



Bee Industry Overview

4th Annual Beekeeper Symposium

February 19, 2021

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novascotia.ca/bee-industry

Role of Provincial Apiculturist

1. Administer the *Bee Industry Act & Regulations*

- Maintain a registry of beekeepers
- Draft the annual Import Protocol and permits
- Conduct hive health inspections & surveys

2. Extension and Outreach

- Disseminate: factsheets, BMPs, industry news, regulatory notices
- Demonstrate BMPs during farm visits
- Assist with delivery of bee courses – Dalhousie and NSCC
- Assist with development and delivery of programming

3. Coordinate with various Agencies & NGOs

- NS Beekeepers Association,
- Canadian Association of Professional Apiculturists,
- CFIA, PMRA, Health Canada (other branches), Stats Canada, Provincial Agriculture Departments

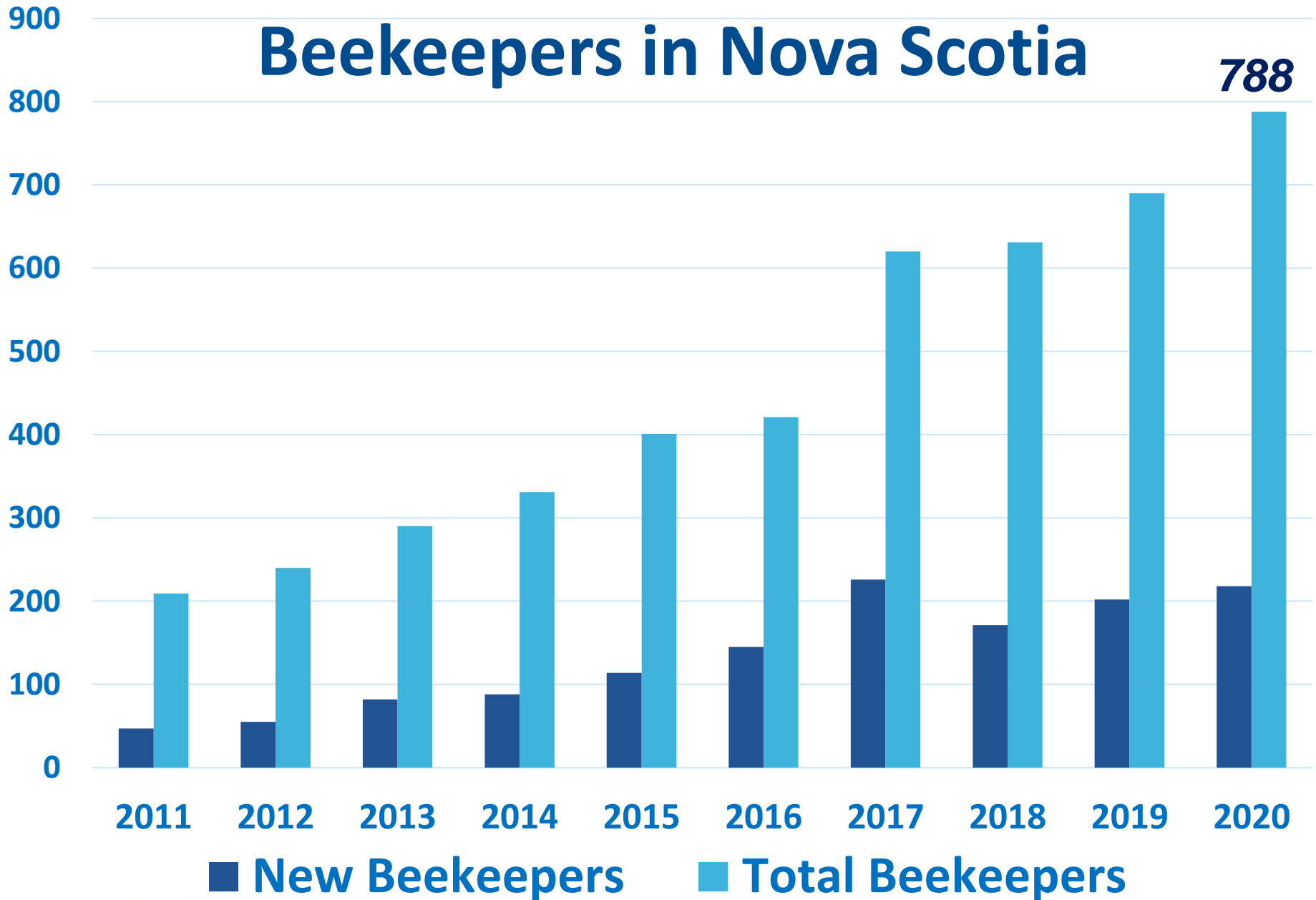


The Provincial Apiculturist inspecting a hive for diseases

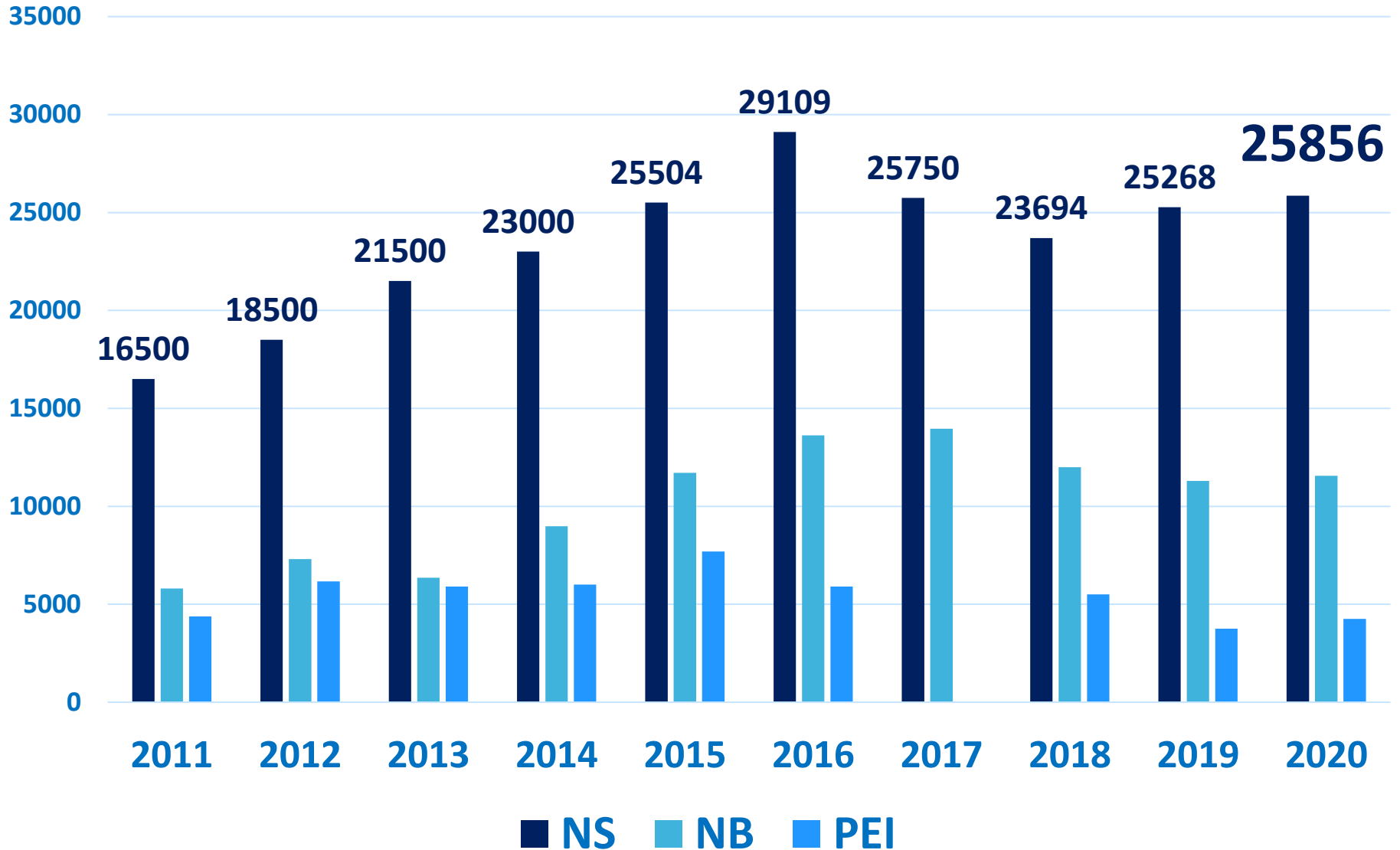


Cages of honey bee queens from Hawaii being inspected at the airport

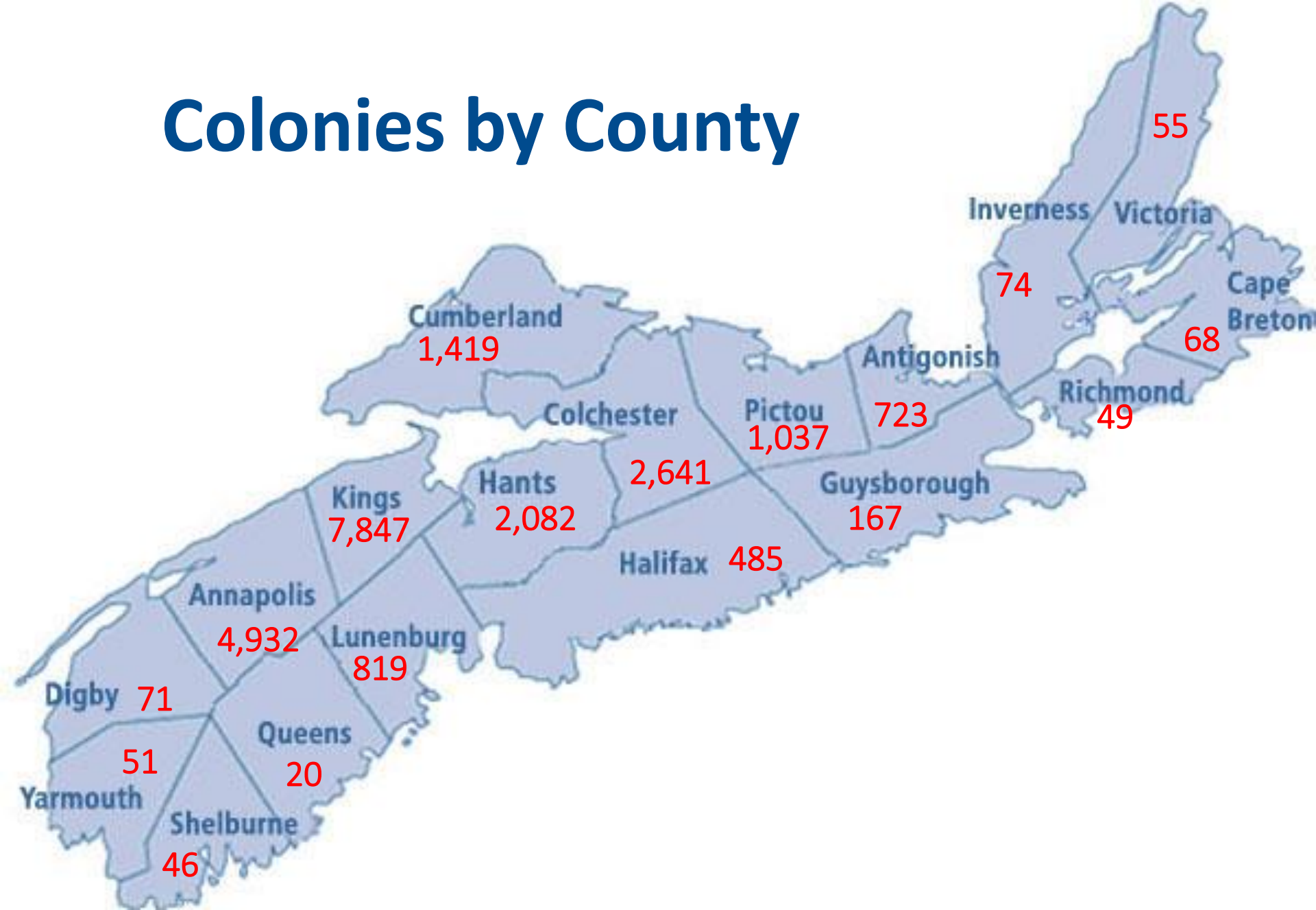
Beekeepers in Nova Scotia



Maritime Colonies



Colonies by County



Operations by Hive #'s

>50 hives = Commercial beekeeper

<50 hives = Small-scale beekeeper

Farm size (hives)	Beekeepers	Bee yards	No. of hives (July)	% of Total NS hives	Hives for pollination	% of Total NS hives for pollination
50+	40	748	23,550	91.08%	14,509	98.34%
25-49	13	31	460	1.78%	56	0.38%
10-24	45	102	696	2.69%	22	0.15%
1-9	395	421	1,154	4.46%	2	0.01%
Total	488	1,302	25,856	100	14,753	100

Beekeeper Responsibilities

- Bill No. 173 Bee Industry Act & Bee Industry Regulations
- Annual Registration
- BK Code visible in every apiary
- Permits are needed to import bees
- Sell to only registered beekeepers
- Inspections needed to sell or gift bees & equipment
- Record keeping, particularly sellers
- No immovable frame hives
- Reportable diseases and pests (AFB, SHB...)
- Clean orderly bee yards – no access to infected comb
- Comply with orders issued by inspectors
- Provide apiary locations within 24 h



Colony Inspections

Anyone **selling, transferring ownership** or exporting bees and/or used equipment is required to arrange for inspection with the Provincial Apiculturist.

Also prompted by:

- Complaint,
- Haphazard (compliance check)
- Random,
- Reportable pest/disease,
- Nearby biosecurity threat.

Hive inspection rate usually 10%.
Equipment inspection rate variable.
Inspections are not guarantees.



	Beekeepers Inspected	Yards	Colonies in yards	Colonies inspected	Chalkbrood	DFW	EFB	AFB
2020	54	88	2408	756 (31.4%)	37 (4.89%)	2 (0.26%)	1 (0.13%)	5 (0.65%)
2019	51	79	2716	822 (30.3%)	21 (2.55%)	5 (0.61%)	2 (0.24%)	0
2018	45	59	1365	672 (49.2%)	93 (13.8%)	3 (0.02%)	0 (0%)	7 (0.005%)

Buying & Selling Bees (& equipment)

Buyers

- Register with NSDA.
- Buy local or get Import Permit.
- Verify NSDA inspection. Review results & comments.
- *Caveat emptor* – know what you are buying.

Sellers

- Obtain NSDA certificate of inspection.
- Comply with orders (treatment, quarantine, destruction, etc).
- Provide inspection report to buyers.
- Verify buyer registration.
- Keep records of buyer's name, address, BK code, quantities, origins for 2 years.

Preparing for an Inspection

- Contact Provincial Apiculturist: jason.sproule@novascotia.ca; (902) 890-1565
- Inspection announcements are sent March – April.
- Provide details: location(s), quantities, time preferences, your attendance.
- Explain the reason for inspection eg, transfer of ownership, reportable pest/disease, **export**.
- Peak Season May – end of June, give sufficient lead time.
- Notify property owners.
- Remove strapping in advance.
- Go through hives and equipment – cull in advance.
- Ensure equipment is accessible and inspector has adequate working room.
- Ensure a minimum 6 ½ ft clearance.

During an inspection

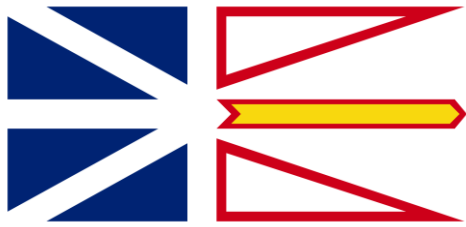
- Beekeeper will be asked COVID-19 screening questions - be honest!
 - Wear a mask and practice social distancing.
 - Inspector may enter any non-dwelling location for hives, equipment, records.
 - Inspector may perform alcohol wash on select hives – sacrifice of approx. 300 bees.
 - Samples of comb, swabs, bees may be collected for lab tests.
 - Inspection stickers may be applied (especially, for export).
 - If present, be prepared to assist – bring appropriate tools and PPE.
 - Care will be taken to protect queens.
 - You may receive orders from inspectors to treat, sanitize, tidy up yards, or destroy.
 - A report will be sent within 2 workdays, indicating approval for sale.
- **Inspectors may abandon inspection if they feel it is unsafe or beyond reasonable expectation of labour or preparedness****

2020 Import Protocol

- NSDA Import Permit is needed to bring honey bees into NS.
- No import of colonies (hives, nucs, pkgs) from other Provinces is permitted.
- Package bees and queens from outside Canada require CFIA permits.
- Importation of queens from Provinces is permitted from select sources.
- All queens must be inspected upon arrival, before release to beekeeper.
- Attendant workers must be destroyed.
- Import of used equipment is permitted under stringent treatment conditions.



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Exports to NFLD



Prohibition of the importation of honey bees

Under the authority of the *Animal Health and Protection Act*, a person shall not bring honey bees (*Apis mellifera*) or honey bee hives into the Province of Newfoundland and Labrador unless accompanied by a certificate signed by an official veterinarian or licensed veterinarian in the place of origin.

The honeybees and hives must be free from the following pests:

- honey bee tracheal mite (*Acarapis woodi*)
- varroa mite (*Varroa destructor*)
- greater wax moth (*Galleria mellonella*); and
- small hive beetle (*Aethina tumida*)

For more information, please contact
ocvo@gov.nl.ca | 709.637.2046

Newfoundland
Labrador
Forestry and Agrifoods Agency

Please do not import honey bees, used equipment, pollen, beeswax, etc!!!! It is illegal to import bees or used equipment without a permit from the Government of Newfoundland & Labrador.

No *Bombus quads* either!!

NFLD maintains freedom from:

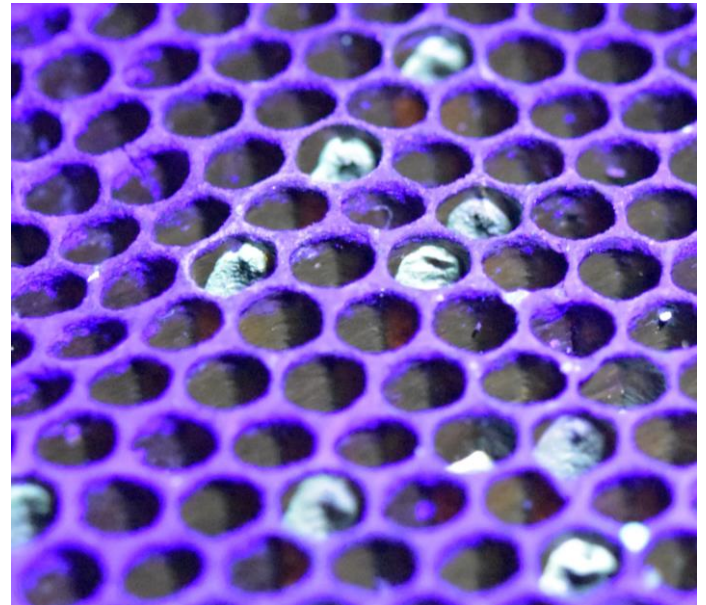
- Varroa mites
- Small Hive Beetle
- Wax moth
- Tracheal mite
- American foulbrood

<http://www.nlbeekeeping.ca/our-bees-nl/>

American foulbrood

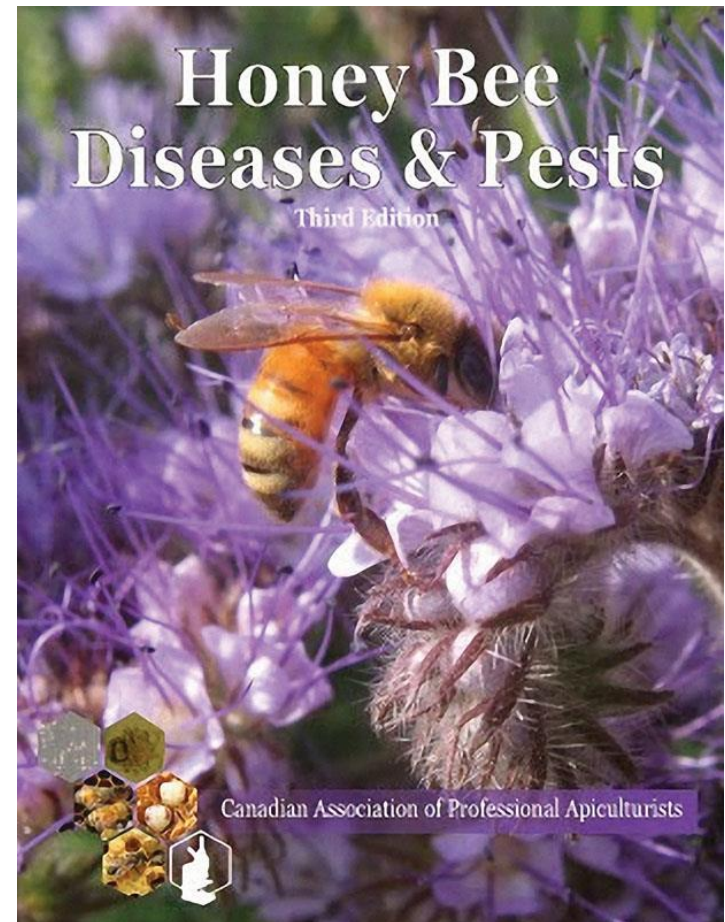
(Paenibacillus larvae)

- AFB is reportable.
- “+” cases require destruction & disposal (burning is best).
- In 2019 Diagnostic kits were made available in Canada.
- 5 cases identified in NS 2020.
- 29 VCPRs identified in registration survey.



European foulbrood (*Melissococcus plutonius*)

- Shifting to a more virulent strain?
- Often results in or necessitates colony destruction.
- Occurring in multiple Provinces and States.
- Connection to Blueberry Pollination.



Small Hive Beetle (*Aethina tumida*)

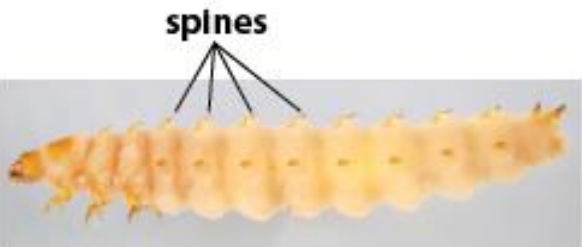
The small hive beetle larvae may resemble greater wax moth larvae (*Galleria mellonella*).

Greater wax moth larva: no spines, has prolegs



prolegs

Small hive beetle larva: spines, no prolegs



spines



Shrews

- Shrews consume ~125% of their body mass per day.
- Damage can be total.
- Guards should be ~1/4" (#3 mesh).
- Diagnose deadouts – look for bee pieces, holes in thoraces.



Photos from Fletcher Colpitts

Goodbye, we'll miss you!

Angela GOURD

Published: October 05, 2020



GOURD, Angela Dawn Angela(Hughes) Gourd passed away tragically on Sept 28th, 2020 at her home in Alma, NS. Angela was expecting her first child within a month. Born and raised in Auburn, PE, In the loving home of Lawrence and Marlene (Rogerson) Hughes. Angela was the younger sister of Julie (Brent) Keough, and older sister to Anthony (Lynn) Hughes. She was the adoring wife of Ben Gourd, and the cherished daughter-in-law of Mike and Kathy Gourd. She was loved by all of the Gourd Family. Angela was an aunt, a niece and a cousin to many. Angela was a lifelong student of agriculture. She had a deep love for all living things, with an insatiable thirst for knowledge. She will be deeply missed by all who knew her. Angela is resting Hillsboro Funeral Home, Stratford. Due to current restrictions a private family visitation and funeral service will be held. Interment will take place at St. Patrick's Cemetery, Fort Augustus. Memorial donations may be made to the Angela Gourd Memorial Fund by mailing them payable to Hillsboro Funeral Home, 2 Hollis Ave., Stratford, PE, C1B 1P3.

www.hillsborofh.ca



*Thank you,
Keep up the super work!*