International Honey Market

by RON PHIPPS

Introduction — A dramatic sea change is on the horizon

A sea change faces the International Honey Market after decades of deeply depressed prices which have brought beekeepers to the edge of a devastating collapse. It is a result of the cumulative consequences of an international market plagued by "multiple modern modes of adulteration" (MMMA) of honey, antidumping orders, the emergence of tariff wars, global climate change, and reduced productivity. International awareness of, and opposition to, MMMA has grown both scientifically and legally.

As we write, the U.S. 2026 honey crop is estimated to be less than 100 million lbs., provoking a surge in both demand and prices. White Sage has reached USD $3.50/lb. White Clover from Montana, South Dakota and North Dakota is being offered at $2.50/lb., and Orange honey at $3.00/lb. This is an unusually small crop, and demand and prices will likely continue to soar.

Both the North American and European honey crops are coming to their conclusion, and South America's are on the horizon. Existing inventories also bear upon market demand and prices.

Observers see clearly that a collapse in honey prices, correlated adulteration and a flood of exports of such pseudo honey, led to a collapse in production of authentic honey, as the incentive to produce eroded and beekeepers faced bankruptcy. The anguish of domestic beekeepers as they are compelled to sell their bees has been palpable.

The year 2026 has also been plagued by international tariff turmoil. American beekeepers support antidumping and other tariffs and introduced the concept of a temporary moratorium on honey imports, as indicated in their comments on the Section 301 tariffs. However, honey importers and packers are requesting relief from Section 301 tariffs, while supporting an increase in the assessment rate for the National Honey Board. Perspectives have strongly diverged.

Foreign honey companies continue their acquisition of honey packers and also accelerate their acquisition of beekeeping operations. Those interests seem to have integrated operations from which they can manipulate and control the honey market. More economists and government officials are aware of this monopolistic movement in the honey industry. We anticipate that unless this tendency is corrected, and adulteration in its many modes is punished and prohibited, prices will remain stagnant.

U.S. honey prices and imports

U.S. honey production was down 14 percent in 2025, totaling 116 million pounds. There were 2.41 million colonies producing honey in 2025, down 7 percent from 2024. Yield per colony averaged 48.0 pounds, down 7 percent from 2024, and producer honey stocks were 34.8 million pounds on December 15, 2025, down 15 percent from a year earlier (USDA NASS Honey Report).

With a vastly diminished 2026 American crop, prices of U.S. White honey were surging in August. Texas Tallow in the Light Amber range has been offered at $3.00/lb. A combination of factors, including extreme heat in the summer months, has led to a smaller crop.

Import prices for main sources of honey for the U.S. vs. the prices paid to beekeepers (not the local farmers market retail prices) are drastically low. Chart 1 shows prices paid to U.S. beekeepers vs. prices paid to exporters for foreign honey.

Comparing honey prices to the consumer price index, from 2021-2025 the consumer price index rose 18.8%. Looking at the graph of prices paid to beekeepers over 10 years (Chart 3), we see that the starting and ending price for White Dakota Clover was unchanged at $2.00/lb. This represents a decline of remuneration for beekeepers.

It peaked briefly in January, 2022, and has declined since. Dr. Daberkow often points out that when a product like honey is being sold below the cost of production, the product is adulterated, not authentic. In previous charts we compared the price sold at retail with the price sold by packers to retailers and found a small gap, whereas

Domestic Honey		Imported Honey	
Dakota Clover White	$1.75/lb.	India	$.065/lb. FOB
		Vietnam	$.056/lb. FOB
Specialty honeys	$2.60/lb.	Argentina	$1.15/lb. FOB
		Brazil	$1.92/lb. FOB
Source: National Honey Report data			

Chart 1 *Average prices of U.S. domestic vs. imported honey in July 2026*

prices paid to beekeepers had a wide gap with packer's prices. This suggests that not only are the beekeepers being disadvantaged but so are retailers.

Shortages of white honey are also affecting the European market, which is strengthening week by week. Besides the global weather disasters, the imposition of duties is creating irresistible upward push. Legal actions are unfurling.

During the past three years, the total volume of U.S. imports of honey has increased significantly (Chart 4).

Concerns about the imposition of increased tariffs in 2026 have resulted in more honey coming in from India and Argentina in the first 6 months of 2026. The IEEPA tariffs imposed during 2025 resulted in the payment of additional 20-30% duties as well

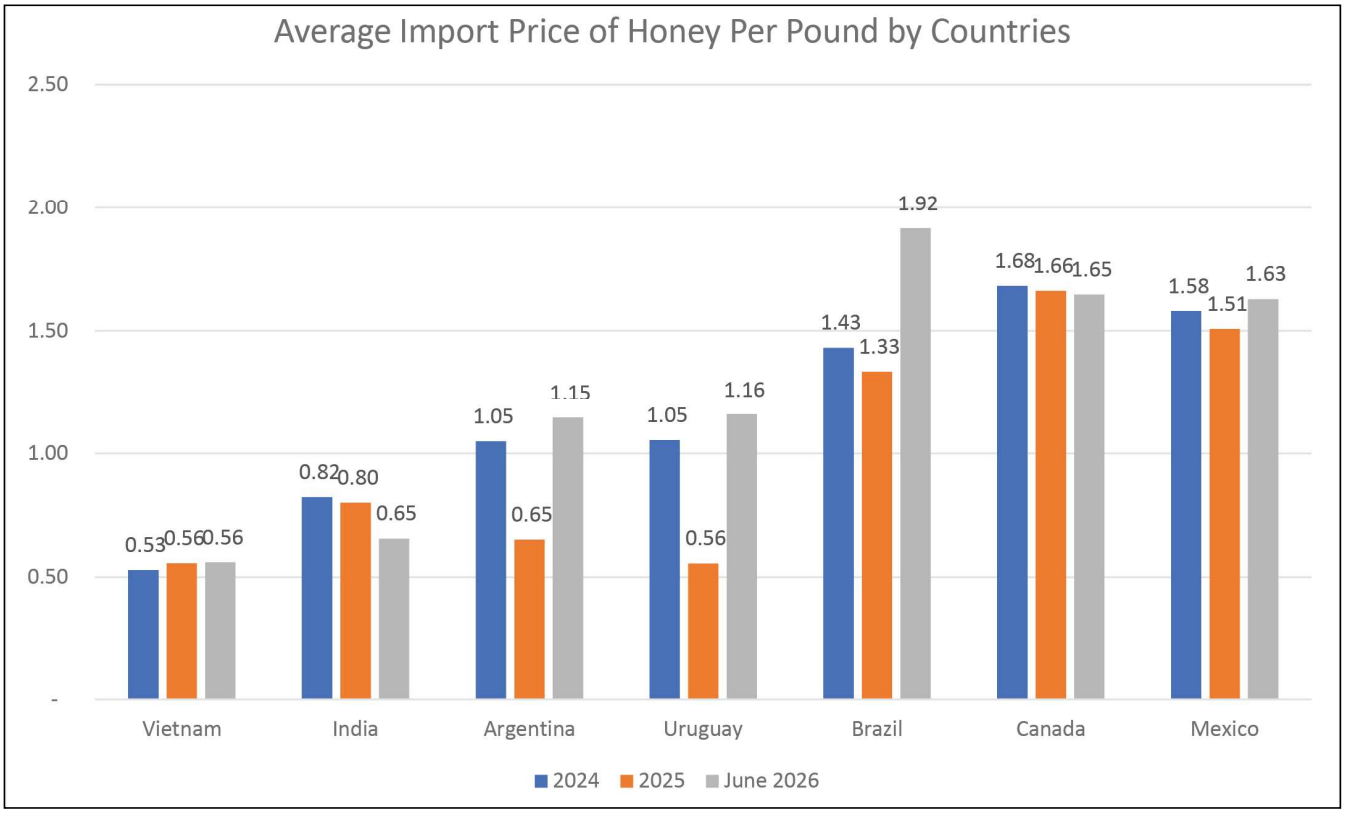

Chart 2 *Average price of U.S. honey imports 2024-2026*

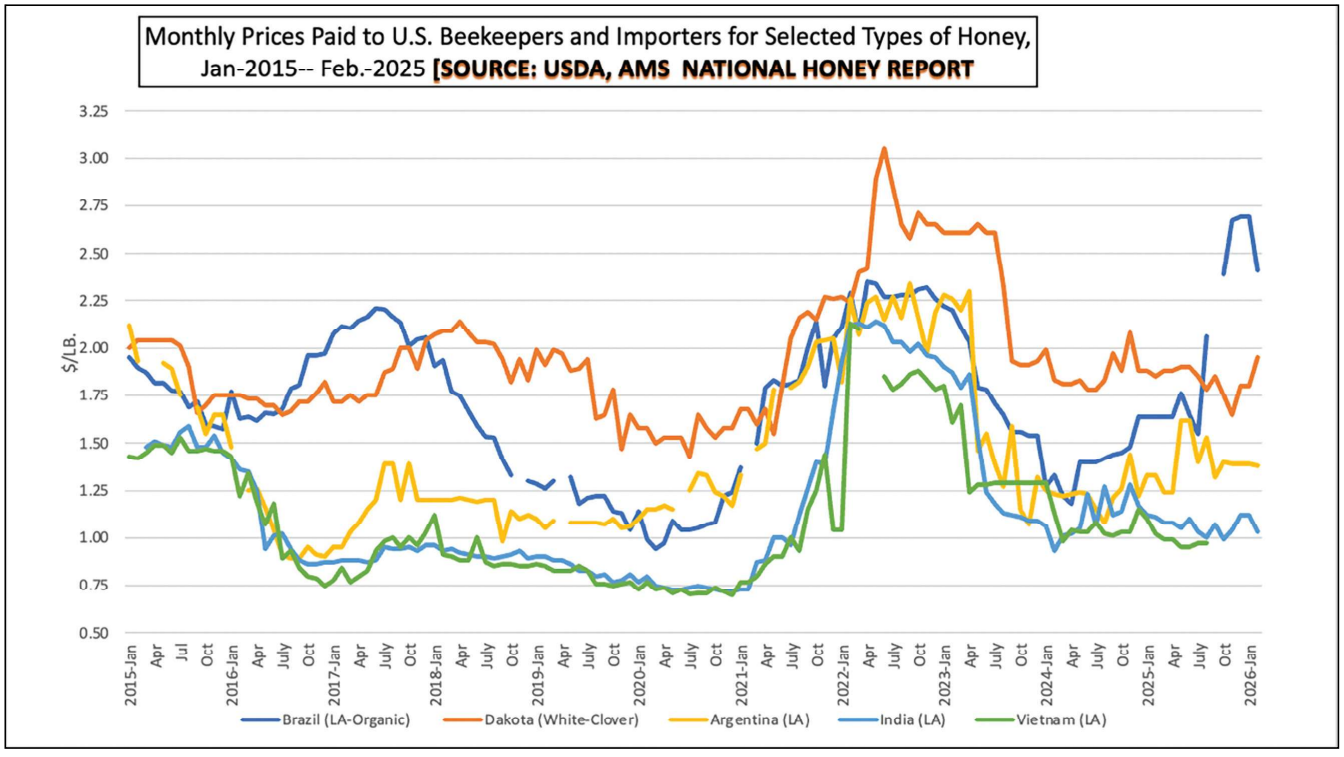

Chart 3 *Monthly prices paid to U.S. beekeepers and importers 2015-2025. Prepared by Dr. Stan Daberkow, Economist Emeritus, USDA (ret.).*

U.S. Honey Imports from all countries in pounds (millions)			
2023	2024	2025	2026 June YTD
439.152	561.905	540.314	286.508

Chart 4

as efforts to build up inventories in advance of the continuous threat of increased tariffs.

U.S. IMPORTS OF RETAIL PACKAGED HONEY

It is also notable that the U.S. market for imported, retail packaged honey reached about $36,000,000 (FOB not including duty, tariffs, freight or import costs) for the first half of 2026, with over 100 countries exporting, including New Zealand, Turkey, Egypt, India, and China. Comb and retail packaged honey are not subject to antidumping duties, a clear advantage for this classification.

The price at a grocery retail store for 2 lbs. of Egyptian honey in August 2026 was $10.00, or $5.00/lb. If we look at the average cost of Egyptian retail packaged honey in 2026, it was $4.59/lb. FOB (National Honey Report data). We have to wonder, where is there a profit in such transactions, when the cost of freight, tariffs, insurance, trucking, storage and other services greatly add to the cost of the product before it reaches the store shelf? Some foreign producers are known to receive export incentives in order to increase the amount of foreign exchange coming in to their country. Imported packaged honey currently represents a competitive threat to beekeepers and the U.S. honey industry.

2026 TARIFFS AND ANTIDUMPING ORDERS

As the whole honey world knows, there have been tremendous conflict and changes in the tariff regimes which apply to honey imported into the U.S. The fluctuating tariffs as well as the MMMA have jointly created a very uneven playing field for imports. After the IEEPA tariffs expired, Section 301 tariffs (on forced-labor grounds) were announced on July 23, 2026. Argentina and India received a 10% tariff, and Vietnam and Brazil got 12.5%.

In July 2026, the National Honey Packers and Dealers Association asked the government to exempt honey imports from the Section 301 tariffs. The American Honey Producers Association proposed that a 6-month ban on all imports of honey from India, Vietnam, Argentina and Brazil be implemented, followed by tariffs of 50% on honey imports from those countries. The perspectives and interests of the packers and importers could not be more different than those of U.S. honey producers.

The U.S. government has announced a 50% tariff on imports from Canada, — discussed later under the heading "Canada."

Total tariffs (or proposed tariffs) on honey from major exporting countries, duties which must be paid at the time of entry of cargo into the U.S., range from zero to 50%.

Argentina received the following estimated weighted-average dumping margin for the period June 1, 2023, through May 31, 2024:

Exporter or producer	Weighted-average dumping margin (percent)
Asociación De Cooperativas Argentinas Cooperativa Limitada	21.35
NEXCO S.A	0.00
Review-Specific Rate for Non-Examined Companies	21.35

In June 2026, the U.S. Department of Commerce (DOC) issued its final results for the second administrative review of raw honey from Vietnam:

- **Mandatory Respondents**: Specific investigated exporters are subject to individual rates of **8.83%** and **26.77%**.

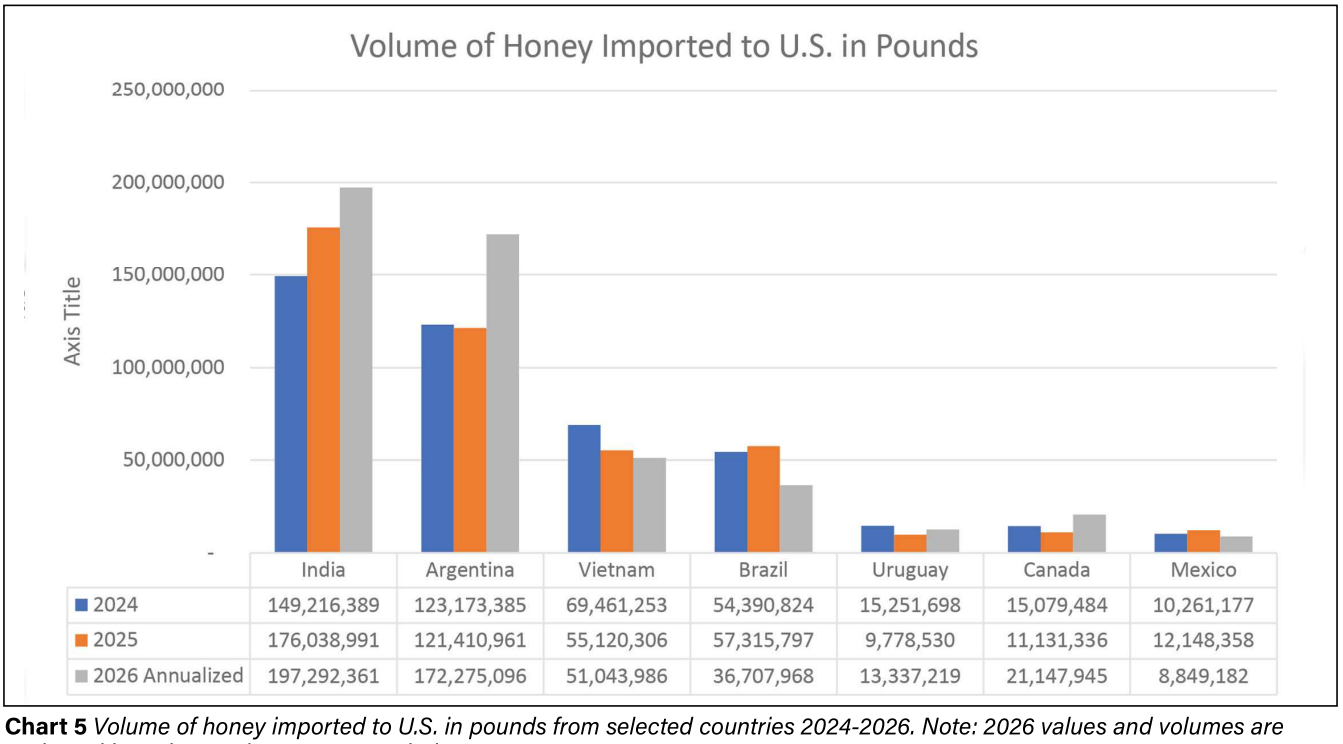

Chart 5 *Volume of honey imported to U.S. in pounds from selected countries 2024-2026. Note: 2026 values and volumes are projected based upon the Jan-June period.*

- **Separate Rate Exporters**: 12 eligible Vietnamese companies received a calculated rate of **14.14%**.
- **Vietnam-Wide Entity Rate**: For all other exporters that did not establish separate rate eligibility, a default country-wide rate of **60.03%** applies.
- **Section 301 Tariff:** Effective July 24, 2026, the Office of the United States Trade Representative (USTR) implemented a new 12.5% blanket tariff on imports from Vietnam following a global forced labor investigation. Honey was not granted an exemption from this measure.

China honey is subject to a weight-based ADD of $2.63/kg., since Chinese exporters asserted extremely low values for their honey exports which allowed them to effectively skirt anti-dumping duties.

This unprecedented era of tariff turmoil is ripe with retaliatory processes which threaten global inflation and division among long term allies.

Cost of production and multiple modern modes of adulteration

During the past several decades, the international honey market has witnessed, and leading American beekeepers have observed, the emergence of MMMA. As the Chinese and many others have witnessed, the extraction of immature, green and unripened honey, which does not attain the essential attributes of authentic honey, can result in the production of huge quantities with minimal cost of production. Dr. Gudrun Beck pointed out when NMR testing first emerged that the NMR profiles of immature honey had the same profiles as nectar. Honey scientists studying authentic honey at the American Honey Institute see that ingredients from the bees are transferred to the honey in the production of honey from nectar, and specific chemicals are present in authentic honey. They are exploring novel scientific ways to differentiate mature from immature honey.

In addition is the use of resin technology to remove residues such as illegal antibiotics and offensive flavors which make the honey unmarketable, and can transform dark colors into light colors. The FDA has written a letter stating that any "honey" product processed with resin technology cannot be sold as "honey."

A new wave of adulteration emerged with the bioengineered sweeteners from beets and rice which can evade detection by the traditional SCIRA test used by the FDA. Even though these alternative sweeteners were being broadly used, availability of the small number of samples of the sweeteners were cut off by Chinese suppliers, so that the database of sweeteners for some detection methods became frozen.

Bernhard Heuvel, President of the European Professional Beekeepers Association, is proposing a U.S. conference to discuss European and North American scientific cooperation in order to expose the modern plague of honey adulteration. We should acknowledge that beekeepers in many countries, including India, strongly object to these modes of adulteration which devastate India's own production of legitimate honey. Dr. Jeff Pettis, a prominent honey scientist in America and former President of Apimondia, has been crystal clear that we need to prevent illegitimate modes of production. The failure to do so has resulted in the collapse in prices and contributed to the collapse in productivity.

We are launching systematic studies of the cost of production of legitimate, authentic and pure honey. These studies, we believe, will make it crystal clear that the protracted low prices of exported honey, which we have documented, are below the cost of production of authentic honey. Cost of production is being discussed in Europe, Canada, Mexico and the U.S. In Argentina there are experts, led by Dr. Enrique Bedascarrasbure, in the production of authentic honey in tropical and semitropical regions and climates where we hope to understand the cost of production.

Bret Adee, Dr. Stan Daberkow and Bernhard Heuvel are contributing to this effort. The decline of prices paid to U.S. beekeepers over the past decade flies in the face of the increase of the cost of production which is accelerated by the decline in productivity per hive, which fact we have documented for a long time.

Honey producer Chris Hiatt was interviewed on April 10, 2026, on the well-known radio program Freakonomics which described beekeepers' challenges from food fraud in depth (**https://freakonomics.com/podcast/beeconomics-101/**).

We anticipate that in the future all honey will have to specify both 1) the detailed conditions and place of production; and 2) the modes of production utilized to produce the honey. Such knowledge is essential to assessing the purity and authenticity of the purported honey. This information is a vital complement to the type of advanced traceability system already in place in Argentina. Conditions such as acidity, rainfall, elevation, floral sources, soil content, harvest time, and moisture reduction procedure are relevant variables. An outline of an FDA honey research protocol asserted the need for more exhaustive and comprehensive data.

Several years ago, the Joint Research Center in Belgium analyzed honey found in the European market — which is a relatively strict and scientifically advanced market — and found 46% of the honey samples drawn from commercial and retail channels suspicious of adulteration. If the emerging methods of detection, including of immature, green, water unripened honey were used, many scientists estimate that the figure would be 80-95%. (Some Indian and Chinese exporters have admitted to producing 100 and 95 percent, respectively, of their "honey" from unripened nectar.)

China is the largest global exporter of honey, with 386,900,000 pounds exported in 2025 at an average value of $1.37/kg. or $0.62/lb. FOB. India is the largest exporter of honey to the U.S. with 176,038,000 pounds exported in 2025 at an average value of $0.80/lb., which declined to $0.65/lb. in 2026. These two countries have gained dominant positions by selling at low prices and using multiple modes of adulteration.

During a visit to Belgium, I introduced the concept of MMMA. I also affirmed the fundamental correctness of the Codex statement that honey is a product of "the complete interaction of bees and flowers" which transforms nectar into honey.

India

No country has had a bigger or more devastating impact upon the American honey market than India. We have provided a full range of statistical data on quantities imported from India in previous International Honey Market Reports in this journal.

A news report from India has attracted attention of beekeepers throughout the world, and is being circulated in the U.S., Canada and other countries. In 2025, Indian beekeepers gathered at honey packing

factories and demanded the purchase price that they had negotiated previously but which was not paid. They accused the honey exporters of selling adulterated honey by mixing 80% syrup with 20% honey. The cost of the sugar syrup is about 50% of the cost of honey. The beekeepers demanded advanced lab testing such as Nuclear Magnetic Resonance or High-Resolution Mass Spectrometry to detect the adulteration. The President of the Indian beekeeping association claimed that 70-90% of the domestic honey sold in India is adulterated with syrup (Tohit Mullick, *Times of India*, 3/10/2025). Complaints about adulterated honey in the domestic Indian market were made by a leader of the Bee Farmers' Welfare Society (MKBWS).

Honey standards

Everyone professes to be for standards. There is a profound illusion that standards will cure the problem of massive amounts of adulteration. Along with the evolving modes of honey adulteration, we have seen evolving, sophisticated modes of detection. Most recently the Hydrophilic Interaction Liquid Chromatography (HILIC) test, with a database of honey and sugar syrup signatures (beet and rice), has been introduced to address the need to identify new adulterants from rice and beet sources. This test is available from German laboratories, as reported by Dr. Martin Linkogel of QSI.

Standards are only as good as: 1) the validity, depth and breadth of those standards, and 2) the enforcement of those standards by the government, the retailers and food manufacturers. A honey standard should apply equally to honey in its various uses such as consumer retail, food service, industrial, and pharmaceutical.

American beekeepers have written to Robert F. Kennedy, Jr., Secretary of Health and Human Services, requesting that the FDA take actions to protect American consumers from fraudulent honey by:

1. Implementing a standard of identity that allows for enforcement actions on economically motivated adulteration (EMA) of honey.
2. Conducting adulteration enforcement using multiple testing and analytical methods, including SCIRA, HPAEC-PAD, LC-HRMS, H-NMR spectroscopy, pollen analysis, DNA barcoding, and proteomics.
3. Collaborating with independent scientists, academic researchers, and industry expert techniques.
4. Increasing the number of samples tested to provide statistically meaningful results representative of the U.S. marketplace.

It was pointed out that the number of samples of imported honey which were tested in a 2025 FDA survey were 50% of total samples collected, when imported honey was 82% of the market in that year. A total of 102 samples were collected, and only 48 were of imported honey. The carbon isotope test methodology which was used, the SCIRA test (AOAC Official Method 998.12), only identifies C4 corn and sugar cane syrups, which are not currently the main mode of honey adulteration.

The Honey Integrity Act H.R.2162 was proposed in March 2026 and is in the legislative process. The Act proposes the use of the USP honey standard.

Dr. Michael Roberts, Executive Director of the Resnick Center for Food Law and Policy, has concluded that merely lamenting the prevalence of honey adulteration is ineffective, and legal measures need to be taken to enforce the regulations against food fraud and strongly punish those who persistently and unrepentantly violate them.

Norberto Garcia has cooperated for a long time in battling the adulteration of honey and we have written and spoken together. Netflix presented the documentary Rotten, whose impact continues. Norberto asserted regarding honey adulteration: "It is fraud and it is a crime."

The beekeeping community in Europe is concerned about the ISO honey standard and various efforts from China, Great Britain and New Zealand to try to change the definition of honey. Many voices are silent on this subject. The efforts are seen as attempts to change Codex, and are led by China because they want to legalize their modes of production so that they can explode the quantities, collapse the prices, maximize their profit and dominate the world market. One Chinese honey official told us that after the People's Republic of China was formed, officials wanted to provide cheap sweeteners in huge quantities at low prices to satisfy "poor and working people," but Chinese methods were soon exported to other countries.

National Honey Board

The order that initiated the establishment of the National Honey Board (NHB) in 1984 was passed during a time when U.S.-produced honey commanded about 80% of the U.S. market. In 2026, that share has dwindled to about 18%. Bret Adee, who is a leading beekeeper and a scholar of the history of American beekeepers, has recently brought attention to this history.

Its original objective was the maintenance and expansion of existing honey markets and the development of new or improved markets for U.S. beekeepers. Clearly that mission has been a failure from the perspective of the U.S. honey producer. The market for imported, low priced honey has greatly expanded for many countries, most startlingly for India.

Honey producers recently commented on the National Honey Packers and Dealers' proposal to increase the assessment collected for the NHB. One such comment: "The NHB's current use of funds is not aligned with supporting the domestic honey industry and is causing harm to the U.S. honey producers."

A flood of pseudo honey, first from China and later from India, caused a collapse and stagnation in prices which robbed beekeepers of incentives, in complete frustration of the goals which were explicit at the time of the formation of the NHB. The current American honey market is not a market for authentic honey produced in accordance with the Codex definition.

All this has caused beekeepers to reflect upon the origin of the National Honey Board. The original mandate was a board controlled by beekeepers. All segments of the industry came together to better market authentic honey. The fundamental concern is that the growth of the honey market has been quantitative, not qualitative, and products highly suspected of adulteration are dominating the marketplace. Those who are benefitting financially from fraud will never successfully police themselves. Fraud in the international honey industry has been found in high and low prices, but its impact jeopardizes the individual consumer and global food security because of the essential role bees play in global agriculture.

Science and bees

During the recent two decades, there has been an increase of very interest-

ing science articles about bees, their capacities and their vulnerability. My friend Dr. Eve Menger, former director of the National Science Foundation, sent me an article on the brains of bees and their receptiveness to the environment. Another report described the evolutionary role that bees have played through their interaction with botanical and zoological life and the human brain. The bees' pollination of diverse fruits led to increased food production and consumption of sugars by humans, which in turn led to the enlargement of the sophisticated human brain. This is also interesting in that the Codex Definition of Honey requires the completed interaction of the bees and nectar, which is essential to the creation of authentic honey. We note that there are some big players in the international honey industry who would like to throw out this definition.

Federico Berron, who has effectively worked with the Mexican government on behalf of Mexican beekeepers, has pointed out that one of the greatest virtues of bees is their creation of a deeply integrated social network.

Honey exporting countries

Argentina

Argentina has greatly exceeded its 65,000-ton average annual honey export volume and is now consolidating an annual honey export of around 90,000 tons. They expect to finish 2026 with around 95,000 tons of exported honey, with the U.S. market representing around 60 percent of honey exports (about 125 million pounds).

All this growth is backed by a steady increase in the number of beehives, which can be tracked through Argentina's official statistics. All beehives in Argentina have to be declared and georeferenced through an online registry, a system which was implemented in 2016. In August 2026, an electronic transit document came into effect for honey supers. The European market requires knowledge of the location of the beehives where the honey was produced. It may be the only country with a nationwide honey traceability system. This year authorities are pushing beekeepers to go a step forward and start the traceability system at the apiary and not only from the honey extraction room.

Some favourable winds are that the price of meat is encouraging the increase in the surface of pasture lands, which benefits beekeeping. The fields of sunflowers (due to the war in Ukraine) and canola are also increasing. Weather forecasts are announcing El Niño, which brings floods but also good crops in the central area of the country where the main production of honey occurs.

Meanwhile, the prices of honey are firm and increasing after the last result of the antidumping investigation which resulted in 0 for NEXCO and +17 per cent to all other export companies from Argentina.

Canada

On August 22, 2026, the U.S. imposed a 50% tariff on Canada, including on honey. Canada announced retaliatory tariffs on hundreds of products imported from the U.S. Canadian beekeepers indicated that selling packaged honey in Canada is an alternative for them. Phones were ringing in Canada and prices were rising after the first announcement. Beekeepers with contracts in the U.S. were trying hard to deliver prior to any tariff, but the late harvest made things even more difficult. If Canadian honey is excluded from the U.S. market by high tariffs, the repercussions will be unpredictable.

Wet weather has resulted in honey with a high moisture content. The 2026 crop is expected to be small and below normal, with lots of high-moisture honey. A small crop, below normal, with high moisture, is expected in Manitoba and Saskatchewan.

The U.S. market accounted for 71% of Canada's honey exports by value, and 74% by volume, in the first five months of 2026. U.S. import volumes

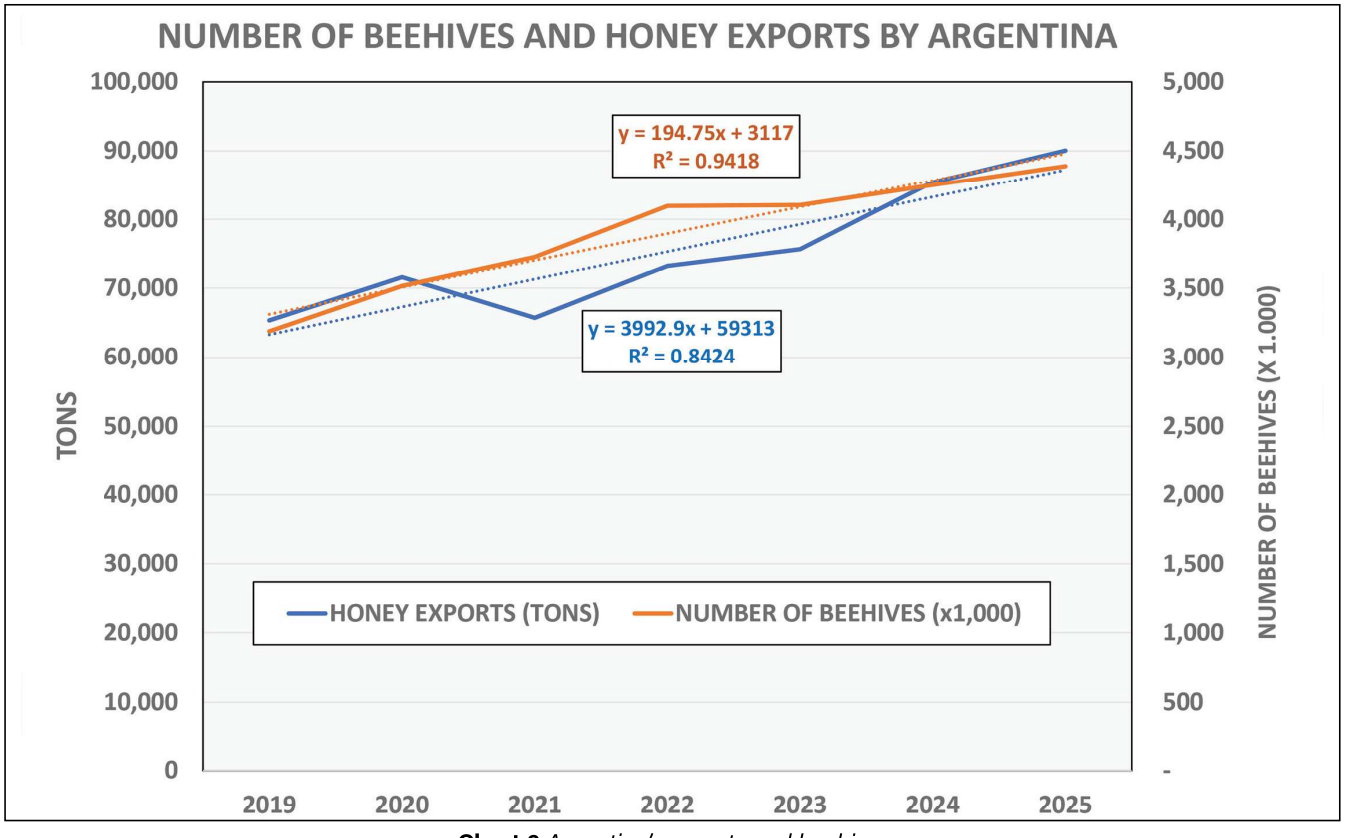

Chart 6 *Argentina's exports and beehives*

from Canada declined in 2025 to 11.8 million pounds compared to 15 million pounds in 2024. Between January and May 2026, Canadian honey exported to the U.S. averaged CAD $2.25 (USD $1.62) per pound. By contrast, imported honey entered Canada from Vietnam at an average of CAD $0.97 (USD $0.69) per pound.

Brazil

Brazil has strict internal controls for certified organic production areas. The apiaries must comply with organic certification requirements, including traceability, evaluation of the surrounding areas, inspections and residue testing.

Brazil's honey industry claims that the beekeeping areas in the Northeast, as well as highland regions and areas surrounded by forests and native vegetation in the Southeast and South, are far from intensive agriculture and have supported reliable organic honey production for many years.

Regarding the current market, it is relatively quiet at the moment. The main crops are now finishing, while the Northeast crop of honey with a higher F/G ratio should begin next month. It is not a particularly large crop, but it normally produces very good-quality organic honey.

Prices for Brazilian honey, mainly organic, averaged $1.92/lb. FOB in the first half of 2026, a much higher level than the Asian honey exporters achieved.

A new 25% tariff on imports from Brazil was announced by the U.S. in July 2026, including on honey, with the exception of organic honey. Brazil plans to seek a resolution through the World Trade Organization. This tariff is in addition to the existing antidumping duties of about 9% which apply to specific exporting companies. Brazil exports over half of its honey production to the U.S.

Mexico

Mexico's production weakened again as result of beekeepers abandoning areas where the blossoms are not orange or mesquite. With international prices damaged by adulterated honey, they can't build a financially healthy honey enterprise. Use of the new HRMS-HILIC analysis may help remove syrup sold as honey from the market, which would help Mexican producers of authentic honey.

Prices have risen from 2025 levels and U.S. imports averaged $1.63/lb. FOB in the first half of 2026.

Europe

Spring European crops in 2026 were mostly very good. Lavender, sunflower and other summer flowers yielded between little and nothing, depending on flowers and areas, but chestnut, mountain, etc. were good.

Later, temperatures were so high during such a long time that vegetation did very poorly. With the addition of forest fires, particularly south of Bordeaux, it became a real disaster. Expectations are that by the end of September production will be better.

Reports have come in that crops in some Eastern European regions have failed.

Beekeepers in France are concerned about prices of Chinese honey coming into Great Britain, with an average price of 1.15€ (equivalent to $0.60/lb.). A lot of quantities are coming in around 0.8/0.85 €/kg. (equivalent to $0.44/lb.).

Organic honey

In August 2026, U.S. commercial beekeepers filed a legal complaint against the USDA over the use of National Organic Program labelling on honey produced in foreign countries, and certified in such a way that the imported honey sold at retail uses USDA organic labelling, which is misleading the consumer. The burden of certification of organic honey is more challenging than originally understood.

MACROECONOMIC PICTURE

This new era of tariff turmoil is ripe with retaliatory processes which threaten global inflation, currency chaos and division among long term allies. The U.S. and Canada have initiated retaliatory tariffs, the U.S. government is pressing China to cease buying oil from its long term supplier Iran, and embargoes are threatening the delivery of strategic resources essential to advanced economies. Shipping lanes have been flooded and disrupted, and the costs of ocean freight have sharply increased.

The U.S. national debt recently passed the significant amount of $40 trillion and other economies, large and small, are threatened with their own cascading national debt.

CLIMATE CONCERNS

As I've written, the consequences of increased volatility, severity and frequency of climate disasters cannot wisely and scientifically be ignored. The U.S. northeast has experienced this summer, as we did two years ago, huge amounts of toxic smoke flowing from Canada's forest fires. A similar phenomenon from western wildfires happened in California in the recent years. Lightning is the common cause of the wildfires.

In Europe fires are burning, affecting France and Spain. Europe is not only caught in growing heat waves for which its infrastructure is unprepared, but its river systems are drying up from severe droughts. Europe's great rivers are not only an aesthetic treasure but crucial to the economic integration and vitality of Europe's immense, advanced economy.

Naturally, toxic smoke is especially of concern for children and infants, as small particle pollutants can pass barriers and enter into and lodge into brains and other crucial parts of our bodies. What is new is the attention to the complex and pervasive consequences to botanical and zoological life in general. What is now coming under study is the effect on bees. Toxic pollutants, which may include glyphosate, are transferred from the mother bees to their eggs. Mutations are being observed in the passing of genetics from mother to offspring. Science is studying the consequences, as they are becoming impossible to ignore.

The irony persists that the highest concentrations of pollutants, environmental toxicity and climate disasters are in those nations such as China and India which continue to increase production of "honey" and maintain extraordinarily cheap prices as the productivity per hive declines. New toxic processes enter the environments in which bees exist and function. This irony cannot be ignored by agricultural economists. It provides the broader context in which the fate and destiny of beekeeping and pollination reside.

Global beekeepers have to pay attention to these phenomena. Just as glyphosate migrates through vast areas through wind and rain and water systems, the toxicity of large scale forest fires has increasing economic consequences.

In July, 2026, the Associated Press reported: "The contiguous United States sizzled to its hottest month ever in July, 2026, according to the National Oceanic and Atmospheric Administration. July averaged 76.89 degrees Fahrenheit (24.94 degrees Celsius) across the Lower 48 states, eclipsing the Dust Bowl's July 1936 by an eighth of a degree. Records go back to 1895."

Sixty-five-foot waves crashed into the China-Nepal border in August, as a mountain glacier broke apart resulting in massive damage and loss of life. The physics and chemistry of how heat is trapped by the planet's atmosphere are well known. China and India are epicenters of the generators of heat trapping gases in the contemporary world. This is true despite China's effort to capture the market for alternative sources of energy. The problem for the global community is exacerbated by the fact that there is no Great Wall within which heat trapping gases can be constrained.

We need sober and thoughtful solutions to protect our fragile environments, which are profoundly linked with globally interdependent economies. Economic interests and ecological health are inextricably linked.

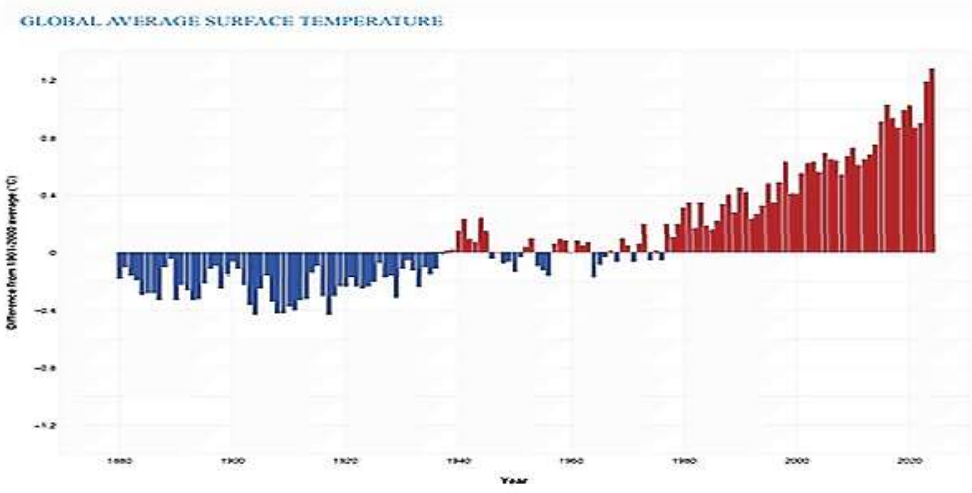

Chart 7: Global Temperatures

The use of advanced science for the creative marketing of honey

Various members of the U.S. and international honey market have asked me to comment on the work we did on using scientific investigations to promote the health benefits of tea. The tea industry presented five symposiums on Tea and Human Health; one was in the Ford Foundation and the subsequent four were in the USDA and involved the FDA. Findings were disseminated internationally, and there was an increase in U.S. consumption of tea and in the varieties offered in the market.

We must stress that this research on health was based upon authentic products, and would be inapplicable if adulterated products were utilized.

With U.S. per capita honey consumption from 1-2 lbs./year, less than a kilo, honey is a small luxury whose price, with creative marketing, can go up substantially. The mountain flowers of Montana, the golden canola fields, the orange groves, the berries, sunflower fields, etc., can be visualized just as the wine industry has presented images of the vineyards across our vast country.

Ron Phipps founded CPNA International, Ltd., served two terms on the National Honey Board and as a member of the Apimondia Scientific Commission on Beekeeping Economy. He was lead author of the chapter "Marketing the American Honey Crop" in Dadant's Hive and the Honeybee.

He held a fellowship in the National Science Foundation for developing the physics of an Infinite, Open, Integrated Universe. He is President of Chamber Players International and Long Island Concert Orchestra. He has written the Ontological Conjecture which seeks to integrate through Field Equations Causal Orderliness and Infinite Qualitative Diversity in the smallest levels of Being.