

**Annual Report for 2021 to the New
Brunswick Beekeepers Association Inc.
- Annual General Meeting**

**NB, 17-19 March 2022
(A Zoom meeting)**

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NB Department of Agriculture, Aquaculture and Fisheries

NB beekeepers and colonies: 2021

| | Total | Commercial | Hobby |
|------------|--------|--------------|-------------|
| Beekeepers | 495 | 31 (6%) | 464 (94%) |
| Colonies | 13,250 | 10,737 (81%) | 2,513 (19%) |

Commercial beekeeper for NB: 50 or more colonies

Honey production *

* How I calculate honey production: I calculate the average honey production from colonies producing surplus honey and I do not include colonies making 30% or less of the average. This prevents an artificially low average.

| | Average yield / colony * (* only honey producing colonies: 9,175 colonies for 2021) | Total yield |
|-------------------------|--|------------------------------|
| Honey (2021) | 19.9 Kgs (43.9 Lbs) | 184,196 Kgs (406,075 Lbs) |
| Honey (2020 revised) | 18.6 Kgs (40.9 Lbs) | 156,878 Kgs (345,850 Lbs) |

- Honey production: good year, generally.

Importation

New Brunswick honey bee importation summary 2021

| Colonies imported for wild blueberry pollination (ON) | Colonies imported for purchase and pollination (PEI) | Queens imported (ON) | Queens imported (NS) | Colonies (moved from NS) |
|---|--|----------------------|----------------------|--------------------------|
| 28,028 | (864) | 48 | 40 | 15 |
| [includes 864 from PEI] | | | | |

- 2022 Protocol for the Importation or Transit of Honey Bees within Canada for New Brunswick
- See the NB Department of Agriculture, Aquaculture and Fisheries(DAAF) web site: <https://www2.gnb.ca/content/gnb/en/departments/10/agriculture/content/bees.html>
- **The application to import honey bees is on the DAAF web site.**

Reminder:

Keep the Varroa mite out of Newfoundland

The Newfoundland and Labrador Beekeeping Association (NLBKA) released its Varroa Action Plan. It has gone out to its membership, the provincial government, and expert peer review for feedback. Beekeepers in New Brunswick can help by **NOT PROVIDING** bees to any beekeeper from Newfoundland. Importation to NL without a government permit is illegal.

Please notify your provincial apiarist and the NLBKA immediately if you hear of anyone exporting honey bees (nucleus colonies, queens, full colonies, used equipment) to Newfoundland.

Honey bees from other countries

- The Canadian Food Inspection Agency is responsible for issuing an import permit for bee packages or queens imported into Canada.
- From Outside of Canada, including the USA
- No full-sized colonies, nucleus colonies, or used hive equipment (i.e. wax comb) are permitted to enter New Brunswick from other countries.
- Honey bee queens or packaged honey bees entering New Brunswick from other countries must have entered Canada with a signed federal import permit from the Canadian Food Inspection Agency (CFIA).
- **Honey bees from USA to Canada:** Only queens are permitted and are only permitted from approved breeders in California and Hawaii. Importers in other provinces import these bees.

Honey and pollination survey in New Brunswick 2021^A

| | |
|--------------------------------------|----------------|
| Honey sold for bulk sales | 40,625 lbs |
| Average price per bulk | \$3.41 |
| Honey for retail sales | 91,650 lbs |
| Average price per retail | \$7.34 |
| Colonies rented for pollination * | 9,169 |
| Average rental price per colony | \$149.83 |
| Revenue for pollination of all crops | \$1,373,791.20 |

Comments: The honey sold for retail and bulk is less than the total honey because it does not include honey production from approximately 10% of the beekeepers who are hobby beekeepers. Also, beekeepers may not sell all of their honey in the same year it is produced. The first pollination is wild blueberry. Revenue for pollination includes revenue from a second pollination, which may be mostly wild blueberry or cranberry, and a third pollination.

- * (e.g.) A colony rented twice is calculated as two colonies; a colony rented 3 times = 3 colonies.
- ^A The respondents represented 83% of the colonies in the survey.

NB colony rental prices in 2021 based on people who responded

- Blueberry (first pollination):
 - Range: \$125 to \$200 / colony
 - most common price: \$150 / colony
- Cranberry
 - Range: \$125 to \$175 / colony

Honey bee winter loss survey 2020 - 2021

- Full report: Canadian Association of Professional Apiculturists (CAPA) web site
- <http://www.capabees.com/>
- Annual Colony Loss Reports
- NB surveyed: beekeepers with 50 or more colonies; 23/32 (72%) responded.

Colony Winter Loss Survey Data: 2020 - 2021

| | Fall 2020 | % winter loss | % winter loss indoors | % winter loss outdoors | Spring 2021 (estimated) |
|---------------------|--------------|------------------|-----------------------------|------------------------------|-------------------------------|
| NB | 12,963 | 13.2 | 12.4 | 13.9 | 11,257 |
| National average | | 23.2 | 19.9 | 25.4 | |

NB Winter loss comments for 2020-2021

- **Wide range in rates of winter losses**
- Respondents had 76% of colonies in NB
- Average NB winter loss was 13.2%
- 56% of NB respondents had losses below the long-term suggested baseline / threshold for winter losses of 15%.
- 22% of NB respondents had winter losses from 15% to 24%.
- 22% of NB respondents had winter losses above 25%.
- **It was not possible to determine the main cause of winter losses** in NB because there was a relatively uniform range of responses from the beekeepers who had higher levels of winter losses.

Varroa monitoring in NB in 2020

| Percent of New Brunswick beekeepers monitoring for varroa mites | | | | | | |
|---|----------------------|--------------|---------------|--------------|----------------|--------------------|
| Technique | Monitoring frequency | | | | | |
| | Sticky boards | Alcohol wash | No monitoring | Only in fall | Only in spring | In spring and fall |
| 17 | 57 | 13 | 4 | 39 | 22 | 22 |

Report: “These results demonstrate that most Canadian beekeepers recognize the value of monitoring varroa. Nevertheless, the desired goal is to have all beekeepers regularly monitoring varroa populations throughout the beekeeping season, particularly at times prior to treatment application windows, and subsequent to treatment to verify efficacy.”

Varroa control in NB in 2020

Most commonly used (1) to least commonly used (3) control methods for varroa by NB beekeepers in 2020

| | Spring 2020 | | Summer / Fall 2020 |
|-------------------------------------|--|-------------------------------------|--|
| % of beekeepers treating for varroa | Treatment methods | % of beekeepers treating for varroa | Treatment methods |
| 57 | <ol style="list-style-type: none"> 1) Apivar (amitraz); 2) Formic Pro (formic acid); 3) Oxalic acid | 100 | <ol style="list-style-type: none"> 1) Apivar (amitraz); 2) Oxalic acid; 3) Formic Pro (formic acid) |

Report: “In the spring of 2020, the percentage of beekeepers that treated with chemical methods ranged from 56% to 98% in provinces where the mite is present. In provinces with lower treating rates like Quebec (56%) and New Brunswick (57%), this means that the most common scenario in spring is actually the absence of treatment.”

CAPA winter loss survey 2020-2021

Excerpt from “Canadian Association of Professional Apiculturists Statement on Honey Bee Wintering Losses in Canada (2021)”.

“Once again, these surveys show that Apivar® is one of the most commonly used miticides for treating varroa in Canada. Because of the repeated use of Apivar®, it is only a matter of time before the development of resistance to this miticide. Preliminary findings of decreased efficacy have been observed in some provinces. It is becoming increasingly important that beekeepers become aware of the principles associated with resistance development and the importance of monitoring the efficacy of all treatments, in particular Apivar®. This will help to mitigate abrupt and widespread failures of treatments.”

Refer to the CAPA web site for the full report.

NB Honey bee inspections 2021

| | | |
|--|---------------------|--|
| # Beekeepers inspected | | 72 |
| # Colonies inspected | | 367 |
| Diseases | # beekeepers | # colonies |
| American foulbrood * - Samples tested (none resistant to antibiotics) | 3 | 7 |
| European foulbrood * | 5 | 5 |
| Chalkbrood (bees not thriving) | 3 | 5 |
| * All beekeepers, except one had reported a foulbrood disease before. | | |
| Small hive beetle (SHB) reports 2021 | | |
| # Reports | County | Status |
| 1 | Charlotte | The beekeeper monitored with Beetle Bee-Gone cloths in fall of 2021. Not resolved (monitoring to be continued). |
| Comments: The NB colonies had been near ON colonies, during wild blueberry pollination, imported from an area in ON known to have the SHB. | | |

Honey bee issues in NB 2021

- Five beekeepers (mostly commercial) had essentially 100% loss of honey bees in apiaries in 2021.
- Three suspected that it was due to pesticide exposure.
- One beekeeper was able to find varroa mites in capped brood in a few remaining colonies.
- Two others: unknown cause or no comment.

Reports from 5 beekeepers is an unusually high number.

GNB Bees web page – update

<https://www2.gnb.ca/content/gnb/en/departments/10/agriculture/content/bees.html>

<https://www2.gnb.ca/content/gnb/fr/ministeres/10/agriculture/content/abeilles.html>

Pest Information

- ▶ Traps used for Monitoring the Small Hive Beetle in New Brunswick Honey Bee Colonies – **NEW 2021**
- ▶ Small Hive Beetle - Best Management and Biosecurity Practices
- ▶ Antibiotics for honey bees must be obtained from veterinarians – **Assigned Veterinarian list: UPDATED October 2021**

Information sur les parasites

- ▶ Pièges servant à la surveillance du petit coléoptère des ruches dans les colonies d'abeilles domestiques au Nouveau-Brunswick – **NOUVEAU, 2021**
- ▶ Les antibiotiques pour les abeilles doivent être obtenus auprès des vétérinaires – **Liste des vétérinaires assignés: MISE À JOUR en Octobre 2021**
- ▶ Le petit coléoptère des ruches - Les Pratiques de Gestion Exemplaires et des Protocoles de Biosécurité

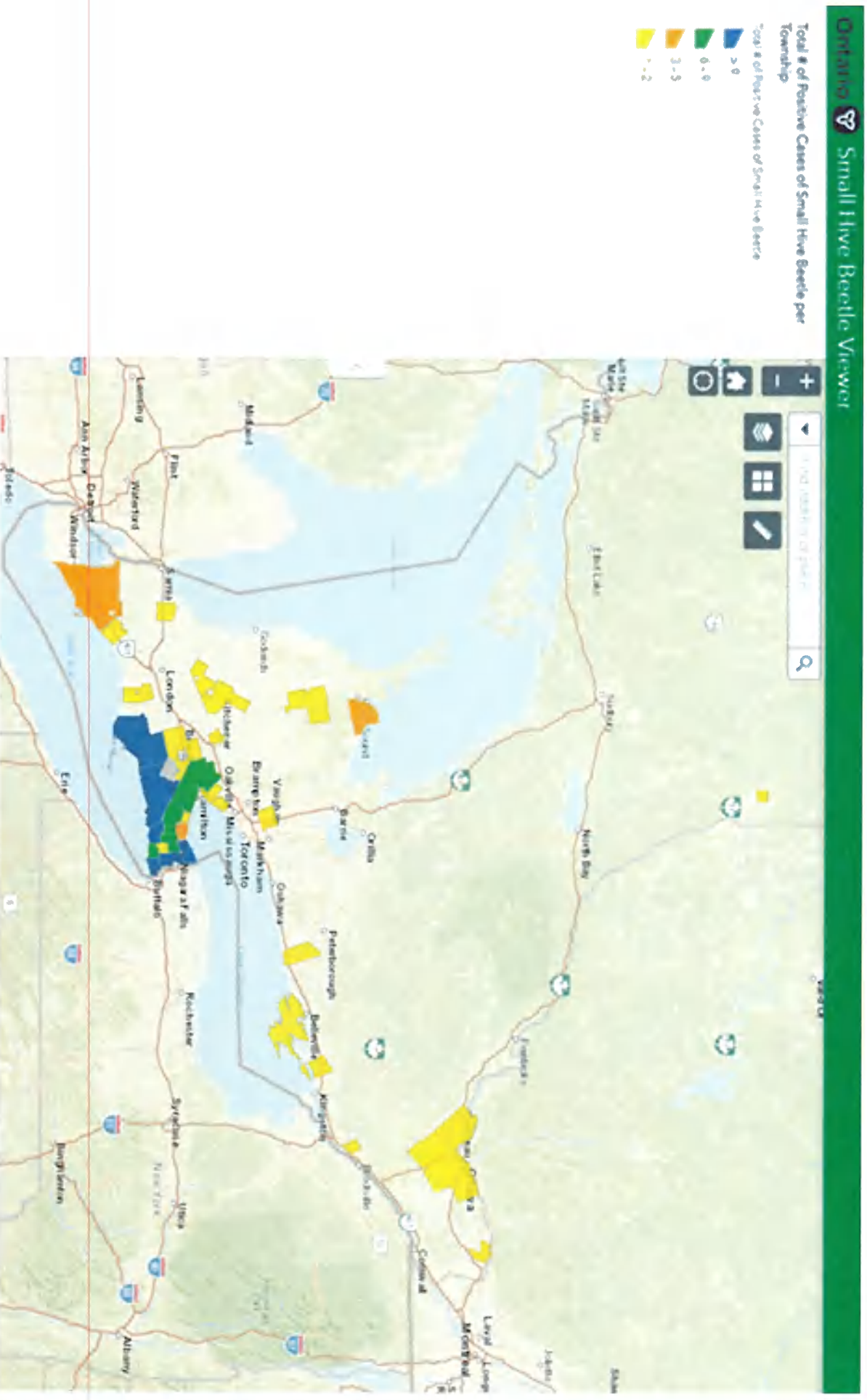
New Brunswick Honey Bee Importation Protocol

- ▶ 2022 Protocol for the Importation or Transit of Honey Bees within Canada for New Brunswick
- ▶ Application to Import or Transit Honey Bees from within Canada for New Brunswick In 2022
- ▶ Exporter Beekeeper Declaration Form – for Temporary Residence (2022)

Protocole d'importation des abeilles domestiques du Nouveau-Brunswick

- ▶ Protocole pour l'importation au Nouveau-Brunswick, ou le transit par le Nouveau-Brunswick, d'abeilles domestiques provenant du Canada – 2022
- ▶ Demande d'importation au Nouveau-Brunswick, ou de transit par le Nouveau-Brunswick, d'abeilles domestiques provenant du Canada en 2022
- ▶ Formulaire de déclaration de l'apiculteur exportateur – pour résidence temporaire (2022)

Small hive beetle (SHB) reports in Ontario (March 2022): SHB has continued to expand its range in 2022.



Information from Perennia (NS) web site

<https://www.perennia.ca/wp-content/uploads/2018/04/04-small-hive-beetle-eng.pdf>

<https://www.perennia.ca/wp-content/uploads/2018/04/04-small-hive-beetle-french.pdf>



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for Apiculture

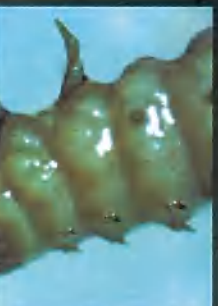
SMALL HIVE BEETLE

Learn how to spot it and what to do if you find it.

Small hive beetle (SHB), *Aethina tumida* Murray, is an invasive pest of western honey bees (*Apis mellifera* Linnaeus) that originated from Sub-Saharan Africa and has since established a breeding population in the Niagara Region of Ontario. Hives from Ontario may be imported to Maritime Provinces in the spring for pollination of crops such as lowbush blueberry. Due to the potential for SHB entry, either by flight or movement of hives, it is important that beekeepers at all levels of experience be able to identify SHB and report suspicious findings to their Provincial Apiculturist.

WHAT DOES SHB LOOK LIKE?

Eggs are small (1.5 mm long), white and visible. However, SHB is more likely to be detected in its adult or larval form.



WHAT DOES SHB DAMAGE LOOK LIKE?

The most considerable damage performed by SHB occurs during their larval stage. Larvae consume virtually every edible substance in the hive except for the wooden hive-wares itself. A large infestation of SHB will cause significant damage to brood, comb, pollen, and honey. Excrement detected by feeding larvae causes honey to ferment and no longer be suitable for human or bee consumption. Frames that have been removed from active colonies are also at risk of SHB damage. Entire seasons' worth of honey in extraction lines can be spoiled and valuable frames of empty wax comb can be lost if indoor storage facilities are infested.



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PETIT COLÉOPTÈRE DE LA RUCHE

Apprendre à le reconnaître et quoi faire s'il se retrouve dans votre rucher

Le petit coléoptère de la ruche (PCR), *Aethina tumida* Murray, est un insecte parasite de l'abeille mellifère (*Apis mellifera* Linnaeus) qui est originaire de l'Afrique subsaharienne et qui se retrouve maintenant dans la région de Niagara en Ontario. Des ruches de cette région sont importées dans les provinces Maritimes au printemps.

What to do if you think you found the small hive beetle.

- You are **required to all suspected specimens** to the NB Provincial Apiarist.
- Sample: freeze, label (date, name of collector, location), identify the suspected hive.
- You may also contact the NB Provincial Apiarist or Chief Apiary Inspector or the Apiculture Specialist.
- All personal information is confidential.

TRENDING TOPICS:

Tick Safety in the Bee yard

<https://www.perennia.ca/wp-content/uploads/2020/07/ATTTA-FS-Ticks-final.pdf>

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perennia.ca

JULY, 2020

TICK SAFETY IN THE BEE YARD

As the weather warms up in the spring and into the fall, there is an increased risk of coming in contact with ticks. Ticks, like mites, are in the arachnid family and are considered external parasites. Peak tick season for nymphs usually occurs during the spring and summer months, while adults pose a greater threat in the late fall. For beekeepers, who spend a lot of time in fields and around wooded areas, the risk is even more prevalent. Ticks live in long grass, wooded areas, shrubs or leaf piles. They attach themselves to you or your clothing as you brush by. Even though they can't fly or jump, it is surprising how quickly several can get on your clothing or skin when working out in the field.

Several species of ticks live in Eastern Canada (Figure 1). It is important to identify which ticks have been found in your area and be aware of the diseases which may be carried by those tick species. There are several websites available for tick identification. Make sure you can

| AMERICAN SCORPION DOG | SCORPION DOG | LONG EAR | DAVEY | HOOD LARK | BLACK HORNED | RED |
|-----------------------|--------------|----------|-------|-----------|--------------|-----|
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Thank you