

A close-up photograph of a bee on a yellow flower against a blue sky background. The bee is positioned on the right side of the frame, facing left towards the flower. The flower's petals are bright yellow and detailed. The background is a clear, vibrant blue sky. The text is overlaid on the left and center of the image.

North American Bee Strategy

A path for pollinator health
and a fair honey market

Four North American beekeeping and honey producer organizations have collaborated to develop this **North American Bee Strategy (NABS)** to promote a unified approach for the health of the industry.

We are the:

- American Beekeeping Federation
- American Honey Producers Association
- Canadian Beekeepers Federation
- Canadian Honey Council

Published November 26, 2025

Prepared by:



Introduction

This is a document that requires periodic updating as the beekeeping environment is continually changing. This document reflects the best science and knowledge at the time of its publication. It will be updated annually.

Other sources of information on these topics can be found at:

[Honey Bee Health Coalition](#)

[Honey Bee Pests](#)

[Project Apis m.](#)

We encourage input from Mexican beekeeping associations and others with knowledge to add in future editions.

Please email Matt Mulica (mmulica@keystone.org) for information on this document

Purpose

The NABS aims to unify the beekeeping industry and provide a path toward industry sustainability. Beekeepers need to have a stronger, unified voice in the face of increasing obstacles to maintaining a sustainable beekeeping industry. Commercial beekeepers across North America face similar challenges and share similar interests. We can work toward those interests more effectively together.

The following strategy focuses on external threats and internal mechanisms for success.



Importance of Honey Bees in North America

Beekeeping in the United States and Canada is an important industry. Honey bees and commercial beekeeping are vital to North American agriculture and food systems. Honey bees are the primary commercial pollinators in North America. They pollinate over 130 different crops, including fruits, nuts, and vegetables, contributing an estimated \$15-\$18 billion annually to the value of crop production in the United States [1] and \$7 billion in Canada. [2]

While not as significant as pollination, honey production is still a valuable industry. In 2023, the value of honey production in the US was around \$350 million USD. [3] The value of honey produced in Canada was around \$277 million CAD in 2023. [4]

Pollination services are essential for the health and productivity of the agricultural sector, directly impacting food security and economic stability.

A major decline in honey bee health across the United States and Canada puts agriculture, health and worldwide food security at risk. This decline has been linked to a range of factors, including pests and pathogens, pesticide exposure and a lack of forage. Protecting and promoting sustainable beekeeping practices is key to ensuring a sustainable global future.



Photo Credit Anne Marie Fauvel

North American Bee Strategy

Executive Summary

Honey bees play a critical role in North American food systems, contributing an estimated \$15-\$18 billion annually to crop production in the United States and \$7 billion in Canada through pollination. However, a major decline in bee health—linked to pests, pathogens, pesticide exposure, and lack of forage—threatens this vital industry and broader food security.

Three critical topics need to be addressed to ensure the industry's future.

Bee Health and Biosecurity - the most immediate threats to hive health.

Varroa mites are the most significant pest of honeybees, and eradication is extremely unlikely. Actively monitoring and managing Varroa in every hive is required, while rejecting a “live-and-let-die” approach to beekeeping which poses a threat to neighbouring hives. The strategy calls for ongoing research into new treatments and streamlining the registration of new Varroacides in both the U.S. and Canada.

Tropilaelaps mites: This emerging threat, not yet present in North America, is potentially “devastating” should it enter the continent. The Canadian Food Inspection Agency (CFIA) and the United States Animal and Plant Health Inspection Service (APHIS) need to develop coordinated response plans *before* the mite's arrival. Key recommendations include:

- Immediately pausing bee imports from countries where Tropilaelaps is found.
- Implementing detection methods like sentinel hives and swarm trapping at high-risk ports.
- Focusing on active management and transparency rather than historically ineffective eradication efforts.

Honey Authenticity - Beekeepers need a fair honey market.

The beekeeping industry is threatened as honey is treated as a low-cost commodity. Economic losses from fraudulent, adulterated honey imports are causing permanent damage to the industry. There is an “arms-race” between detection methods and adulteration.

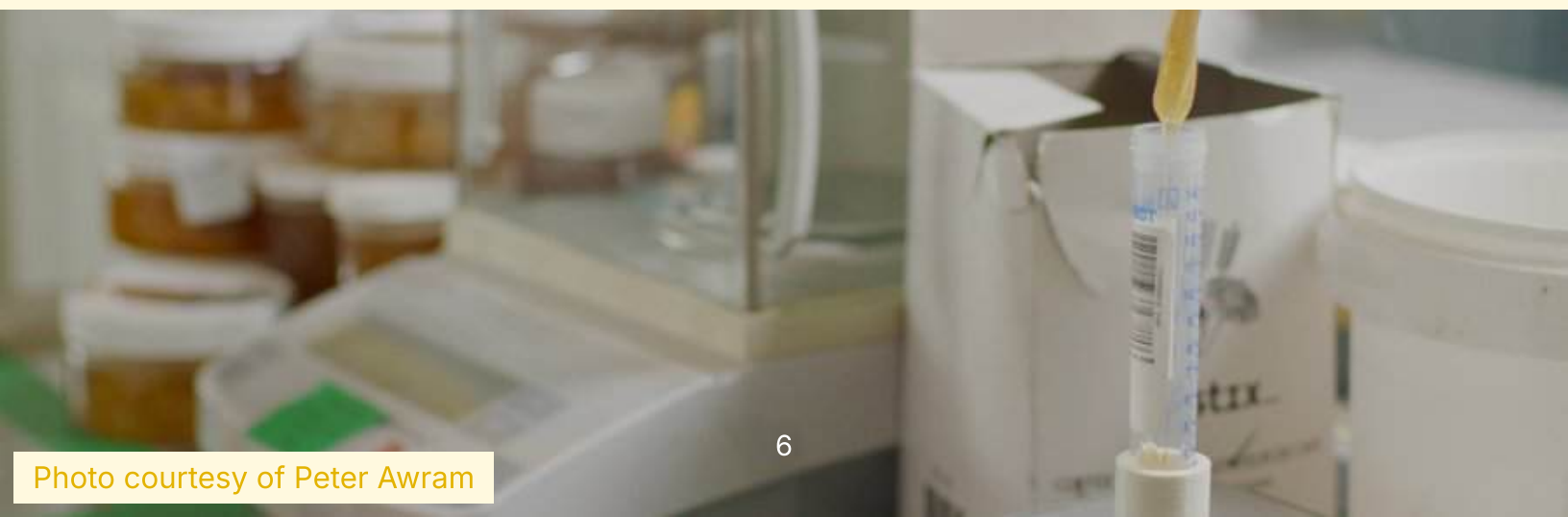
Key Solutions:

- **Standard of Identity:** Advocating for a “standard of identity” for honey, similar to wine, to elevate it from a simple commodity and celebrate its variety based on floral source and geographic region. This will increase the effectiveness of laboratory testing because honey is a very diverse food with considerable variability from region to region as well as year to year.
- **Enforcement:** Adulterated honey must be *destroyed* rather than returned or reclassified, as it often re-enters the marketplace in such situations, providing little incentive for adulterers to attempt to evade detection since the penalties are minimal.
- **Testing and Certification:** Supporting the creation of a thorough database of authentic honey samples and a voluntary certification system to ensure authenticity for consumers.

3. Research

The strategy calls for more effective, applied research to address beekeepers' immediate problems.

- **Streamlined Process:** A unified application process for research funding will make it easier for researchers to apply to multiple organizations.
- **Standardized Practices:** Encouraging the creation of standardized best practices for research protocols (e.g., measuring hive strength) so that results between different studies can be accurately compared.
- **Central Repository:** Supporting the creation of a single, searchable repository for both ongoing research proposals and final results. This would help avoid duplication, facilitate knowledge sharing, and maximize the effectiveness of research efforts.



Bee Health and Biosecurity



Varroa

Since the Varroa mite's introduction in the mid-1980s, it has spread to almost every part of North America. Active Varroa management is a necessity for all beekeepers in North America. Varroa is the most significant pest of honey bees. In addition to feeding on the fat bodies, Varroa mites also transmit a number of virulent diseases between bee colonies.

Eradication of Varroa mites from North America is extremely unlikely

All eradication efforts including those in North America, New Zealand and most recently in Australia have failed. Many beekeepers perceive certain historical eradication efforts as having caused more damage to the beekeeping industry than the pests they attempted to eradicate. Failed eradication efforts have, in some cases, contributed to a breakdown in the relationship between beekeepers and government agencies.

However, so-called "live-and-let-die" beekeeping is not an effective management technique. Varroa mites spread quickly, as evidenced by the original spread of Varroa mites throughout North America. Honey bees travel frequently between hives, allowing mites and disease to spread rapidly among bee populations. Also, ongoing Varroa infestations negatively affect the hives of neighboring beekeepers. Beekeepers who do not actively monitor and subsequently treat for Varroa, as needed, are a threat to the hives around them.

Tools for Varroa Management



Research and Development

North American beekeepers support ongoing research and development into new Varroa mite treatments, including miticides and management techniques. We also call for coordination and collaboration on Varroa mite management techniques and associated research between the U.S. and Canada. We support increased assessment across geographic regions to allow more comprehensive documenting of bee health across the North American continent.

Because Varroa mites have developed resistance to many pesticides used to control them, there is a need to quickly develop, evaluate and register new Varroacides and other emerging technologies in both the U.S. and Canada.

Collaboration to streamline the registration of future products is paramount to get these tools into the hands of beekeepers as soon as possible. Testing and registration of active ingredients that beekeepers are already utilizing, as well as effective compounds that have been developed and registered in other countries, should be prioritized.

In addition to Varroacides, other Varroa management techniques should be developed and publicized. This could include selective breeding for resistance to mites and disease, or other Integrated Pest Management techniques that promote the rotation of available Varroacides.

What Beekeepers need right now

Brood level thresholds and triggers should be developed and confirmed by the U.S. and Canada.

Additional Varroa testing methods should be developed and publicized by the U.S. and Canada.

Tropilaelaps

The Tropilaelaps mite will be devastating if it enters North America.

Researchers in Thailand report that Tropilaelaps infestations cause honey bee hives to dwindle to sizes too small to survive winters in most areas of the U.S. and Canada. U.S. and Canadian federal governments, as well as individual states and provinces, must have response plans in place to manage Tropilaelaps.

Reports indicate that beekeepers in the country of Georgia, after finding Tropilaelaps mites for the first time in 2025, are at a loss at how fast the colonies are dwindling.

Studies in packages with the live bees find that Tropilaelaps is not present after 3-4 days however, in contrast, Tropilaelaps seems to survive up to 9 days on dead bees which suggests that packages are not safe.





Photo courtesy of Maggie Gill

Research on Tropilaelaps is evolving daily

Good places to find publicly available up to date information:

[Tropilaelaps - Honey Bee Health Coalition](#)

[Tropilaelaps | PHIRA-Science](#)

[Auburn University Bees](#)

Timely detection of Tropilaelaps is crucial

The mites are very hard to see being a third the size of varroa and moving quickly on frames meaning that without considerable education monitoring methods

The UK has recently implemented 'Enhanced Sentinel Apiaries' where high risk entry points have been identified and monitored hives are placed to allow early identification of pest entry. In addition we need to limited hives around ports of entry so that it is not easy for pests to enter the continent. Sentinel hives that are checked often and signs indicating that hives are not allowed withing 5 km of entry points are needed. Early identification and procedures for mitigation need to be implemented quickly to minimize pest impact.



Export Controls

Tropilaelaps has been spreading rapidly. As of the writing of this document, Tropilaelaps was recently discovered in Europe (2025). Tropilaelaps has been confirmed in Asian countries including China, Thailand, Vietnam, and India. The identification in colder climates such as South Korea contradicts older beliefs that Tropilaelaps cannot survive in colder climates. In the Americas, there is currently little reliable information about where bees imported into Mexico, Central, and South American countries originate from.

Possible entry points for Tropilaelaps include any points of entry into the U.S. or Canada that accept package bee or queen imports. With constant trade shipments, feral bee swarms could be found on transports. We recommend that countries where Tropilaelaps has been identified should not be allowed to export bees to North America. Exports from countries where Tropilaelaps can easily reach should undergo thorough inspection regimes and evaluation for risk of unnoticed incursions.

Countries with a bad track record of inspection and disease should be banned from exporting to North America. It is also necessary to be aware that worries about economic damage has prevented countries from acknowledging the presence of pests. From a risk management viewpoint it may be necessary to restrict imports when it is likely that pest infestation may exist without public acknowledgement.

In addition to regulations and policies, beekeepers should be united on a strategy to respond to Tropilaelaps.

Efforts to eradicate honey bee pests historically have proven to be both ineffective and detrimental to the beekeeping industry. Therefore, an approach emphasizing active and intense management from the outset is essential to mitigate the spread of *Tropilaelaps*. This includes developing treatment methods and control strategies while monitoring and restricting potential entry points into North America. Plans should include adequate compensation for beekeepers and education on identification and management.

Beekeepers in the U.S. and Canada must encourage a culture of transparency that encourages early detection and disclosure of any potential pest presence.

It is crucial to foster a culture that encourages reporting without fear of business repercussions, supported by adequate compensation and education initiatives for pest identification and management.

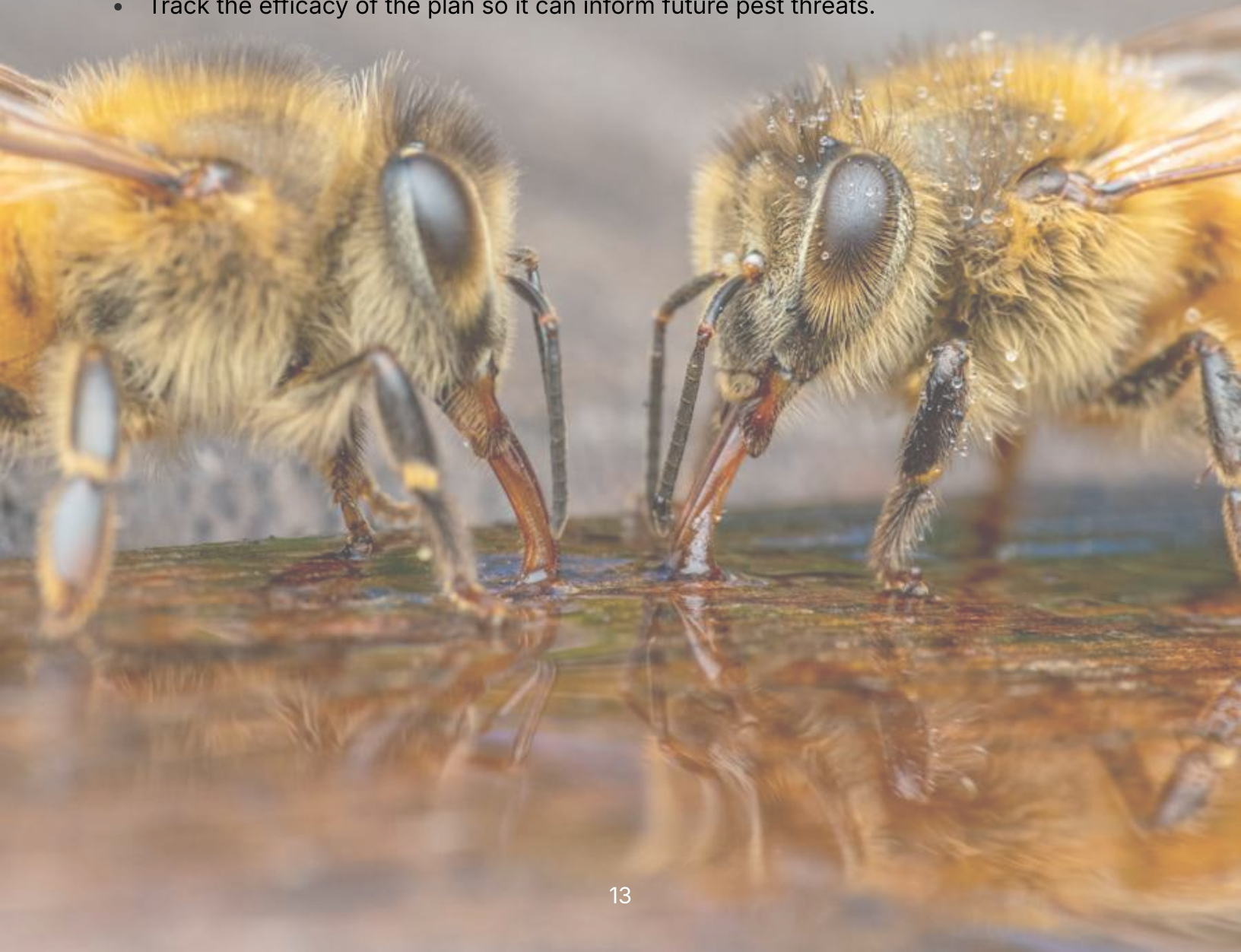


Coordinated Response Plans

It is crucial that the Canadian Food Inspection Agency (CFIA) and United States Animal and Plant Health Inspection Service (APHIS) have individual and coordinated response plans for *Tropilaelaps*.

CFIA and APHIS should pursue the following objectives when developing a coordinated response plan:

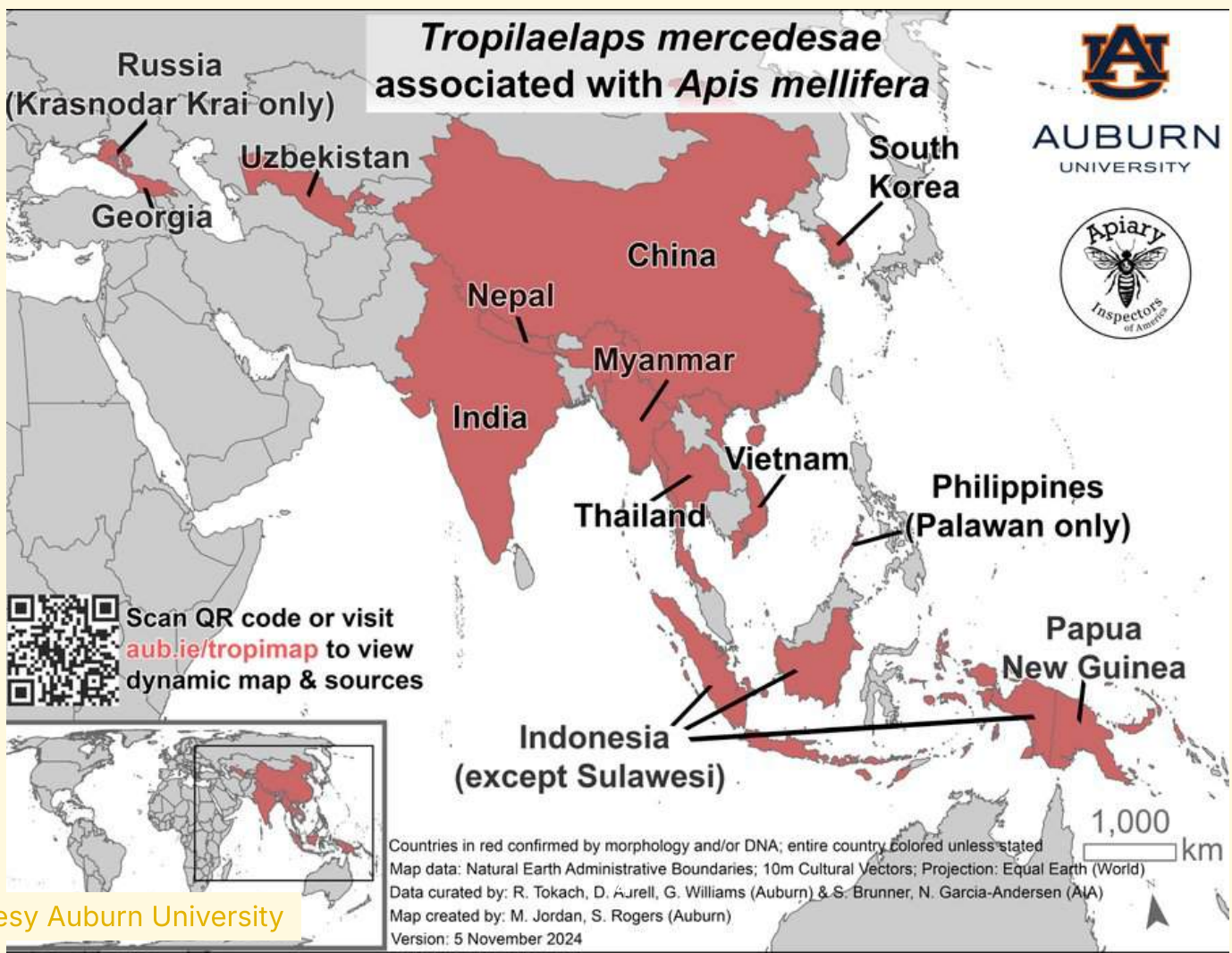
- Develop the plan prior to *Tropilaelaps*' arrival.
- Update the plan as new information comes to light.
- Track the spread of *Tropilaelaps* and institute temporary quarantine zones, with the understanding that containment has never succeeded for bee pests.
- Avoid widespread destruction of hives to eradicate *Tropilaelaps*, which may prevent beekeepers from reporting infestations and therefore be counterproductive. In a worst case scenario, this could cause uncontrolled spread.
- Include resources for identification, education, and management of infestations.
- Track the efficacy of the plan so it can inform future pest threats.



CFIA and APHIS should:

Immediately pause the import of any packages of bees from countries where *Tropilaelaps* has been found, or those countries that share a land or close water border to areas where *Tropilaelaps* has been found. Packages entering from areas in or adjacent to countries that import packages from Southeast Asia are of particular concern.

These plans are critical for the well-being of the beekeeping industry, national food security, and associated industries. Affected industries should be consulted and included in the development of the response plans.



Detection and Monitoring

Rigorous monitoring efforts are needed to prevent *Tropilaelaps* from entering North America. Methods that are useful for detection and monitoring, while being economically feasible and easily deployed include:

- Sentinel hives
- Swarm trapping at ports and other high-risk areas
- Hive monitoring - rapid brood uncapping
- Rigorous oversight and risk management analysis of bee import countries by CFIA and APHIS
- U.S. and Canadian beekeepers' awareness and *Tropilaelaps* education

We recommend that CFIA and APHIS coordinate with one another, and share their *Tropilaelaps* strategies or find areas of common concern.

Research

North American beekeepers support needed research to address questions of accurate detection, treatment, and management of *Tropilaelaps*.

Potential detection tools:

- Rapid cell uncapping [5]
- "Bump" method
- Powdered sugar shake
- Sticky bottom boards

However better methods of detection are a priority as none of these methods have proven to be definitive.

Potentially effective treatments include:

- Formic acid
- Brood breaks

Significant, additional research is also required on management of hives with *Tropilaelaps*, including establishing a treatment threshold and evaluating how *Tropilaelaps* will react to overwintering indoors and in cold climates.

We recommend the development of a multinational working group involving CFIA, APHIS, beekeepers, researchers, and state and provincial officials.

Environmental Health Issues

Pesticide Exposure

The application of crop protection products represents a significant concern for beekeepers. While acute pesticide toxicity is a recognized issue, the sublethal and synergistic effects of these compounds pose a potentially greater, yet less understood, threat to bee health and colony viability.

We advocate for rigorous, comprehensive research into these areas, extending beyond assessments of immediate mortality.

Investigations should encompass the impacts of pesticide exposure on bee navigation, immune function, foraging behavior, larval growth and development, and adult bee longevity. Furthermore, the complex interactions arising from simultaneous exposure to multiple chemical agents must be thoroughly evaluated. A deeper understanding of these factors is essential for the development of sustainable agricultural practices that mitigate risks to pollinator populations.

Lack of Forage

North American beekeepers encourage the Canadian government to implement forage incentive programs. We also encourage regulators across the United States to encourage more pollinator forage including seeking out opportunities for forage improvements. These areas may include, but are not limited to, areas around wind turbines, areas around solar panels, ditches, and verges.

North American beekeepers support using public lands as managed bee forage areas. We request that regulatory agencies consult with more than one group when making permitting decisions related to managed bees on public lands. We also request that public land managers open an increased line of communication with beekeepers regarding new bee pasture and forage opportunities.

Other Notable Threats

European Foulbrood (EFB) and its variants

The prevalence and impact of EFB varies widely. Early detection and appropriate management practices are essential to mitigate the effects of EFB on honey bee

health and productivity. More research is needed on how the disease is evolving and how it interacts with other pests and diseases.

American Foulbrood (AFB) and Antibiotic Resistance

The rise of antibiotic resistance in AFB is a concern. Addressing the spread of anti-

biotic-resistant strains of AFB requires monitoring as spores are very long-lived.

Small Hive Beetle (SHB)

Empty comb and environmental factors, including dry soils, can contribute to uncontrolled SHB. Good management is

key to controlling SHB. This includes the same practices as those controlling wax moths.

Other Wasps and Hornets

Other wasps and hornets can threaten honey bee colonies. These predators can invade hives, kill bees, and steal honey, which can weaken or even destroy a colony. Eradication efforts of pest wasps and hornets should continue if and when new populations are found, ensuring that pest populations do not cause widespread harm to beekeeping operations.

Yellow-Legged Hornet (*Vespa velutina*)

The yellow-legged hornet is an invasive predator of honeybees recently detected in Georgia (U.S.). It preys on foraging bees at hive entrances, reducing colony strength and honey yield. Native to Southeast Asia, this hornet has adapted well to temperate climates and is already established across much of Europe.





Honey Authenticity

The Honey Market

North American beekeepers seek opportunities for beneficial cooperation in honey and commercial bee markets across the United States and Canadian borders.

In the past, the Canadian and U.S. honey industries were much more aligned than they are today. Canadian honey once received preferential treatment in the U.S. market. With the current free-trade agreement, we should look to return to this beneficial relationship. In particular, Canadian Prairie honey and U.S. Midwest honey have considerable similarities. There is an opportunity to expand this market in both countries. Historically, the U.S. was the sole supplier of commercial bees to Canada, largely due to the comparable climates and geographies. The needed genetic traits for honey production in the most productive honey regions of these two countries are remarkably similar, further underscoring the potential for a cohesive, integrated market.

One of the major issues in the honey market today is how honey has been turned into a low cost commodity.

Very little is being done in the marketing of honey to distinguish varieties and local honey from imports, despite the wide variation in kinds of honey around the world. Manuka is an example of a honey that has escaped this fate by providing unique differences that make it sought after. Factors such as floral source, weather and geographic location have huge effects on the composition of honey.

Production standards vary greatly and food safety is not controlled adequately in imports. As a result, imports of variable quality and authenticity are allowed to enter and compete unfairly against local honey of higher quality. By emphasizing unique differences between honey we can stop competing on price alone. There is a concern that the technology being used to adulterate honey is moving faster than our ability to test pure, unadulterated honey. The processes being used to adulterate honey are being adopted in multiple countries and leading to confusion in the marketplace and economic losses for North American beekeepers. Existing enforcement has not led to major changes in the level of honey fraud, often because penalties are nominal and customs will reclassify fraudulent imports.

Adulterated honey must be destroyed.

Reclassification or returning to its origin is not acceptable. Too often beekeepers have seen adulterated honey returned to the marketplace when it is not destroyed providing little punitive effect.

How Honey is Adulterated


Several modes of honey production and processing are used to adulterate honey for economic gain. The methods listed in the following table violate international standards and create unfair competition in the honey marketplace.



Table 1: Modes of honey production and processing that violate the Codex Standard (1981) and the European Honey Council Directive 2001/110/EC (2001).

	PRACTICE	WHAT IS VIOLATED?
PRODUCTION	Harvesting of immature honey as a systematic and purposeful mode of production	<ul style="list-style-type: none"> - Bees have insufficient time to mature honey and add specific substances of their own by multiple manipulations. - The transformation of nectar into honey is only partially made by bees, and human intervention completes the process in an illicit manner.
	Artificial feeding of bees during a nectar flow.	<ul style="list-style-type: none"> - Honey must only be produced by honey bees from the nectar of plants or from secretions of living parts of plants or excretions of plant-sucking insects on the living parts of plants.
PROCESSING	Honey dilution with syrups.	<ul style="list-style-type: none"> - Any additions to honey other than honey are ruled out (including those substances that are contained naturally in honey).
	Dehydration of extracted immature honey with technical devices, such as vacuum dryers, etc.	<ul style="list-style-type: none"> - Moisture reduction of immature honey is an inseparable part of the maturation process, which must be done exclusively by bees.
	Use of Ion-Exchange Resins to remove residues, offensive aroma, constitutes important for quality control (HMF), and lighten the color of honey.	<ul style="list-style-type: none"> - Honey shall not be processed to such an extent that its essential composition is changed and/or its quality is impaired. No pollen or constituents particular to honey may be removed.
	Pollen addition to honey with the purpose of disguising the botanical and/or geographical origin of the product.	<ul style="list-style-type: none"> - Any additions to honey other than honey are ruled out (including those substances that are contained naturally in honey).
	Masking and/or mislabeling the geographical and/or botanical origin of honey.	<ul style="list-style-type: none"> - Honey may be designated by the name of the geographical region if the honey was produced exclusively within the area referred to in the designation. Honey may be designated according to floral or plant source if it comes wholly or mainly from that particular source and has the organoleptic, physico-chemical and microscopic properties corresponding with that origin.

Source: Apimondia Statement on Honey Fraud



"Standards of Identity" show the unique character of honey.

North American beekeepers support federal oversight on the issue of honey testing to encourage a level playing field. There is a need for a standard of identity for commercially significant kinds of honey that allows for enforcement. Fraudulent, adulterated honey should be identified in the marketplace and on ingredients lists, so that the public understands what they are consuming (i.e. by region, by floral resources, etc.). A standard of identity serves two purposes:

1. It elevates honey from a commodity, where price alone dictates its value, to a product celebrated for its variety and regional uniqueness. Much like wine, this would create interest and value for honeys based on their variety and region. Since honey will never be the cheapest sweetener, marketing strategies should emphasize its unique qualities and inherent value. This means that cheap imports cannot easily replace high-quality honey and displace the North American industry.
2. It improves the ease of testing. One of the biggest issues in honey testing is the great variability among different kinds of honey. More specific standards based on floral source and geographic region will greatly increase the ability to rapidly test and screen honey to accurately determine its authenticity. Federal guidelines should enforce the best available science.
3. We support the US Pharmacopeia Standard, but for fingerprinting techniques to work we need much more detailed standards

Honey fraud is out of control worldwide.

Governments, in cooperation with industry, need to be pushed toward creating a standard of identity for honey. However, even without government standards, beekeepers, packers and other honey sellers should develop standards of identity that can lead to a healthier honey market for all participants.

Beekeepers and beekeeping organizations must continue pushing for legislation that protects the industry and consumers from fraudulent honey.



Identification of Fraudulent and Poor-Quality Honey

North American beekeepers support the creation of a thorough database of honey samples for each testing method, overseen by an independent body.

To combat honey fraud and ensure high quality, a rigorous and robust honey database is imperative. This database should incorporate both private and governmental testing. A method for obtaining samples that are traceable to source and year must be developed. Authentic samples should be collected using protocols like those

outlined in the UK's honey reference sample collection protocol.

A honey testing method should utilize the most rigorous, up-to-date techniques, such as Nuclear Magnetic Resonance (NMR) and mass spectrometry, which have already been thoroughly researched and detect at atomic levels.

Importers and packers should be required to share lab test results with CFIA, FDA and/or customs.

North American beekeepers support the creation of a voluntary certification system to ensure honey authenticity.

Potential partners in this endeavour include the American Beekeeping Federation, the American Honey Producers Association, the Canadian Beekeepers Federation, the Canadian Honey Council, and the National Honey Board.

A key aspect of this certification process is working to prevent the blending of honey from distinct geographic regions (e.g., provinces, states, countries). Blended honey may lead to uncertainty in results and exploitation of testing loopholes.

North American beekeepers support holding accountable any parties who attempt to sell fraudulent honey or avoid paying appropriate tariffs or duties on imported honey.

North American beekeepers support increasing consumer awareness about adulterated honey and providing resources to help consumers determine their preferred honey.



Research

Beekeepers need applied research to address immediate problems in hive health that currently lead to high losses, increased costs, and threats to our food systems.

North American beekeepers support creating streamlined methods to enable further research on important and emerging issues including:

- Varroa management
- Tropilaelaps management and detection
- Breeding for disease resistance
- Interactions between native and managed pollinators
- Emerging pests and diseases
- Methods for detecting honey adulteration



Unified Application Process

We acknowledge the time and effort required in putting forth a research proposal. We support, where possible, moving funding for honey bee research to Project Apis m. (PAm.) Where not possible, we support developing a standardized format for applications modeled after PAm.'s. Standardizing formats and providing basic outlines will create efficiencies for researchers when applying for funds through multiple sources.

A standardized application process for funding would enable a researcher to write a single proposal for submission at multiple funding organizations with minimal changes. Items to include could be:

What is being tested and examined in the proposed research?

- What essential and important problem is being solved? How will the result apply to beekeepers?
- Will this research produce a final solution or will it lead to further research? Both are legitimate topics for study but organizations should consider how future funding will be obtained to take the research to the final solution.
- Can the solution be practically applied directly by beekeepers or does it require an organization to take the solution to market? Is it appropriate to seek out a partner for the research?
- What previous research is out there and what other groups are working on this problem?

What resources are required and are they reasonable for the problem being asked?

What is the ROI on the research? While there is a need for basic research, in the current beekeeping environment, a focus needs to be placed on research with immediate applied benefits.

Best Practices

Encouraging effective research on honey bees should also include creating standardized best practices for research protocols on honeybees. These could address factors such as:

- Incentives for multiple groups across the country to consult and/or work together. For example, a central searchable repository for proposals.
- Basic practices for measuring hive strength, Varroa levels, hive growth, etc. There is a need for a high level of accuracy that allows results between studies to be compared.
- Proper statistical analysis and consistent metrics for calculating hive numbers and other important values for determining significance. These calculations would then form part of the proposal and evaluation process to ensure the validity of results and comparison between studies.

Reporting

North American beekeepers support creating effective methods to report research results and avoid duplication in order to maximize the effectiveness of research efforts and resources.

We support the creation of a single repository of research on bees which would include:

- Standardized summary reports generated by researchers at the end of experiments that can be easily searched - Include both summaries in layman terms and searchable keywords
- Searchable summaries of proposals generated using the standardized form to allow people to identify what research is currently ongoing.
- A secure environment where researchers can talk about research plans, solicit input and collaborators, and post proposal designs and preliminary results for comment.

This repository will facilitate knowledge sharing and collaboration among researchers, avoid duplication and promote innovative solutions.

The NSERC Funding Database and databases managed by Project Apis m. and the United State Department of Agriculture (USDA) can contribute to a centralized repository of funding opportunities and results.

Conclusion

North American beekeepers continue to see declines in bee health as outlined in this document. This has made it harder for operations to stay financially viable as beekeepers support food production. The North American Bee Health Strategy is intended to promote cross-border communication between beekeepers, researchers, policy makers and bee health stakeholders on honey bee issues to address the shared challenges we face.

These include:

Effective Pest and Disease Management: Beekeepers require support for the active monitoring and management of pests like Varroa mites, which are a major threat to hive health. The plan recognizes that eradication is unlikely and promotes ongoing research and development of new treatments and techniques, including miticides and cultural controls.

Protection Against Emerging Threats: Beekeepers need comprehensive response plans for emerging threats like Tropilaelaps mites, which could be devastating to North American bee populations if introduced. This could include improvements to monitoring of imports, export controls, early detection methods, and treatment strategies. Funding for sentinel hives and swarm trapping and similar mechanisms are essential to detect unintentional importation at ports and borders.

Solutions to Honey Adulteration: Beekeepers require measures to ensure the authenticity of honey in the marketplace, including a standard of identity for honey to differentiate it from fraudulent or low-quality imports. This also includes the creation of a voluntary certification system, and a thorough database of honey samples with standard testing methods.

Support for Research and Development: Beekeepers need access to applied research that addresses immediate problems in hive health. This includes streamlined research funding, standardized best practices for research protocols, and a single repository for research results.

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Acknowledgements

Thanks to the NABS Drafting Committee:

Peter Awram - Canadian Beekeeping Federation
Samantha Brunner - Ex-officio, Apiary Inspectors of America (United States)
Steven Coy - American Honey Producers Association
Chris Hiatt - American Honey Producers Association
Elizabeth Hill - Ex-officio, USDA Office of the Chief Scientist
Derek Micholson - Ex-officio, Apiary Inspectors of America (Canada)
Samantha Muirhead - Ex-officio, Apiary Inspectors of America (Canada)
Jeremy Olthof - Canadian Honey Council
Mike Paradis - Canadian Beekeeping Federation
Rod Scarlett - Canadian Honey Council
Patty Sundberg - American Beekeeping Federation
Tim Wilbanks - American Beekeeping Federation
Dan Winter - American Beekeeping Federation

Special thanks to the Honey Bee Health Coalition for facilitating the development of the North American Bee Strategy.

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Margaret McGuirk