CAPA News

Canadian Association of Professional Apiculturists (CAPA)

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In This Issue

Upcoming Events

AHPA 2025
2-5 Dec — Tampa, Florida
https://ahpanet.com/

Bee Tech 2026
12-14 Feb — Calgary, Alberta
https://honeycouncil.ca/beetech2026/

ABF Conference 2026
Jan 6-10 — Alabama
https://abfnet.org/2026-abf-conference/

CAPA Statement Regarding Non-participation in the Recent CFIA Risk Assessment

Because we have received inquiries regarding the recent CFIA (Canadian Food Inspection Agency) risk assessment on the importation of honey bee (*Apis mellifera*) packages from the United States of America, we wish clarify to our members, the beekeeping industry and other stakeholders, that the Canadian Association of Professional Apiculturists (CAPA), as an organization, did not participate or provide comment on the assessment.

The CFIA and the Canadian Honey Council (CHC) were notified of this decision in writing. The CFIA was informed on September 3, 2024, and the CHC was informed on September 17, 2024. CAPA does not represent any government regulators at any level and is not involved in regulatory decisions. Any questions regarding regulatory decisions should therefore be directed to the appropriate authorities. CAPA reaffirms its support for the Canadian beekeeping industry and reiterates its willingness and commitment to engaging constructively with the industry and other stakeholders, grounded in a shared understanding of our respective roles.

2024 Committee reports

IPM Committee

In 2024, the IPM Committee discussed updates on the expansion of Oxalic Acid (OA) label use and noted the recent uptake in use in Canada. The committee also received updates on numerous varroa control research activities in Canada, including but not limited to: the collaborative efforts between the University of Saskatchewan (SK) and Manitoba (MB) Knowledge & Research Transfer Program (KRTP) testing VarroxSan® (OA + glycerin) effects during a winter treatment window; SK Tech Adaptation Team testing VarroxSan® during honey flow; Simon Fraser University and Agriculture and Agri-Food Canada (AAFC) trials on the 3C active ingredient; and continued testing RNAi technology (Norroa™) testing in Manitoba and Ontario. The committee also noted several new product registration submissions to the PMRA, including VarroxSan®, Apivar® 2.0, Amiflex® and Apiguard®. (*Since then, Apivar® 2.0 and VarroxSan® have been approved for use in Canada for the upcoming 2026 season.)

The committee also tracked the miticide resistance testing that occurred across the country in 2023 and 2024, including: British Columbia (BC) and Alberta (AB) documenting signs of amitraz and pyrethroid resistance; MB using bioassays and genotyping, as well as following up on high-mite-load New Zealand packages; Ontario (ON) finding reduced amitraz efficacy, prompting genotyping plans for 2025; and Atlantic Canada reporting effective varroa management, for now quelling immediate concerns of reduced amitraz efficacy. Off-label miticide use remains a concern to the committee in light of the Health Canada inspections which found unauthorized OA + glycerol use.

Due to concerns about the emerging pest *Tropilaelaps* mite, training and workshops will be held to prepare for potential outbreaks. The IPM committee recommended CAPA generate a committee specific to *Tropilaelaps*, which was since established.

National Winter Loss Committee

In 2024, the National Survey Committee largely focused on refining the annual winter loss survey. Core questions were revised to streamline data collection while allowing provinces to add region-specific queries. CAPA continued the practice of releasing a preliminary report early in the season (July 10, 2024) to assist industry responses to media inquiries, followed by a final report on December 13, 2024. While the full colony loss report for the 2024/2025 winter is not yet available, the preliminary report is available on the CAPA website at https://capabees.com/capa-statement-on-honey-bees/.

The survey covered 384,104 colonies, representing 47% of all managed colonies in Canada. The national winter loss rate was 34.6% (Table 1), exceeding the historical average of 27.7% (2007–2023), with provincial losses ranging from 9.8% to 61.3%. Despite this, the total number of colonies increased by 3.6% during the year, continuing the upward trend of hive growth in the country (a 35% increase since 2007) reflecting beekeepers' efforts to continually rebuild stocks.

National Winter Loss Committee (*continued*)

Top reported causes of colony losses varied by province but impacts from weather/climate and poor queens seem to have been more important across the country. Most beekeepers report that they monitor for varroa mites but some provinces showed gaps in consistent monitoring. The most commonly reported mite treatments were amitraz, formic acid, and oxalic acid. Registered antibiotics were the primary treatment for brood diseases and nosema, although application methods and timing differed across provinces.

CAPA, along with Provincial Apiarists (PAs) and researchers, continues to promote integrated pest management (IPM) and best management practices (BMP) to help beekeepers maintain healthy colonies and reduce winter losses.

Table 1: Survey parameters and honey bee colony mortality (2023-2024) by province and national average.

Table 1. Survey parameters and honey bee colony mortality (2023-2024) by province

Province	Total number of colonies operated in 2023	Estimated number of colonies lost based on the estimated provincial winter loss	Type of data collection	Number of beekeepers targeted by survey	Number of respondents (% of participation)	Minimum size of beekeeping operations targeted by survey (# of colonies)	Number of respondents' colonies that were wintered in fall 2023	Number of respondents' colonies that were alive and viable in spring 2024	Percentage of surveyed colonies as a proportion of the total number of colonies in the province	Provincial Winter Loss including Non-viable Colonies
Newfoundland and Labrador	678	66	Email, phone	18	13 (72%)	20	622	561	92%	9.8%
Prince Edward Island	5 500	3 373	Email, phone	25	20 (80%)	20	4 616	1 785	84%	61.3%
Nova Scotia	29 830	9 415	Email	46	25 (54%)	50	19 476	13 329	65%	31.6%
New Brunswick	12 836	3 730	Email, postal, phone	31	22 (71%)	50	10 082	7 152	79%	29.1%
Quebec	70 022	28 185	Online	138	58 (42%)	50	37 194	22 223	53%	40.3%
Ontario	101 161	50 998	Online, phone	182	105 (58%)	50	50 803	25 192	50%	50.4%
Manitoba	114 015	44 738	Email, online, phone	208	71 (34%)	50	51 253	31 142	45%	39.2%
Saskatchewan	99 000	17 920	Online	200	89 (45%)	50	39 439	32 300	40%	18.1%
Alberta	308 200	105 478	Online, phone	165	69 (42%)	100	161 545	106 258	52%	34.2%
British Columbia	75 000	18 829	Online	433	86 (20%)	20	9 074	6 796	12%	25.1%
Canada	816 242	282 732		1 446	558 (39%)		384 104	246 738	47%	34.6%[1]

[1] This number is the total loss calculated over all colonies in Canada.

Non-*Apis* Committee

The Non-*Apis* committee notes the ongoing issue of incursions of non-native bumble bee species in Canada particularly due to accidental escapes from greenhouses. Many of its members are actively working on *Bombus impatiens* (Common Eastern Bumble Bee) issues. In response to concerns about *B. impatiens* escapes near BC greenhouses, meetings were held in 2024 with suppliers of *Bombus* “quads” and regulators. Suppliers agreed to review protocols, with Koppert planning to phase out *B. impatiens* in favor of native *B. vosnesenski*. Regulatory frameworks and ongoing monitoring are being explored to prevent non-native species establishment. University of British Columbia researchers formed a working group to coordinate research on *B. impatiens* in the Pacific Northwest. Surveys show its rapid spread near greenhouses, raising ecological concerns. Although suppliers are shifting to native species, education and improved control measures are urgently needed to prevent further dispersal. Committee member Dr. Vicki Wojcik is reviving efforts to establish a Canadian pollinator policy, similar to the U.S. model, by engaging the CHC and AAFC.

The committee also noted that producers of managed alfalfa leafcutter bee face pest control challenges after the registration of the pest control product (Dichlorvos) for the parasitoid wasp *Pteromalus venustus* was canceled. Cultural and mechanical control measures are somewhat effective, but do not provide adequate control. Research into new alternative control products is ongoing.

Africanized Honey Bees Committee

In 2024, the Africanized Honey Bees Committee tracked the ranges Africanized honey bees (AHBs) in the U.S. and scientific literature regarding SNP testing (Single Nucleotide Polymorphism). AHBs are currently confirmed in several U.S. states and ranges are slowly expanding northward, especially in California. The recently completed CFIA risk assessment on U.S. honey bee package imports reaffirmed the ban on importing packaged bees from the U.S., but importing AHBs via queens and packaged bees from other countries remains possible. The committee is concerned about accurate identifying and monitoring of AHBs as recent genetic studies show that hybridization of AHBs with European bees complicates detection. Consequently, standard mitochondrial DNA tests may miss AHBs due to genetic admixture.

Detecting AHBs using mitochondrial DNA or morphometrics is unreliable due to hybridization and maternal inheritance. SNP-based tests on the other hand offer greater accuracy by analyzing nuclear DNA. Recent studies show high accuracy with reduced SNP sets, making SNPs the emerging gold standard albeit it being the more costly method.

A 2016 survey found AHB mtDNA in 8.2% of Canadian apiaries, but SNP testing showed low African ancestry, suggesting no established AHB population. A 2024 study confirmed AHB genetics are rare in Canada. Nonetheless, accidental importation is still possible. The committee concludes that a national AHB monitoring system and alternative queen sources may be a desirable option if AHBs become prevalent in supplier regions.

Importation and Bee Movement Committee

In 2024, the Importation and Bee Movement Committee (BIMC) focused on addressing importation concerns and facilitating communication between CAPA and key stakeholders like the CFIA. For instance, the CFIA requested information from the BIMC to better inform their evaluation on a 30-mile exclusion zone around sites in which Africanized honey bee genetics have been detected (in 2023, the exclusion zone was reduced from 50 to 30 miles). Africanized bee genetics was a consideration in the risk assessment on U.S. honey bee package imports which CFIA released on November 7, 2024 and while CAPA itself did not participate in the revision process of the risk assessment, individual members and provinces may have contributed entirely independently, within their respective roles in apiculture.

Dialogue between the BIMC and CFIA remained active in 2024. For example, building on a letter the BIMC wrote to CFIA in 2023 regarding the risk of imports from Ukraine in light of concerns of importing *Tropilaelaps mercedesae,* CFIA suspended all Ukrainian honey bee imports in June, 2024. The BIMC acknowledges these decisions are also a result of CFIA's own rigorous epidemiological risk assessments. Other conversations between the two organizations included: Small Hive Beetle (SHB) larvae found by CFIA inspectors in a queen shipment from California, prompting quarantine and re-caging and imported New Zealand packages having elevated varroa mite levels. The BIMC looks forward to working with Dr. Scott MacFarlane who now leads CFIA's honey bee files, succeeding Dr. Connie Rajzman.

By: Cameron Menzies, CAPA NEWS editor, capa.news24@gmail.com.

British Columbia Provincial Apiculturist Update

Spring Survey – Winter Mortality

Colony mortality following last winter was estimated at 42%, a significant increase over 2024 when colony losses were estimated at 25%. Factors including varroa mites, weak colonies in the fall, poor queens and weather were listed as the primary causes of colony mortality in both years. The reason for the difference in winter mortality remains unclear.

2025 Beekeeping Production

BC's final production estimates of the 2025 beekeeping season are not available at the time of writing this update. Preliminary reports indicate a below-average production season for most regions. Drought and extended periods of smoky conditions due to forest fires are believed to have been the main causes of poor production. Beekeepers have also reported ongoing struggles with varroa control due to reduced efficacy of Apivar and some other miticides. Insufficient application of IPM principles may have also contributed to lower production results.

Staff Changes – Tech Transfer Program

After Dr. Nuria Morfin accepted a position with the University of Manitoba, changes were applied to BC's Tech Transfer Program. While Nuria has remained Chair of the Steering Committee, Dr. Fahim Raza was appointed as Technician in Apicultural Research. Fahim and his team have been busy with a diverse set of projects over the summer season with results expected to be presented at the AGM of the British Columbia Honey Producers' Association in late October.

BC Provincial Apiarist

After my official retirement on August 1, 2025 the Ministry initiated the process of finding a replacement. About 18 applications were received but the vetting process eventually brought the number down to three. While remaining outside the selection process, I have been told that the final selection will take place at the end of October and the appointment of the new PA shortly thereafter. In the meantime, I have agreed to continue diagnosing disease samples, edit various extension materials and be involved in the annual production survey.

By: Paul van Westendorp, former BC Provincial Apiculturist, vanwestendorp@telus.net.

Prairies Provincial Apiculturists Update

The 2025 beekeeping season began with high winter colony losses across each of the three prairie provinces (AB = 42%, SK = 44% and MB = 43%); driven primarily by varroa and associated viruses. The season was also marked by massive wildfires across Manitoba (MB) and Saskatchewan (SK) that led to some beekeepers seeing reduced foraging and honey production due to heavy smoke conditions. Production was also impacted by prolonged drought conditions in spotty areas across the prairies and a long, rainy spring in some areas of Alberta (AB). Total honey production across the prairies is therefore expected to be below average; however, excellent early-season clover blooms in some areas and late-season rains extending flows in other areas should prevent average yields from being too low.

A growing bee health challenge in recent years across the prairies (and other regions) has been an increase in confirmed, often severe, cases of European Foulbrood (EFB), with the number of EFB cases rising again in 2025. Multiple factors are likely contributing to the rise in EFB, including evolving (more virulent) strains of EFB, nutritional stress due to drought or poor weather and an increased spread of used equipment due to multiple years of high winter losses and more purchases/ sales between beekeepers. Beekeepers should be vigilant for any early signs of EFB (and/or American Foulbrood (AFB)) and promptly report those to your provincial apiarist to assist you with nipping the disease in the bud. While this should always be the case, it is especially important nowadays with cases on the rise.

While prairie beekeepers face many challenges, we also recognize the fantastic research being done across the prairies by universities, government, and tech transfer programs. Among other things, this includes research into different EFB strains and novel surveillance methods, and many active research trials on new varroa mite controls. We are hopeful that some of the recent submissions to Canada’s Pest Management Regulatory Agency (PMRA) will result in new mite control products becoming registered in Canada in the near future.

By: Derek Micholson (MB Provincial Apiarist*, Derek.Micholson@gov.mb.ca), revised by Renata Labuschagne (AB Provincial Apiculturist) & Graham Parsons (SK Pollinator Biosecurity Specialist).*

Atlantic Provincial Apiculturists Update

The beekeeping season in Atlantic Canada began favourably with the exception of New Brunswick (NB), whose beekeepers lost an average of 45% of their hives last winter. Nova Scotia (NS), Prince Edward Island (PEI), Newfoundland and Labrador (NL) fared better with losses of 18%, 23%, and 13% respectively. The approximate 13,000 colonies that died in the region were eventually replaced this spring or by early summer in areas with higher losses or more northern areas with cooler springs. Spring buildup is an important time of year for an Atlantic Canadian beekeeper as they prepare for the lowbush blueberry pollination season.

The 2025 pollination season was generally a success as there were sufficient windows of good flying weather. Many colonies even pulled in a crop of blueberry honey, a welcomed bonus to supplement pollination revenue. After the hives returned home from the crop fields, bees got right to work collecting nectar from wildflowers and planted forage whose nectar flowed agreeably in the early summer weeks. This streak of good fortune soon dried up however, as most of Atlantic Canada sank into what became one of the worst droughts the region has seen in years.

While some nectar continued flowing during the hot and dry late summer weeks, much of the region experienced a dearth. Beekeepers were extra cautious lighting their smokers during this period as apart from PEI, each Atlantic province experienced wildfires. Overall, honey yields are expected to be variable, with drought-affected areas seeing below-average yields. Some late-season nectar flow may help reduce the need for supplemental feeding but the region is not expecting a bumper crop.

As for varroa mites, the pest was reportedly manageable in 2025, with the exception of NL which remains the only province without an endemic population. Beekeepers in the Atlantic region are treating earlier in the season and making concerted efforts to keep mite levels low. Beekeepers are optimistic for a winter of limited colony mortalities, as long as mite levels remain in check and syrup is fed at the right time and in the right amounts.

By: PEI Provincial Apiarist Cameron Menzies, crmenzies@gov.pe.ca.

Tech Transfer Program Update - Quebec

The Quebec Technology Transfer Program (TTP) is based at the Deschambault Research Center (CRSAD) in Deschambault, Quebec. It is part of a larger beekeeping program structured around three key sectors: the Research team, the Extension Services team and the Consulting services team. The Research team is involved in a variety of projects, both in basic and applied research. We collaborate with researchers from universities across the province of Quebec, as well as from other parts of Canada and Europe. Most of our projects rely on the CRSAD colonies, and we also work with local beekeepers on specific topics. Our current research focus is selective breeding and the use of genomic tools to improve honeybee stocks, indoor mass storage of honeybee queens during winter, and honey bee nutrition. The Extension Services team was established in 2020 with the goal of supporting knowledge transfer and making research more accessible to the beekeeping community. The team focuses on the dissemination of research findings, outreach to beekeepers, and the delivery of beekeeping training and workshops. It also organizes events and webinars, and develops a variety of educational and informational resources for beekeepers. The team also publishes newsletters on a regular basis. The Extension Services team works in close collaboration with the beekeeping industry (*Apiculteurs et Apicultrices du Québec*), the Quebec Ministry of Agriculture (MAPAQ), and other stakeholders through the Table filière apicole du Québec. The program operates with the financial support of MAPAQ.

In 2025, our main projects were:

- ***Journée apicole 2025*: From Hive to Processed Products, Innovation and Quality.** This day of conferences and workshops, organised in collaboration with CRAAQ, focused on honey quality and other hive products. Fundings: *Programme Innovation Bioalimentaire 2023-2028.*

- **Introductory Workshop on Honey Sensory Analysis.** Led by Lucia Piana, a renowned Italian expert in honey sensory analysis, this training helped participants better identify the flavors and aromas present in honey. They explored the olfactory and gustatory characteristics of Italian monofloral honeys and learned how to detect common defects in honey. Fundings: *Réseau Agriconseil de la Capitale-Nationale et de la Côte-Nord.*

- **Varroa Treatment Decision Tree.** This tool was created to help beekeepers make informed decisions about varroa control. It includes principles of integrated pest management and monitoring techniques; a summary table of available treatments and their characteristics; and a decision tree designed to identify the most appropriate treatments based on the time of year and various environmental or colony-related factors. This tool was developed in collaboration with MAPAQ and the University of Montréal.

- **Preparing and Marketing Bee Products Guide.** The content of this guide was revised and updated, with new content on sanitary standards for honey extraction, packaging and regulations. Fundings: *Programme Innovation Bioalimentaire 2023-2028.*Project realised in collaboration with CRAAQ.

By: Martine Bernier, Quebec Tech Transfer Program lead, CRSAD, martine.bernier@crsad.qc.ca.

Articles

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Short News

Congratulations to:

Paul van Westendorp on his retirement from the position of BC Provincial Apiculturist.

Renata Labuschagne on her appointment as Alberta's Provincial Apiculturist.

Britteny Kyle on her new role as Lead of the Ontario Tech Transfer Program.

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Bee Tech 2026 Conference

The Canadian Honey Council (CHC) is pleased to announce with the Canadian Association of Professional Apiculturists (CAPA) that we will be hosting the Bee Tech 2026 – Canadian National Beekeeping Convention in Calgary, Alberta, February 12 – 14, 2026 at the Westin Airport Hotel, Calgary. It is anticipated that Bee Tech 2026 will be the largest ever beekeeping convention and trade show in Canada outside of the Apimondia Congresses.

For registration and more information see link below:

https://honeycouncil.ca/beetech2026/

The Editorial Board are pleased to invite you to submit your reports, research articles and news at:
capa.news24@gmail.com

Robert Lu (Design & Artwork)