

Newsletter 1 – December 2021 U

United Beekeepers of Alberta & Calgary Beekeepers Association

## Winter 2021 Edition Ron Miksha, ABLB editor

"Winter is a season of recovery and preparation." – Paul Theroux, novelist and beekeeper

It's the season of recovery and preparation. If your colonies are snuggly wrapped and heartily fed, they will likely make it through winter - unless the queen is poor, the worker population low, and mite count high.

Welcome to this first edition of **ABee Landing Board**. I hope you like the name. I would have named it something like *Town & Country Buzz*, but Alberta beekeepers chose the name of this newsletter by participating in a title-selection survey for our quarterly.

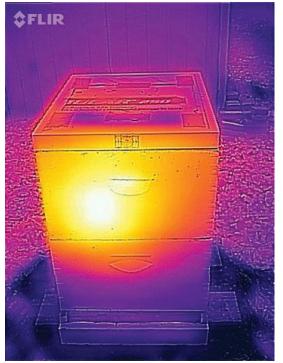
Fifty-six beekeepers entered names for this newsletter. Runner-ups included *Bee Informed*, *All the Buzz*, *Bee Wrangler*, and others selected by participant voting. *ABee Landing Board* won the most votes. I'll get used to the name and hope you come to like it, too.

This newsletter is truly a crowd-sourced effort with many contributors. You will be introduced to some of them as you read their articles. We are always looking for others (That means *you*!) to send in stories and pictures. Tell us about your beekeeping habits, successes, and failures so we all can learn from each other.

If you like this free newsletter, please send your email address to <u>ABeeLandingBoard@gmail.com</u> in order to continue receiving it. We *must* have your permission before we send off these newsletters in the future. Just send a quick email with **YES** in the subject line and your name and address in the body, telling us that you want to continue receiving *ABee Landing Board*. That's all, but it's the law. Thanks!

I hope you enjoy this issue!

## Here it comes! Winter, that is.



Does your hive glow? Using an infrared thermal camera's equipment, the warmest parts of this wintering hive glow yellow and red. We can see that the bee cluster (which produces the photographed heat) is in the top box and slightly offside, to the left. Photo by permission of Bill Hesbach

This has been a mild fall, but winter is three weeks away, so trouble is still coming. It's doubtful that any bee will see her shadow until at least March.

This is the time to read a good bee book, catch up with online blogs and bee magazines, and laugh at a few beekeeping videos on YouTube. Regenerate, lick your wounds (it was an odd summer, so some recovery is in order), and prepare for the warm days of spring.

Of course, you also want to take inventory of your hive equipment, perhaps build some replacement frames, review last year's notes, and stockpile the feed and medications your bees may need when you finally open your hives on that first mild day.



## Dry-Country Blossoms – Glenda Livingston

This is a series that will describe some of the nectar and pollen plants in Alberta. Glenda Livingston has taught various modules of the beginner beekeeping course for the Calgary and District Beekeepers. Glenda and her husband operate a market garden (and many honey bee hives) on the dry-country prairies east of Calgary.

## Sweet Clover Saved our Honey Crop in 2021

Looking back to this most challenging growing season, we are grateful that we seeded Sweet Clover. In the prairies, especially on drylands, the crops for foraging bees were under serious threat.

Our farm is in Vulcan County, two hours southeast of Calgary. Being on a 'dry corner' gives us stark insight into what a drought year really looks like. A 'Declaration of Municipal Agricultural Disaster' was issued for our county this summer. Those on dryland suffered huge losses.

Between the heat dome, drought, grasshoppers and smoke from BC wildfires, it was a miracle that we extracted any honey at all. Our honey crop was due to our planting of a field in Sweet Clover the year before. Due to the dry conditions, pollinators were desperate to find suitable nectar sources.

For bees in a small apiary, the lack of a variety of nectar sources due to monoculture in agriculture and the intense competition from rental bees in neighbouring fields results in even more stressful conditions. Throw in a drought year and things get especially dire.

On our 24-acre farm, we have 20 honey-bee colonies and operate a market garden. We consider our 14-acre dryland field of standing sainfoin & alfalfa as a nectar and pollen resource for our bees because we can't always rely on neighbouring fields. Using organic practices, we grow a wide variety of vegetables, culinary and medicinal herbs, and flowers. Without the canal system we could not farm here. We ration water carefully as it is pumped from our dugout. By selectively planting to attract pollinators, the honey bees, many native insects, and birds benefit from the variety of flowering plants in our fields and gardens. Besides being a place for us to earn an income, we notice that our farm has become a haven for the natural world.

Beekeeping out here in the irrigation district is done mainly by large beekeeping operations that run hundreds to thousands of honey-bee colonies. Alfalfa leafcutter bees are also used for pollination as well. Their nests fill the tents that span the vast areas under the irrigation pivots. Let's just summarize by saying that there are a lot of pollinators needed for those intensively farmed quarter-sections. That is a lot of competition for our colonies which is why we always plant as much sweet clover in our open areas as possible.

Yellow sweet clover (Melilotus officinalis) is a terrific honey plant! Being a biennial, it establishes itself the first season and in the second year, it blooms for months. This year it flowered from late June and into October. The flowers were packed full of honey bees, small pollen-collecting beetles, native solitary bees and wasps. Just standing next to the sweet clover stands, one could hear the buzz and smell the sweetness from the yellow blooms. Ecologically speaking, sweet clover has a bad rap. It is an introduced species. For us, it is a drought-resilient plant with deep enough roots to find the precious water out here. Being a legume means it 'fixes' nitrogen from the air and makes it available in the soil. We notice that when planted in stands, sweet clover outcompetes all weeds, something we always have plenty of!

Pests on the prairies, such as the nasty flea beetles (inherent to canola) and grasshoppers (inherent to drought), overrun many of our crops unless impenetrable row-covers protect them. These pests don't appear to touch the sweet clover.





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Sweet clover with honey bee (photo: S. Bennett)

Sweet clover is easy to seed in open areas. Some moisture is needed during the first year so it can establish its roots but in the flowering year, it tends to make use of its deep root system to flourish so it needs little water. Being a tall plant (4-5 feet high) makes it too tall for planting between garden rows but in a dense stand the plants hold each other up even in the strong Southern Alberta winds. We use a hand seeder to plant in open fields, then use a harrow to cover the tiny seeds. After that, we irrigate. One could simply rake in the seeds for smaller areas.

There is also a white-flowered sweet clover (Melilotus alba). It can act as an annual by blooming on the year of planting. As for re-seeding itself, we have found that both the white and yellow varieties do re-seed themselves when moisture is available. Honey from sweet clover is of very high quality being light coloured and very sweet. If your bees have access to roadsides and the edges of natural areas, they most likely encounter sweet clover as those areas tend to reseed themselves annually.

So, we are looking ahead to next season. As farmers, we try to plan the best that we can and learn from our mistakes and our successes. Whether or not next year is another drought year, we are prepared with our field, once again seeded in sweet clover!

Best wishes to you and your bees for 2022!

Glenda Livingston



## **Dark Honey?**

Sweet clover, the generous nectar source that covers so much of our prairies, produces a very mild honey. As Glenda Livingston wrote in her piece, above, honey from sweet clover is light-coloured and high-quality.

Alberta honey is known for its extra-white colour, making it an attractive buy for packers around the world. This year, 2021, unfortunately saw a dip in our honey quality with nearly everyone noting the dark hue of our product. On the other hand, though darker than usual, the honey was still thick and delicious.

We are blaming the dark colour on heat, drought, and a change in nectar sources. But we're not sure. I think that neither heat nor drought are the direct culprits because some very nice white honey is produced in hot deserts. Instead, the heat may have reduced nectar secretion in our typical flowers, forcing bees to seek minor nectar sources, some of which produce darker honey. Next issue, we hope to have answers for you about this colourful issue.



#### United Beekeepers of Alberta & Calgary Beekeepers Association

Editor's note: We first published this piece in Spring, 2021. We thought everyone would like a chance to read this important information again.

# What to know about purchasing honey bees and equipment in Alberta

Olivia de Herdt and the Bee Health Assurance Team Alberta Agriculture and Forestry Plant and Bee Health Surveillance Section Crop Diversification Centre North | 17507 Fort Road NW Edmonton, AB T5Y 6H3 | 1-780-644-8746 www.alberta.ca/bees-and-apiculture.aspx



Getting bees? Questions to ask and things to consider

#### **Buyer Beware**

There are many places to purchase bees within Alberta; however, it is a buyer-beware market. Even when purchasing from a reputable source it is important to ask questions and understand what to look for, even when only purchasing equipment. It is imperative you do your homework before purchasing bees.

#### Where Can I Buy Bees?

Many suppliers now offer packaged bees:

 Imported packages and/or queens shipped internationally have been inspected prior to entering Canada

Note: bees are not allowed from the United States; only queens.

- Many operations/beekeepers sell nucleus colonies and singles.
- Check online with your local beekeeping organization, Kijiji, Alberta Bee News, or ask other beekeepers. Many operations sell bees during the early spring.

#### What Should I Ask?

- 1. Is the seller registered with the province of Alberta?
  - It is regulated under the Bee Act that all persons owning bees and/or equipment within Alberta be registered. Anyone who is registered should be able to provide a valid registration certificate.
- 2. What diseases has the seller seen in the past?
  - If they have had American Foulbrood (AFB) in the past and are still using the same equipment, it is recommended not to purchase the bees or equipment.
  - AFB and EFB can remain on equipment for years and infect bees put into it.
- 3. What medications or treatments have the seller used (if any)?
  - Antibiotics such as Tylosin or Oxtyetracycline may leave residues in the equipment.
  - Antibiotics can also mask symptoms of AFB or EFB and flare up once the antibiotic usage stops.
- 4. Has the equipment been decontaminated (scorched, irradiated, etc.)?
  - Consider decontaminating any empty equipment upon purchase.
- 5. Has the seller had an inspection done? When?
  - Sellers can request a pre-sale inspection. As the buyer, ask for a copy of a recent inspection report.
- 6. Have these bees come from another province?



- Bees from outside Alberta are required to have an inspection done by the province of origin, and must have an interprovincial movement permit from the Alberta government. The seller should be able to provide proof of a permit.
- Currently, no colonies or package bees are permitted to be imported from Ontario; only queens with a valid permit.

#### **Other Things to Consider:**

- 1. Buy new equipment
  - To avoid the risk of chemical residues or diseases exposure, put your bees in new equipment or new frames with decontaminated equipment.
- 2. If buying used comb, how old are the frames?
  - The darker the comb, the longer it has been used in a hive and the more likely it is to carry diseases or contain chemical residues.
- 3. How old are the boxes/other equipment?
  - Check to see if the equipment is damaged from storage or use
- 4. Has the seller seen, been monitoring for, or been tested for other disease or pest levels?
  - Such as Varroa mite levels, Nosema levels, AFB/EFB.
  - If yes, do not hesitate to ask for records.
- 5. What is the treatment history of the hive?
  - Have antibiotics been applied? If so when, and which antibiotics?
    - Remember, antibiotics do not cure AFB/EFB, they mask symptoms.
  - Was the colony treated for parasites? If so when and with what?
- 6. Does the colony have everything it needs?
  - A nucleus (nuc) colony should contain stored pollen and honey, a mated queen, brood, and adequate worker bees to cover the brood
- 7. Use your judgement!!
  - Educate and re-educate yourself on the different diseases and pests and inspect them for yourself! Evaluated experience is the best teacher!

#### I Have Decided To Purchase Bees, Now What?

Great! Now it is your responsibility <u>to register or update</u> your registration. Good luck with the upcoming season! Your Bee Health Assurance Team For any questions, please email <u>bee@gov.ab.ca</u> A printable version of this document is available online: <u>Purchasing Honey Bees or Equipment in Alberta:</u> Questions to ask and things to consider



- Submitted by Olivia de Herdt

## The Canadian Honey Council Fall 2021: Excerpts from *Hivelights*

Rod Scarlett Executive Director, Canadian Honey Council

The spring of 2021 resulted in drastically reduced imports of packaged bees, difficulties in securing labour and the introduction of more health and safety precautions. Despite these difficulties, it appeared that the bees were very healthy and hive numbers would recover. Across most of western Canada it was a dry spring and beekeepers' expectations were high, especially given strong honey prices. For many however, those expectations were shattered by extreme weather conditions, heat in the west and rain in parts of the central Canada. Production levels in mainland BC, Alberta, Saskatchewan, and Manitoba will probably be below average, in some provinces up to 20% below average. The saving grace for many is that prices have remained strong and will certainly help offset poor production levels.

A noticeable difference this year is that much of the canola honey is darker than usual. There are couple of explanations for why this occurred, but one is that during the very hot spell when canola was in bloom, the bees looked for alternative sources for nectar and sought out those sources from trees and flowers on the edges of the fields. This may have impacted the color, but it also had a secondary impact. As Canadian



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beekeepers have been adding information to the database for nuclear magnetic resonance testing (NMR) the samples they have been providing have not included the "unusual". Canola honey was predominantly canola nectar and the occurrence of things like honeydew, wildflowers and weeds were rare and thus never submitted to be included in the database. Since NMR creates norms that would be attributed to various honeys, the appearance of variations needs to be carefully analyzed in order not to incorrectly identify a honey as adulterated. The Canadian Honey Council has notified the Canadian Food Inspection Agency of this issue and has provided the appropriate scientific background for support. It's just one more area of concern for Canadian beekeepers.

Get to know the <u>Canadian Honey Council (CHC)</u>. You'll learn a lot about the diversity of beekeeping systems, opinions, and issues facing Canadian beekeepers. The CHC provides <u>a free archive of their valuable</u> <u>Hivelights newsletter</u> online.– *ABLB editor* 

## A Bee Walked into a Hive...

*A Bee Walked into a Hive...* This feature will brighten everyone's day. Dennis Milbrandt has a great sense of humour and a gift for word-play. Bees, honey, and combs are naturally punny. What could go wrong?

There was a queen bee called Jane, Who sadly was caught in the rain, Though above her they hovered, The drones soon discovered; That mating in rain was insane. – DentsM

A bunch of drones spend the afternoon in a pub drinking mead and carousing. Evening comes so the fly off toward the apiary. They're singing and bumping into each other and finally arrive at a hive.

There, a guard bee comes out and glares at the drunks. One drone shouts, "Is thish the hive of Bob Bee?" The guard bee replies, "Yes."

The drone replies, "Good, would you point out which one of us is Bob so the rest of us can go home!" – DentsM

## **AGvisorPro for Beekeepers**

Out in the bee yard with a question about what you're seeing? Not sure whom to call? There's an app for that.

**AGvisorPro** brings agriculture experts in touch with farmers. Visit the website (<u>https://agvisorpro.com</u>) to download the app and use it to pose questions to beekeeping pros.

Using the AGvisorPro platform on a smartphone can put you in touch with beekeepers who have a lot of experience and have likely seen the issues facing you in your hives.

This technology, a paid service, was developed in Alberta, and connects farmers of all



kinds with experts across Canada.

Once you reach an expert, you can have a live conversation or, better yet, visual assistance. It can be really hard for an expert to help you without actually seeing your problem, so walking through the situation with a knowledgeable assistant might save your hive.

The program is available wherever you download your smartphone apps. Learn more: <u>https://agvisorpro.com</u>

# Like this newsletter?

It is produced by the United Beekeepers of Alberta Council and the Calgary and District Beekeepers Association. Become a UBAC member: <u>https://unitedbeekeepers.org/</u> If you're in the Calgary area, be sure to join the Calgary & District Beekeepers Association. <u>https://calgarybeekeepers.com/</u>



## Alberta Bee Clubs

Here are links to some of Alberta's clubs:

- Calgary District Beekeeping Association
- Edmonton District Beekeeping Association
- Grande Prairie Beekeepers Club
- Red Deer & Area Beekeepers Association

As COVID restrictions continue, community bee club meetings have embraced Zoom talks. We have access to more speakers than ever. It will be great to get back together with our fellow beekeepers in person once the world goes back to 2019, but meanwhile, we've got folks showing up to talk to us from some of the great bee research centres.

We're going to have a lot of catching up when the virus threat goes away. Meanwhile, support your local bee clubs. Renew your membership. Attend their on-line venues. Learn. Participate.

## Edmonton District Beekeeping

## EDBA MEMBERSHIPS:



Monthly meetings for Edmonton-area 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.



Two of EDBA's best beekeepers are once again looking to help train new beekeepers in 2022. The course offered by Malcolm Connell and Craig Toth is not part of EDBA, but is offered in the Edmonton area. This is Malcolm and Craig's seventh year running beginner beekeeper courses in NE and NW Edmonton. Course dates this winter will be January 22 and February 20. Registration: www.naturalelementshoney.ca

## **Calgary and District Beekeeping**

The Calgary and District Beekeeping club had a busy summer and fall despite COVID limiting our ability to meet in person.

The swarm season started on May 17 for the CDBA swarm catchers group. In 2021, the group consisted of 23 individual beekeepers, each with over five years of experience keeping bees. They responded to swarms reported to 3-1-1 (and forwarded to us) or reported via email to our website email address,

calgarybeekeepers@gmail.com. Once the club received notice of a swarm, the club passed the information along to the first available swarm catcher who then responded, on their own accord.

The goal of a volunteer swarm catcher is to perform a public service by getting the swarm off the street, off the car or out of the tree depending on the situation. Although it may seem like free bees to many, that is often not the case. Most swarms require at least two visits to collect the stragglers, the bees may be diseased and, with an older queen, many colonies do not survive the winter unless re-queened. More times than we like, the catchers respond to the location only to find the swarm has moved on or has been collected by a nearby beekeeper. A big thank you to the members of the swarm recovery group who collected over 130 swarms (or honeybee in-building removals) in 2021. Any hopes of bees staying at home during COVID were dashed as this was our busiest swarm year since keeping records.

The summer started off with the relaxation of COVID restrictions, so we were able to provide an exhibit at the Calgary Stampede in July. Twenty-eight volunteers, who were equipped with masks, hand sanitizer and Plexiglas barriers if they wanted, enjoyed seeing people again after a very quiet year. Although crowds were down from past years, this gave volunteers more time to spend with visitors who were clearly glad to be outside as well. Historically, we were given an exhibit space



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about 30' by 20' but this year, we were able to spread out in a space over double that size. Thanks to a wonderful team of volunteers who all managed to stay healthy! This page includes pictures from Stampede '21.





Aggie Days is from April 6 to 10, 2022 and CDBA has been asked to exhibit again at the Stampede grounds. The organizers will be planning the event within whatever restrictions the government allows in April. This is always a great time to show off beekeeping in the city and surrounding areas and it provides a fun volunteer opportunity for our CDBA members. If you are interested in volunteering, the exhibit coordinator is Jim Rogers, <u>clownoftuny@hotmail.com</u>. Jim has organized this event for over 15 years and is looking forward to being there again in 2022 after the event was cancelled last year.





The club hosted a **Speakers Series** which consisted of 19 diverse guest speakers in 2021. During the next Zoom event on Dec. 8, Dr. Paul van Westendorp and Cassie Cichorz will discuss the Asian Giant Hornet. This Zoom presentation will be available to everyone should you be the first 100 to register. With COVID still disrupting in-person meetings, please watch our website for the 2022 Speakers Series which is available to all CDBA and United Beekeepers of Alberta members for \$25/year.

For those of us who keep bees in "bear country", we have an additional challenge to protect our bees.



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Attractant management is key to preventing conflict with bears. In short, this means not feeding them, intentionally or unintentionally. Erecting an electric fence is a very effective way to protect many different types of attractants, including beehives. Calgary and District Beekeepers (through a financial donation) along with Jay Honeyman, Human Wildlife Conflict Biologist with Alberta Environment and Parks, and other supporters are creating a **video** to highlight the effectiveness and diversity of electric fencing in southern Alberta. This video will be a useful tool for all of us who need to protect our bees from bears and is expected to be completed by the spring of 2022.

## Calgary and District Beekeepers Association SPEAKER SERIES

## Dec. 8 – Asian Giant Hornet

Speakers: **Paul van Westendorp** - Provincial Apiculturist, British Columbia and

#### and

**Cassie Cichorz** - Asian Giant Hornet Outreach Specialist, Washington State Department of Agriculture

Open to the first 100 people to register. Zoom invitation to be sent first week of December.

For more information, please contact calgarybeekeepers@gmail.com

For our **2022 Speaker Series**, please visit calgarybeekeepers.com in January 2022

CDBA held their fall **Beginner's Beekeeping course** the first week of November. Although we had hoped to hold at least part of the course in person, we turned to Zoom for the second time this year to present 14 hours of beekeeping information. The next Beginner's Beekeeping will be held on March 5 and 6, 2022. We remain cautiously optimistic that we will be able to host this course (in part) and our apiary visits in person in the spring.

This summer, a few beekeepers got together a couple of times at a pub for **Bees and Beers**. This was the club's best attempt to meet again in person. Shortly after reviving this event and with additional COVID restrictions in the early fall, it was decided to postpone personal gatherings until people are more comfortable meeting in large groups indoors.

2022 **CDBA memberships and optional insurance to members** are now available on the club's website at <u>https://www.calgarybeekeepers.com/about/member</u> <u>ship-levels</u>. Membership fees remain at \$25/year which is the same fee for at least the past 12 years. The executive encourages you to support our club by taking out a membership. This helps pay for our guest speakers, some free courses, our website, and other club activities throughout the year. Hopefully, we will be able to host the summer BBQ or even the winter potluck and honey competition next year.

Over 100 of our members took advantage of optional insurance in 2021. If you would like insurance coverage for 2022, please make your payment (membership and insurance is \$105) before Dec 26 in time for your coverage to start on January 1, 2022. If you miss this cut-off date, we will be making an amendment in late April which will provide insurance coverage starting May 1, 2022. As part of the CDBA's general insurance policy, the Cooperators allows us to add a rider to the policy covering named individual members. This provides each individual beekeeper with \$2 million coverage for claims against their beekeeping operation. For more information, please see our website.



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Lastly, CDBA membership voted in October to start a **newsletter** in combination with the existing United Beekeepers of Alberta newsletter. The purpose of the newsletter is to share information and knowledge that is specific to beekeepers in Alberta. Membership also voted to hire Ron Miksha as the newsletter's first editor. Ron was the editor of the United Beekeepers of Alberta (UBA) newsletter, has written for the *British Bee Quarterly, American Bee Journal, Bee Culture,* BC's *BeeScene,* and the Canadian Honey Council's *Hivelights.* He is also author of *Bad Beekeeping* and *badbeekeepingblog.com.* Welcome to Ron and thanks for taking this on!

The club executive is looking forward to 2022 when we will be introducing new and revised programs. These will include a new Speakers Series (some may be in person!), an updated mentoring program, a photography competition and an Intermediate Beekeepers course. CDBA continues to look for new ways to serve our members as we continue to provide services the best we can during this pandemic. Should you have suggestions or would like to volunteer for any of the club's programs, please contact us at calgarybeekeepers@gmail.com.

Happy Beekeeping. Liz Goldie (on behalf of the CDBA board members)

## How to Worry about this Fall's Weather

For beekeepers, worry is part of the natural state of things. If we have cold weather early, we worry that sugar syrup hasn't been properly cured and stored and the winter cluster didn't have time to form.

This mild fall has brought other concerns. Has it been too warm? Are the bees eating through their winter stores? Is the queen laying too many eggs? Don't worry too much. Commercial beekeepers keep their wintering sheds at about 5 °C, and that's been similar to our recent temperatures. Long dark nights have quieted the queen. You and the bees can rest until March.

## City of Calgary Beekeeping Bylaw: What you need to know

Well, the "beekeeping bylaw" passed, and after 100 years of beekeeping in Calgary, we are now officially allowed to keep bees in the City of Calgary although everyone who wanted to keep bees before, always just kept bees.

Historically, most beekeepers within the City kept bees responsibly and there were only a few complaints to be addressed each year. So why did the City feel a beekeeping bylaw was needed now? Jennifer Lawlor, Business Strategist at the City of Calgary, who has been working with the CDBA stated, "The City of Calgary wants to ensure that beekeeping continues successfully in light of the heightened popularity of beekeeping. This bylaw will allow the City to know where people are keeping bees and to support beekeeping practices that mitigate nuisance and safety concerns in the community."

Agree or disagree, the City of Calgary City Council passed an updated Responsible Pet Ownership Bylaw 47M2021 on June 1, 2021. This bylaw will come into effect January 1, 2022 and will require that beekeepers have a license to keep bees within the city.

So what does that mean for an existing beekeeper? According to Ms. Lawlor, it means that, "the existing beekeeper will need to ensure they have their beekeeping license by December 31, 2022. Once they have their license, they will be notified annually when it needs to be renewed (just as we would with cats or dogs)." Next year, the City will, amongst other guidance, provide an application form for us to complete for a license that will be valid for a year from whenever we are issued that permit in 2022. "The City is currently refining the details of the beekeeping program but will have more details in early 2022", says Ms. Lawlor. For people starting beekeeping in 2022, a license permit will be required before they can get their bees but existing



beekeepers are good to continue keeping bees for now. The annual license fee is \$10.

The bylaw also states that "A licence or permit holder must not keep more than two (2) bee colonies without approval of the Chief Bylaw Officer except that the licence or permit holder may keep more than two (2) bee colonies for a one month period of time when splitting an existing colony for hive management." (Part 4 28 (c)). This means you can apply to have more colonies than 2 should you already have more than 2 colonies with no complaint history and/or you are located on an oversized lot. This also means that the City may choose not approve more than 2 hives.

The application will also require "proof of completion of any training or mentoring required by the Chief Bylaw Officer" (Part 4, section 27 (2) (d)). We have confirmed that the CDBA Beginner's Beekeeping course will qualify as appropriate training and that the experience of existing beekeepers will also be given consideration. How experience will be judged is not decided yet.

Once the application has been submitted and a license issued, you must provide new location information to the City if you "relocate" your bees. Ms. Lawlor clarified relocate as: "From the perspective of the City, relocating the hives means moving the hives to another property. We would not need to be notified if a person moved their hives within their property."

Although this bylaw will no doubt be an additional burden for those of us who have responsibly managed our bees in the City, there are some rules that have not been included by the City yet have been enforced in other jurisdictions. For example, there is no requirement to notify neighbours (even though you may wish to do so), no limits to the amount of honey you can sell (some jurisdictions did not allow the sale of honey), and no restriction on the number of honey supers or brood boxes per hive.

A benefit of the new bylaw is that it will require a basic level of responsible beekeeping education for new beekeepers, which should reduce complaints, and enhance the reputation of beekeeping in the City. Additionally, the requirement to register with the location of your hives will also help identify the source of the bees should there be a complaint.

There are many aspects of the bylaws including the conditions under which a license can be revoked by the City and fines for non-compliance. I recommend reviewing the beekeeping bylaw, specifically Part 4 of the Responsible Pet Ownership Bylaw 47M2021. A link to the bylaw can be found on the CDBA website (home page) <u>City of Calgary Responsible Pet Ownership Bylaw</u> — <u>Calgary and District Beekeepers Association</u> (calgarybeekeepers.com). A link to the beekeeping program and license application form will be added, as soon as it becomes available next year.

Should you have any questions about the bylaw, please feel free to email me at <u>liz.goldie@shaw.ca</u>.

Liz Goldie



## **Winter Chores**

Don't open your hives when it's freezing. Check occasionally for winter damage:

Lids blown off, wrappings undone; Skunks prowling.

On the first mild (+5 to 10), sunny, windless day:

Open your hive for a couple of minutes to

check for food stores and see if the colony is alive; Don't remove any frames;

Don't try to find the queen.

If there isn't much honey left and bees have moved up near the inner cover, feed fondant or hard sugar candy. If the colony is dead:

Tape shut entrances to reduce robbing; or, Remove the equipment to storage.

Wrap the hive again. Leave it wrapped until May.



## Reports from the Alberta Beekeepers Commission AGM, November 24-26, 2021

Observations from Malcolm Connell about the Alberta Beekeeper Commission 2021 Annual General Meeting and Conference. Malcolm took 21 pages of notes and distilled them for us here.

These notes are what Malcolm heard various speakers state. Also, please remember that these pieces, provided by Malcolm, are not necessarily his own opinion, but are reported as stated by the speakers, as shown below.

If there are any important omissions or mistakes, please contact this newsletter's editor.



#### President's Report by Jeremy Olthof

Main points:

**Two new research initiatives** have begun. One is at the University of Lethbridge, supervised by Dr. Shelly Hoover; the other is at the University of Alberta supervised by Dr. Olav Rempel.

**Irradiation facility update.** The proposal is to locate it at the International Airport in Edmonton. It would be on a new solar power grid. It requires other investors. So far medical device and cannabis companies have expressed interest. It will include a lab component which the BC facility, currently treating beekeepers' equipment, doesn't have. Hopefully, it will be operational in 18 months.

Progress on **opening the border for bee packages** from the USA can't go ahead, if accepted, until a lawsuit (on culpability issues) is settled against Canada for stopping bee packages from USA since 1987.

**Dr. Medhat Nasr** has been given funding to continue his Alberta research in Prince Albert, Saskatchewan.

There were enough members for a quorum (42): about 20 on Zoom and about 60 people present in person. In

this hybrid meeting format, there were some problems with counting votes. Unlike last year there were no divisive issues at stake. Commission fees per hive will increase by 5c to \$1.10.

The next Integrated Pest Management (IPM) Seminar will be on February 10 and 11, 2022, at Double Tree Hotel, Edmonton.

<u>Canadian Honey Council (CHC) Report</u> by Ron Greidanus, director.

This year there are 746,612 hives in Canada, the lowest since 2015. 11,785 beekeepers were listed. However, Alberta now has 305,000 hives, which grew from last year's 280,000. In Canada, 82 million pounds of honey were harvested, the smallest amount since 2013.

Only about 20% of **bee packages** ordered from Australia and New Zealand actually arrived in 2021. Queen bees arrived in Canada from Malta, Ukraine, and Italy for the first time. One breeder in Malta gets breeder queens from different parts of Europe, e.g. Finland, and breeds queens from them for export. It's possible to get an export licence to purchase them. Most provinces admit to having a stock replacement problem, hence more support for getting packages from USA. **Nuc orders** for 2022 are already mostly sold out.

Ontario, Quebec, Manitoba and Saskatchewan predict 30 % winter losses this winter 2021/2022 because of increased *varroa* populations. The Honey Bee Health testing team is testing for resistance to Apivar. The **oxalic glycerine towel** treatment to lessen varroa mite numbers is expected to be approved for 2022. *Medivet* products such as Fumagillin have been transferred to <u>Vita Bee</u>. Apivar treatments seem to be less effective now and the warmer weather in 2021 seems to have helped varroa mite numbers increase.

**Canadian honey** faces protection pressures from other countries attempting to find fault with Canadian honey residue levels. Nevertheless, Canadian honey is regarded as low risk in world trade. To help define the



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nature of Canadian honey, the CHC is planning to build a data base on what's in Canadian honey in the different regions.

The CHC helped bring in workers from Nicaragua and sending them back home. Vaccines given to workers in Mexico have not been accepted in Canada. Videos are being produced to help train foreign workers in beekeeping practices. These will be online in modular form.

**The CHC is underfunded** despite the creation of a reserve fund from profits from the 2019 Apimondia in Montreal. The fee per hive levied on beekeepers will increase from 14 cents per hive to 16. Another way for CHC to raise money is the fee of \$7,500 per year on each member. Big city bee clubs with money could potentially apply.



<u>Heat Stress on Bees</u> by Dr. J. Cahill, University of Alberta (plant ecologist-grasslands)

Alberta's growing season is getting longer. This not true in most of the world. The temperature in Alberta has increased 1 °C since the 1980s. If we increase by 4 °C, we'll average 60 days of plus 30 °C.

This means other crops will be planted successfully in Alberta, but not canola. There will be more rain but less moisture saved because of drier soil. Bee colony growth will be less as more bees will be needed to keep hives cooler and therefore there will be fewer field bees. Pollination reactions to drought need to be researched in conjunction with climate change. Droughts reduce flower size and therefore there is less moisture. Single species plants are more vulnerable.

Soil practices followed by farmers can be detrimental. Citizen scientists will be important in helping provide information to cope with climate change. This is already happening with groups keeping records of plant growth dates in spring.

#### Tech Transfer Team Report by Dr. Renata Borba

In research projects, 18% of caged queens in Alberta survived winter compared to 70% of the caged queens in Quebec. The reason for lower survival n Alberta was starvation. The caged queens were kept in a room at 16 °C. They need to be put in hives immediately when brought outside.

Speakers from the Tech Team will be giving free presentations on Zoom each month. You'll find details about resources for beekeepers <u>at this website</u>.



<u>Stock Replacement Round Table</u> with Ron Greidanus, Dr. Renata Borba, Ron Dickson, Dr. Shelly Hoover

Alberta usually has 20-30% winter losses. Hence we need packages. There were no packages in 2020. In 2021, one-third of packages ordered actually arrived. Air Canada is saying there will be limited opportunities to import packages in 2022 after March 20. The Saskatchewan replacement strategy was discussed.

For several years they have needed fewer packages as more beekeepers with fewer than 4,000 hives have more time to raise walkaway splits which become large enough hives by fall for the next year. Beekeepers with more than 4,000 hives say they don't have enough time to do this. Also, the most important factor in being able to keep increasing the number of hives is getting more and more foreign workers. Ron Dickson says indoor wintering at 2-5 °C in the Peace Country works well.

Last year in Alberta, 30,000 hives were brought in while 32,000, mostly to BC, were sent out. Seventeen beekeepers in the province take hives south for pollination.

In Southern Alberta, 80,000 hives are used for pollination. Foreign workers are vital for continuing expansion here. Without them, we would have to shrink our hive numbers to be sustainable, one beekeeper with more than 10,000 hives said.



To succeed in beekeeping, a beekeeper needs to know business models and not just business practices. We also need to increase the number of queens bred locally. For instance, Sue Cobey, who has operated the New World Carniolian queen-breeding program for over 40 years, gives free queens to her neighbours to control local genetics.

The discussion ended with the Saskatchewan stock replacement model receiving a lot of credibility.



#### A Beekeeper Profile: Glyn Stephens, Calmar

Although Glyn Stephens has operated in Alberta for only four years, his mother was a queen breeder in New Zealand. This profile details some of his queen-breeding work here in Alberta. Glyn's company is called "Revival Queen Bees".

He feeds pollen patties light sugar syrup in spring so the bees need less water. He starts grafting in late April/early May and starts his mating nucs in May. Instead of a Chinese grafting tool, he uses a small paint brush. A six-frame (with feeder) queenless cell starter is used to graft 45 cells. The bees are fed for a week before with sugar syrup and pollen patties. The first two grafts often don't take as well as later grafts because of the weather.

Cell finisher hives (receiving grafted cells from the starters) are fed with light syrup and patties. Cell finisher hives have a queen below an excluder and the cells above are caged and put between frames of brood. Before emerging, ripe queen cells are moved to small nucs, one cell in each.

One frame of brood is placed in three-frame nucs with deep frames. None of the nuc openings face the same direction. In the 2021 heat, he worked outside under a tent from 5 am to 1 pm. At over 34 °C, an incubator is not needed.

Nucs are left queenless for two to three days and fed at the same time, then a new cell is added and the cycle repeats.

Extra drones are reared by inserting a few half-sized frames with space at the bottom for drone brood. These drone-producing hives are headed by the daughters of breeder queens that Glyn buys from other beekeepers, so genetic diversity is achieved. Brood is removed from plugged-up nucs. Queens are killed in aggressive hives. Queens are also replaced before their second winter. The queens in two out of every three nucs usually do well.

Mite treatments involve Apivar in August and oxalic acid in August and September. Each queen is allowed three weeks (5-10 days of laying) before she is sold. Apivar doesn't cause problems with new queens. Glyn doesn't use oxalic if there is a queen in a hive. By the third round of nucs, he has to remove some brood which is put into broodless nucs. In 2021, 1,400 nucs were created from three rounds: 200-400 queens a week over ten weeks.

Mating nucs don't get patties. Virgin queens can have mating problems, but are usually 95% successfully mated. 250 nucs are put in a yard. Nuc yards are half a mile apart and full sized hives are kept in the same yards.

Honey is removed from regular-sized hives with two brood boxes and additional supers in the first week of August. At the end of August, two unsold nucs are combined into one hive for winter. Feeding for winter starts and older queens are replaced. A queen is retained for two summers. Locally bred queens last longer. Having young queens is a key to increase successful overwintering rates.



Please send comments and questions about these notes from the ABC AGM to <u>connellmjm@hotmail.com</u>



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

## It's honey, Honey

By Mark Soehner November 2021

**Greetings to readers** of the premier edition of the C&D Beekeepers newsletter, *ABee Landing Board*. I plan to write a column for each edition on my experiences in my Haysboro apiary.

Where is Haysboro? It is the 1958 development in southwest Calgary bounded by McLeod Trail, 14th Street, Heritage Drive and Southland Drive. Prior to development, this was the one-square-mile Hays farm owned by milk producer and liberal senator Harry Hays. He had award-winning milk-producing cows.

In my back yard at 96 Havenhurst Crescent, I have award-winning honey bees. The taste of their honey is marvelous. Most recently, their honey production was entered in a world competition run out of North Carolina. To my pleasant surprise, the entry was a "finalist" representing Canadian and Alaskan entries. It was in the top 30 world entries. In addition, I have several "tasters choice" ribbons from our club that I am equally pleased to have earned in recent years.

In this inaugural story, I want to tell you of my winter preparations in September and up to mid-October, the time of writing this article. I have 10 hives in the backyard. I know that this is more than the club's recommended number, however with the city regulation coming into effect in the new year, I am going to be asking for permission for more that the permitted two hives. All of my hives have Beaver Plastics **polystyrene boxes**. The boxes are, I believe, an R7 thermal rating. Below the base and above the lid, I have R10 building polystyrene insulation cut from 4x8 sheets. I have wrapped scrap tarps of 4mm thicknesses around three sides for further insulation. The south sides of the hives are not wrapped and generally in winter, see 4-6 hours of sunlight. I have a slightly restricted bottom entrance and no top entrance. In the top of the hive, I have a 3-kg sugar patty nestled in a 3" deep polystyrene collar, with burlap to fill the collar and absorb moisture.

In September, I gave **three oxalic acid vaporizing treatments** spaced a week apart. I had purchased newly expired Formic Pro strips and administered them early October for 10 days. To my knowledge, I have not seen mites here. One windshield solution test in September showed 1 mite in a 200 bee sample.

I had so much honey this season. When I placed harvested boxes back on the hives in August/September for the bees to "clean" them, the bees continued to fill the frames. The bees had "glued" the boxes together with comb building. I did not want to tear the hives apart just to get to the bottom two boxes. As a result, I have three hives where I have more than the normal two boxes going into winter.

So here we are, post-Canadian Thanksgiving, with good Fall weather, and my ten hives ready for Winter. They have 2021 queens, honey and sugar supplies, insulated boxes, wrapping, mite control applied, and a sunny south exposure. We should be good.



Join the United Beekeepers of Alberta Council! Help educate and encourage beekeeping in Alberta and western Canada. You can help! Become a UBAC member. Visit https://unitedbeekeepers.org/



**Talking Bees** will range as far and wide as the bees we keep, covering topics as diverse as how to share your passion for bees with family, friends and the public, tips to keep your back healthy in the apiary, and the importance of mentorship and education in beekeeping, all while recognizing that there's no single flightpath to success in beekeeping.

## Talking Bees by Russ Peters

#### Good notes - the most important tool in the apiary

First, full transparency: I'm a novice. My wife and I have been back yard beekeeping for just three seasons. We've taken courses, read books, participated in the CDBA's excellent Saturday at the Hive programs, watched ALL the University of Guelph's beekeeping videos on YouTube, and pestered our patient and generous beekeeping mentor with countless mundane questions and a few emergency calls. But I'm still a newbie. After three years I know effectively nothing, except that I wish I'd started beekeeping five years ago, or ten, or thirty. *Then* I might know something.

Nonetheless, I'm only too happy to talk (or write) about bees. Anything bee related at all. Honestly, even the boring stuff is interesting.

And to prove it, what better subject for the first *Talking Bees* column in the inaugural issue of *ABee Landing Board* than the gripping topic of: record keeping.

Wait! Don't go! Hear me out.

I know, record keeping can seem like the drudgiest chore in the apiary, but there's gold in them thar notes.

#### Our record keeping journey:

Even before we got our very first nucs I knew that we needed to keep records. And I started with the best of intentions. But that all went out the window when we got into the apiary. Who has time to take notes when you're nervously pulling your very first frame, keeping your smoker lit, trying to spot the queen and attempting to remember what you learned in your beekeeping course the previous fall? I had a notebook and pen handy, and we made a few basically useless notes before the pages got all stuck together with propolis.

Our other attempts at record keeping over the balance of our first two seasons weren't any better – we tried using photos, video and voice memos, but they didn't work well and were labour intensive and impractical.



And, honestly, it just seemed all hassle with no real upside. The beekeeping was fun and challenging, the bees were doing okay, so why bother with the unnecessary complication of taking notes?

But at start of the 2021 season, I was determined to try again and I'm glad I did because it instantly made us better beekeepers, with an improved understanding of the health and strength of each colony over the year.

#### **Our Approach:**

First let me say that there's nothing particularly clever about how we take notes. It's just a low-tech homegrown method that works for us, based on what we learned from our record-keeping mistakes and failed attempts in our first two seasons. If you have a better system, please share.



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I created a 1-page template that we could print out for each hive we were inspecting, covering the key things that every beekeeper looks for when getting into the hive:

1/ Did we see the queen or eggs?

2/ Number of frames of brood and quality of the laying pattern

3/ Number of resources (frames of honey/pollen)4/ Number of frames of foundation and open drawn comb

And I included a spot for notes about general impressions about the health of the colony, signs of swarming, pollen coming in, build up, signs of disease, need for a new queen, need for treatment, need for more supers, and a place for to-do notes for the next inspection.

Add a good clipboard and a pen on a string and we were ready to go.

After our inspections, it'd take less than 10 minutes to transfer the notes about our four colonies into the computer. Then, before the next inspection I'd take a moment to review the notes from last one, which would give us a specific game plan for each hive.

#### The benefits:

Having the record keeping template kept our inspections focused and consistent.

We began using it to keep notes at the start of the 2021 season, and on our first full inspection it allowed us to quickly confirm that while all our colonies were queenright, one was building up very slowly and had poor laying pattern compared to the others.

Without the notes from the other colonies to look at, we would have second guessed ourselves and waited at least a couple weeks for a much-needed requeening. As it was, we requeened right away and that hive took off like a rocket. Keeping records also allowed us to better monitor the progress of our colonies over the season. From week to week and month to month, I could read the story of each colony and see patterns and trends that I missed completely in our first two seasons.

It also made us more confident in our beekeeping. Every week we went into the apiary with a clearer idea of what we needed to do and what we should look for in each hive, a far cry from our earnest but scattershot beekeeping in the first two years.

#### The takeaway:

Sticking with it and finding an effective way to keep apiary records that works for us has been a gamechanger for our beekeeping.

Of course, keeping records is far from an innovation. But if you haven't quite got apiary record-keeping figured out yet or are new to beekeeping and think that taking notes is more trouble than it's worth, keep experimenting until you find an approach that works for you. It's worth the effort and will change your beekeeping for the better.





Don't worry if your hives are buried under snow. They will be fine. Worry, instead, if we don't get enough snow to bury a hive because it will mean a dry season ahead!



**Honey Reci-bees** is a quarterly series of recipes and cooking/baking ideas from Carmen Peccie and from contributing club members. Carmen is an enthusiastic first-year beekeeper located in De Winton.

## HONEY RECI-BEES by Carmen Peccie

Here are some honey reci-bees that perhaps you haven't thought of or tried yet! Enjoy!

\*The first recipe is from Liz Goldie and she got it from her sister-in-law. Liz enjoys supplying the whole family with the honey for it now that the honey granola trend has spread!

HONEY GRANOLA 1/2 cup honey 1/2-2/3 cup canola or sunflower oil 1 tbsp ground cinnamon 4 cups rolled oats 1/2 cup flax meal or flax seed 1/2 cup wheat bran 1/2 cup wheat or oat germ 1/2 cup unsalted sunflower seeds 1/2 cup almond slivers 1/2 cup chopped walnuts or pecans 1 cup coconut 1 – 2 cups dried fruit (raisins, sweetened dried cranberries, cherries)

Preheat oven to 350F. Mix the honey, oil, and cinnamon in a saucepan and bring to a simmer over medium heat. Then mix the dry ingredients (\*minus the fruit) in a bowl until they are evenly combined. Pour the heated honey mixture over the dry ingredients. Stir it well so that it is evenly coated. Spread the raw granola in a single even layer over two rimmed baking sheets. Bake for 20 - 25minutes, stirring it every 7 minutes until the granola is golden brown. Be careful as it will burn easily especially around the edges. If you like chunky granola pieces, increase the honey/oil mixture and press it with a spatula before the final 7 minutes of cooking. Let it sit at room temperature until it's completely cool and then stir in the dried fruit. Store in an airtight container at room temperature. Liz suggests eating it with yogurt – yum!

#### \*Here's an easy one that makes a unique snack

BLUE CHEESE AND HONEY CHIPS 1 bag of salted kettle cooked potato chips 1 package of blue cheese crumbles Approximately 1/3 cup of liquid honey

Place the potato chips on a platter or serving dish in a thin layer. Sprinkle the blue cheese crumbles over the chips using as much or as little as you like. I am a blue cheese fan, so I tend to go heavy on the cheese. Drizzle the honey on top.

## \*To end on a sweet note, here is a reci-bee based on one from the honey section in the "Women of Unifarm Cook Book". Thank-you Helen!

HONEY CARAMEL CHEWS

1 can of sweetened condensed milk ¼ cup butter 1 cup sugar 1 cup honey ½ tsp salt 1 tsp vanilla 1 cup chopped nuts

Melt the butter in the milk in a small saucepan over low heat and set it aside. Mix the sugar, honey, and salt in a 2- quart saucepan. Cook over medium heat and stir constantly until it comes to a boil and the sugar dissolves. Boil, stirring often to firm ball stage. Continue to boil and *slowly* add the milk/butter mixture so that the sugar mixture remains at a boil. Cook and stir again until the candy reaches firm ball stage. Remove from heat and stir in the vanilla and nuts. Pour into a well-buttered pan. When it has cooled, cut into squares and wrap them individually in wax paper. Save some to eat straight out of the pan, like I did! I used walnuts when I tried this one and it was delicious.





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## THE BACK PAGE EDITORIAL

Ron Miksha

I hope that you are enjoying this first issue of **ABee Landing Board,** a collaboration of the United Beekeepers of Alberta Council (UBAC) and the Calgary and District Beekeepers Association (CDBA).

There are many people to thank for helping pull this together. First, Liz Goldie. Liz has been one of the sparkplugs of both the UBAC and CDBA. She is a director of both of these clubs. It was largely her efforts that saw the creation of this new beekeeping newsletter. She is also a sharp proof-editor, so she helps find gaffes before I commit them to print.

Extra proof-editing has been volunteered by Russ Peters, a professional communicator (and contributor of our *Talking Bees* column), and Pierre Marleau, a member of the CDBA executive. Liz, Russ, and Pierre – thank you! If readers find residual errors or typos, though, I still want to take full credit for them. Mine are the last eyes to look this thing over and any published mistakes are my responsibility. <u>Be kind and send a note</u> to help make this a great newsletter.

We were really happy to have Russ Peters, Glenda Livingston, Dennis Milbrandt, Mark Soehner, Liz Goldie, Carmen Peccie, Malcolm Connell, and others adding their voices and wisdom to this newsletter. If you have an interest in expressing yourself, we'd like to hear from you. In the future, we expect to have regular columns about wax, processing and marketing honey, bee equipment, colony health, and beekeeping tips. <u>Send a</u> <u>buzz our way</u> if you would like to volunteer for one of these, or if you have ideas for other pieces.

This newsletter grew out of the United Beekeepers of Alberta Newsletter, which was started by Malcolm Connell of Edmonton, and published quarterly. He started something good! There are a few differences in this new newsletter. We have added a wide variety of writers and we will begin advertising in the next issue. Not everyone loves advertising, but we are focusing on western Canadian suppliers of bees and equipment. We hope this will serve as a guide to who sells the things you need here in our area, and beyond. And the bit of revenue generated by advertising space will help assure that this newsletter will remain free to subscribers.

Because further editions will include some advertising, we *must* have your permission to send newsletters to you in the future. The federal government enacted antispam legislation back in 2014. The law states that any newsletter, if it carries advertising, can only be emailed to people who ask for it. We'd like to get you on the list. Send a note to <u>ABeeLandingBoard@gmail.com</u> with your name and address.

Feel free to send your contrary opinions (*sans ad hominemi*) to <u>ABeeLandingBoard@gmail.com</u>. They will be published here.





January 1900 at the honey bee research lab, Cornell University, Ithaca, New York. Beekeeping has changed a bit in the 122 years since this photograph was taken. In this photo, a boxy jacket sits around each secure hive. The jacket is filled with sawdust for insulation. Notice the snow on the peaked roofs – a good sign because little heat is escaping upward. In those days, winter losses were around 10% and mostly due to queen failure.