in an apiary. Sample a minimum of 10% per apiary. Check out our Varroa Mite Sampling Guide for details on how to perform the alcohol wash method.
- 2. If you do not know the county of your apiary: In the top right hand corner of the Varroa Mite Tracker Map, input the coordinates or address of your apiary to locate the county.
- 3. Fill out the form for each colony and submit vour data.
- 4. View the map to see the mite levels across the province!

SUBMIT DATA HERE

Notes from the 67th Annual Beaverlodge Beekeepers' Field Day

- submitted by Malcolm Connell

Beaverlodge, Alberta, June 23, 2023

After sleeping overnight at Green Valley Inn in Valleyview, I arrived in time for the coffee, and muffin-fueled breakfast put on by Bee Maid Coop at nine, in the basement of the white building that houses many of the beekeeper-scientists' offices. Unfortunately, I was too late to grab a chocolate muffin. Faster hands than mine were present.

I was surprised that there were no tours of the <u>National Bee Diagnostic Centre</u> as in former years. The explanation was a lot of visitors could create contamination issues with samples received later, but a few Edmonton members managed to persuade a technician to give an unofficial tour.

Presentations from Bee Maid were given by Derrick Johnson (Spruce Grove) and Kirk Wilson (Winnipeg). Derrick talked about the expansion of the Spruce Grove and Winnipeg facilities, while Kirk concentrated on the economics of beekeeping packing and marketing. He told us that honey production expenses had gone up 64% in the last few years and we should tell consumers that, if they complain about a \$5 price increase at the farmers market. Kirk expects the wholesale honey price per pound this year to drop from \$3.15 to between \$2.60 and \$2.80.

The amount of honey imported into Canada has increased from 1.6% of all Canadian honey consumed to 16%. The Bee Maid Coop has increased sales of amber and golden honey, which most imports look similar to, in addition to selling its prized white honey to Japan. Private brands are cheaper and more honey with a private label is being sold than brand honey. Bee Maid continues to sell its brand plus a lot more private honey (70% of its honey supply), e.g. to COSTCO. Kirkland

honey in COSTCO is purchased from Bee Maid Coop and is described as a private label honey.

Brazil continues to provide the main organic honey source for Canadians. Honey used in cheap honey ham comes from Asia. Walmart is being boycotted by Bee Maid Coop because Walmart gets a lot of money from squeezing penalties that punish honey sellers who don't deliver honey on time. The Coop has 327 members and usually gives its members a better price than beekeepers selling to other sources. Bee Maid is more than a packer - it even uses TikTok and Instagram to tell the stories of beekeepers.

Queen bee retail prices are not going down; they now range between \$47 and \$50.

After the Bee Maid Coop update, we moved to the **rotating module presentations**, each lasting twenty minutes. These were:

- 1) **Oxalic acid** demonstrations of how to use it safely.
- 2) **Prof. Rueppell** (from U of A) using bees from hives nearby to show how bees can be tested for hygienic behaviour.
- 3) Dead mason and leaf cutter bee samples were on hand as well as relevant literature about them.
- 4) **The Tech Team** was on hand to demonstrate sampling techniques for judging mite infestations.
- 5) **Hobbyist** set up. When I visited, they showed how to check for mites. I was told that the Grande Prairie bee club organized the module, but I noticed Beaverlodge technician personnel were doing the explanations.
- 6) **Honey tasting** of samples from more than ten countries and nectar sources.

I attended the oxalic acid demonstration module at least three times. Fortunately they were careful not to light the acid on fire which would have created safety issues for those watching.

What I learned about applying oxalic acid:

1) **Suit up** – have a cloth mask and glasses. Have a large mask. Cover the skin, use gloves.

Use a full face respirator 3M 6800, which costs \$240. Use a specific cartridge - with the pink filter costing \$40 for oxalic and formic. They will check to see if the mask fits your face. This is from Acklands Grainger Industrial Supplies.

- 2) Use a **one-gram tablet per brood box** for 10 minutes.
- 3) With the vapourizer or provap 110v (\$600 from Bee Maid), treat once in spring and three times in Oct/Nov (seven days apart) when temperatures are close to 5C. The presenter reminded people that the cost is similar to the cost of two beehives. If two more hives survive winter, you get your money back.
- 4) The provap is **applied for 30 seconds**. The hive is sealed for 10 minutes. Seal off all entrances.
- 5) Provap comes with a set of instructions from Bee Maid. It has two Teflon taps. When the tap is off, seal the entrances with rags. **Wear a glove** on your hand for protection from heat. Push down on the provap or vapourizer with the hand which has the glove on.
- 6) **Put a tape on each hive** to record what time you did the treatment, so if you are doing several hives, you can remember to come back in exactly 10 minutes.
- 7) One big issue for me is using a marine battery with the vapourizer and wondering if it needs to

be recharged next year. One solution I learned was to have a 110 v generator which plugs in with a similar size plug as a household appliance.

Or, using the drizzle method:

Use 35g. Mix 50/50 in water and apply 50 ml per hive. Do the drizzle between the seams of bees in both brood boxes. Randy Oliver (https://scientificbeekeeping.com/7701-2/) uses this on nucs before the cells are capped.

When the modules finished, I realized that I had learned quite a lot just from eavesdropping on the quiet conversations of spectators watching a module.

The free lunch barbeque was well attended with at least 140 people lined up.

Summaries of some after lunch presentations

Prof. Olav Rueppell pointed out that recent research shows that varroa mites feed more on the hemoglobin (blood) of bees than on the fat. For more information about this, you can go onto his website.

The National Bee Lab in Beaverlodge has received base funding for another five years. The lab is also researching leaf cutter bees, pollen types and wasp treatments.

Provincial Bee Apiculture Report from Samantha Muirhead, reported by Malcolm Connell:

Resistance to Apivar seems more widespread. Bad weather and nosema have probably contributed to an increase in European Foulbrood. In 2023, there seems to be more varroa mite



issues. In general, the colonies look strong. There have been more signs of queen supercedure and swarms.

Paul van Westendorp, BC Apiculturist from notes collected by Malcolm Connell:

- 45% of beekeepers responded to the Alberta survey but only 22% of BC beekeepers responded.
- BC has 5,000 beekeepers with 64,000 hives. Alberta has fewer than 3,000 beekeepers but has 330,000 beehives.
- Each year Saskatchewan, Manitoba and Alberta send hives to the Fraser Valley in March to pollinate blueberries.
- Paul was provincial apiculturist in Alberta in 1987 when the package bee program accepting packages from the USA was stopped. The CFIA needs to do a needs assessment again, he said. Their last assessment in 2013 concluded that the border remain closed because of threats from varroa mite infestation, Africanized bees, resistance to Apivar, and small hive beetle infestation. However, we imported 200,000 queens from US sources in 2023.
- Sightings of a few nests of wasps from China, South Korea and Japan have not affected the beekeeping industry in BC. So far this year, no Asian wasps have been found.
- A bigger problem has been the invasion of wasps from Central Asia coming into Western Europe and destroying hundreds of hives. It will become a problem if this wasp gets into Nova Scotia by boat.

Paul reminded us that we need to get permission to move bees into BC by applying on the government website. During lunch, Paul talked to me about going on an expedition with <u>Brother Adam</u> (creator of the Buckfast bee hybrid) decades ago and to Kenya to search for the high altitude *Apis mellifera monticola* honey bee subspecies.

The theme of Paul's talk was that no matter what decisions we make, whether it be border issues or other movements of bees, there are always risks.

Connie Phillips, CEO Alberta Beekeepers Commission

The tech team has been given two more years to become self-sustaining.

Upcoming Alberta Conferences

- 1) Western Apicultural Society (WAS) Conference and AGM, co-hosted with Calgary and District Beekeepers Association (CDBA) in Calgary, Sep 29 Oct 1.
- 2) <u>Alberta Bee Commission</u> (ABC) AGM and conference at West Edmonton Mall, November 30 December 2.
- 3) <u>BeeTech Conference</u> in Calgary, February 9 and 10, 2024, organized by <u>Canadian Association of Professional Apiculturists</u> (CAPA) and the <u>Canadian Honey Council</u> (CHC).

- submitted by Malcolm Connell



WAS/CDBA: Diamond, Platinum, Gold & Silver!

The WAS/CDBA Conference (September 29 – October 2) will be at the Grey Eagle, next to the City of Calgary. Register before September first and get the early bird discount!

Registration fees pay only part of the cost of the conference. This event simply could not happen without the generous support of our many sponsors, which include:

Diamond: Hive World

Platinum: Bayer; Orange Frog Production; Propolis, Etc.; The Honey Merchants; UBA; Worker and Hive

Gold: Andermatt Canada; Bee Maid; BHF Sales Ltd.; Global Patties; NOD Apiary Products

Silver: Western Bee Supplies; Beaver Plastics;

Community Natural Foods



The WAS/CDBA 2023 Conference Diamond, Platinum, and Gold Sponsors!























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Rose-Anne Bouffard's Busy Dogs

In this issue of ABee Landing Board, we recognize the great work being done by Rose-Anne Bouffard. Rose trains dogs to help rescue wild bee nests and she has begun to prepare her helpers to sniff out American Foulbrood. Rose is also a CDBA member and a recent CDBA Introductory Beekeeping Course graduate. She has a blog where she reviews her dogs' work and play. You can find the blog here. Today, we highlight part of a recent blog post from Rose.



Giving busy bees a run for their money....

by Rose-Anne Bouffard Jul 24

Wow, what an incredible summer so far, with several bee rescues, Seven [Rose's dog] starting her training, and opportunities to volunteer with some of our most dedicated Councils in Alberta.



Rescuing Our Local Bumblebees

This year has had more people than ever recognize that saving bees is worth the effort, and then they find me and request my services. Not all bees should be moved, if they can be left alone that is best, and I love educating people on this fact, and their benefits. They're so fun to watch as well, as they bumble about running into things, and their crash landings.

But in cases where they are stinging, I come in to relocate their nest, and I've been successful! I am happy to report that 4 nests have been relocated safely in the last couple of weeks. The bees end up on my property where they are thriving. This shows that they can indeed adapt to new surroundings, and as far as I can see they do in fact do orientation flights.

My last case was particularly interesting, and I had a very keen student of my methods joining me. This case had *Bombus huntii* burrowed next to a house, in a mouse hole (we found the tiny skull!), full of garbage for nest material.

We started digging where we thought the main nest would be, we were wrong. That is fine because bumbles will try to fool predators with false entries and complicated tunnels. Luckily we weren't too far off when I suddenly got buzzed with a hunch and found them immediately. It's a talent.

Once the nest was located we had to very carefully unearth it without destroying the honey pot or the larval cups, and securing the queen. We carefully dug the roof off of the nest, which revealed everything in its glory, unlucky for us we were too excited to bother photographing what we saw, nonetheless we had our treasure in front of us. We had our bumble box full with cotton next to us, half the cotton remained inside and the other half left out, ready to be placed on top of the nest.

I carefully considered what I had in front of me, it was a perfect representation of bumblebee nests...I really didn't want to harm it. I took my gardening knife and carefully removed the nest from underneath, having everything grabbed at once. It was a textbook clean removal. I placed the precious contents into the box, and carefully placed the rest of the cotton on top. The queen was obvious and easy to secure.

My friend and I at this point are just so excited to have successfully removed this nest, safely and in one piece.



We were beside ourselves with happiness for these girls that will get a chance to live out their lives.

We left the bees there for the day so that they could move into the new nest and bed down for the evening. This ensures that most bees are in the nest and ready to be moved. I came back right as the sun was setting for the day, and it was perfect.

Now these girls are waiting for release this evening, somewhere safe where they won't be harmed.

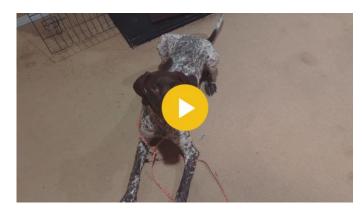
Seven is Getting Ready for Her Debut!

Seven has been waiting to start her training, the reason, we needed samples! I reached out to the Provincial Apiarist Office and they had luckily acquired some AFB, EFB, and sac brood frames. Excellent, we loaded up into the car to drive to Edmonton and collect our prized samples.



The dogs enjoyed a quick run around the grounds, and Tiny brought joy to the staff, as she tends to do. We collected our samples (several frames) and went home, with an additional gift of a bucket of honey. Everyone was so kind and excited for Seven to start her work, it was a great day.

At home, it was time to dole out the samples for Seven and get her started. Our first step is to get her excited about these smells, and that's what we did. My other job in this case is to figure out what she might be keying on, the distress pheromones, the beginning of the rot, or the diseases themselves. Time will tell. You can watch Seven's very first training session:



In this video I have told Seven absolutely nothing, all I am doing is getting excited when she picks up the scent. This is how training will go for the next little while.

I'll be Volunteering!

I am joining the <u>Alberta Native Plant Council</u> as a volunteer in their communications committee. I am so excited to spread my love of Native Plants from such a great platform. Stay tuned for more on that!

The <u>Calgary and District Beekeepers Association</u> is holding a few events in the near future, please be sure to check out their calendar for details.

Thanks for reading <u>Dogs Find Bees!</u> Subscribe for free to receive new posts and support my work.

Pledge your support!

You can find more information about our native bees at the Alberta Native Bee Council webpage. Donations are welcome! Lets save our bees!

Thanks, Rose-Anne Bouffard

THE BACK PAGE EDITORIAL

by Ron Miksha

Risky business

Beekeeping can be a risky business. Bee stings and messed-up spines are just the beginning. The CDBA introductory beekeeping course has an entire long module about safety. As a beekeeper, you care about the risk to other people due to accidents or mistakes.



This honey bee is in position to sting. (Credit: Miksha)

Rather than discussing dislocated backs, blazing farm fields, fingers fried by hot smokers, oxalic fumes, and springtime bee droppings on neighbouring cars, I want to mention a couple of things that were brought up on the CDBA chat group lately.

I think that it is obvious that information shared on the chat groups is used at the reader's discretion. People pose questions or look for help; other people do their best to answer. It is really hard for anyone to give good answers when information is limited. That's why we usually begin by saying, "It depends . . ." For example, if someone asks if they should requeen a hive because the colony is not building up quickly, it depends on the

queen's laying pattern, the bee population, the local nectar and pollen flow, the age of the queen, the history of mites and diseases, the amount of foundation or hive congestion, and more. All of these things may contribute to a slow colony's build up. So, it depends.

Everyone wants to be kind and helpful. Please realize that your bee club is allowing the exchange of opinions and ideas – *but CDBA is not endorsing anything!* You are assuming the risk when you take free advice or if you respond to someone's connections. Legal liability has to rest with the user. Otherwise, all opinions, help, ideas, instructions, and introductions will likely end.

Recently, someone asked for help and advice about bees nested in the wall of a house. Another time, someone was looking for honey bee stings to treat an illness. Both of these connections are risky for the users.

It should go without saying that bee removals and rescues are dangerous and may result in unforeseen structural damages to buildings. CDBA may connect people, but the risk belongs to the parties involved.

And, whether multiple sclerosis or rheumatoid pains can be alleviated by bee stings is a question for the medical professionals: most will say it is not helpful. They ask extreme caution because of risky anaphylactic reactions and because people may bypass other treatments while trying bee remedies. Beekeepers should never directly sting anyone with the intention of treating an illness. That's practicing medicine without a license. The CDBA does not endorse this or other medical interventions and suggests extreme caution.

Again: advice, connections, and opinions are at a users' risk and discretion. We're all just trying to be helpful.

As always, we'd like to hear from you – especially if you have contrary ideas and opinions to share! Meanwhile, many thanks to all our <u>ABeeLandingBoard</u> volunteers. All readers are invited to contribute stories and photos.