



INTERNATIONAL HONEY MARKET

by RON PHIPPS

A friend of mine is an eminent professor of international law, from one of the world's most prestigious universities. His favorite animal is the giraffe. He admires the giraffe because it has a long and vulnerable neck, which it nonetheless sticks out. He also points out that because the giraffe's neck is so long, it can see much farther into the distance than can other animals. The international honey industry needs people who have the courage and clarity to stick their necks out and the acuity to see into the distant and deep future.

In the acclaimed Netflix documentary "Rotten," concerned with food fraud and economically motivated adulteration, Prof. Norberto Garcia opens the series with professorial calmness, stating: "It is fraud and it is a crime." The international honey industry is experiencing a major Sea Change. This point of inflection is driven by the fact that the demand for authentic honey has increased, the supply of authentic honey has decreased, and the legal and commercial risks of dealing in adulteration and food fraud have mushroomed. After a deeply aberrational collapse of prices in recent years, the prices of authentic honey began a rise in recent months. The increase has been most dramatic relative to authentic honey from Canada and Argentina, and organic honey from Brazil. The prices of U.S. and Mexican honey have also stiffened.

MAJOR EVENTS

The U.S. Pharmacopeia committee on standards for honey completed review of all independent comments and submitted their final draft in

early 2021. We believe that the final draft will most likely conform to the initial draft issued in January 2020. That means that all the means of adulteration which were identified in the Apimondia Statement on Honey Adulteration, and in the initial 2020 draft of the U.S. Pharmacopeia, have been recognized and reaffirmed. Both the Apimondia Statement and the U.S. Pharmacopeia Standard conform to the Codex requirement that all authentic blossom honey is the by-product of the completed and complex interaction of botanical and zoological life, nectar and bees.

In addition, the attention to the phenomenon of food fraud has greatly increased as numerous media articles, conferences and discussions

have focused on the generic nature of food fraud and economically motivated adulteration. In the general arena of foods, the United Nations Food and Agricultural Organization (FAO) has authorized a formal memorandum on the role of international law in food fraud, including honey fraud as an important illustrative example.

There have also been very informative and vital podcasts addressing the issues of food fraud, beginning with honey, as was done in the Netflix series "Rotten." The podcasts will explore issues in wine, olive oil, fish, and other foods. Prof. Michael Roberts and I participated in the honey podcast, Dr. Peter Awram discussed analytical testing, Gordon Burns in-

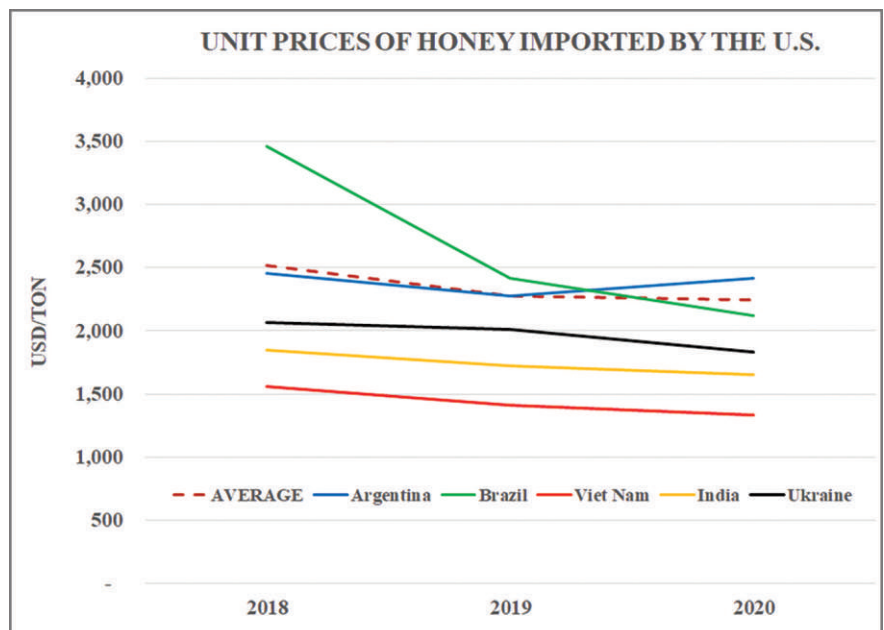


Chart 1. Unit Prices of Honey Imported by the U.S. from Argentina, Brazil, India, Viet Nam, Ukraine

troduced wine analysis and Gillian Wade spoke on food fraud litigation. The link is: <https://www.bruker.com/en/landingpages/bbio/food-authenticity-podcast-ep3.html>

Advocates for the protection of consumer interests have focused increased attention on the problems of food fraud and adulteration. In addition, advocacy for Corporate Social Responsibility has grown and continues to mushroom. Corporate social responsibility for combating food fraud and economically motivated adulteration is being driven by the demands of both the producers of authentic products and consumers who want to ensure the safety, authenticity and health benefits of what they consume.

U.S. HONEY ANTIDUMPING ACTION

In late 2020 and early 2021, the international honey industry was inundated with reports of an impending antidumping petition to be filed by American beekeepers. The indications were that this filing would be against five countries: India, Vietnam, Ukraine, Argentina and Brazil. On April 21, 2021, the petition was filed. The statistical basis for evaluating such complaints is the prices for imports during 2018, 2019 and 2020. In my preceding market report, the statistics were included. Chart 1 below reflects those price tendencies.

Chart 2 shows the degree of dependency of those five countries on the U.S. honey market, the most prominent being Vietnam at 92.9% and India at 92.1%.

Because of the coronavirus pandemic, the global priority, including the priority of the new U.S. administration, was to control this virulent and pernicious virus. There were also many government positions to be filled, including positions which had been left unfilled by the preceding administration. Of course, this pandemic, which began in Wuhan, China, has had a global impact upon the world's health, economy, education and emotional norms and well-being. This overriding factor has delayed some of the formalities of government investigation, but it is our understanding that a statistical basis of an antidumping evaluation will use the years 2018-2020. It is very important to note that U.S. antidumping law has a retroactive dimension. Of particular significance is that, if there is a surge in imports, that surge may be subject to retroactive duties after the U.S. Department of Commerce calculates preliminary antidumping rates.

Preceding the determination of the antidumping case against Chinese honey, there was a surge of imports, despite legal cautioning regarding the dangers of surges. The surge was not penalized because of the unusual conditions of the Suspension Agreement, which preceded that antidumping case and which included quarterly price adjustments based on the prevailing world market. That special circumstance does not pertain today.

Several of the five countries cited as potential targets in 2021 have also been associated with allegations of

adulteration. Such associations do not pertain to either Argentina or Brazil, which have been leaders in the struggle against economically motivated adulteration and food fraud in the honey sphere.

DETAILS OF THE 2021 ANTIDUMPING CASE

On April 21, 2021, the AHPA and Sioux Honey Association filed a petition for imposition of antidumping duties on raw and organic honey imports from Argentina, Brazil, India, Ukraine, and the Socialist Republic of Vietnam. Excluded from the scope is comb honey or honey packaged in retail containers. The schedule may be: Department of Commerce Initiation May 11; International Trade Commission Vote June 7; DOC Preliminary Antidumping Determination September 28; DOC Final Antidumping Determination December 13, 2021.

Alleged Dumping Margins are:

Argentina	16-23%
Brazil	114%
India	34-99%
Ukraine	10-94%
Vietnam	207%

CLASS ACTION SUIT

On March 29, 2021, a class action lawsuit was filed in the Eastern District of California. Defendants included honey packers, certifiers and testing agencies. The complaint was filed by three named class representatives, on behalf of themselves and all American domestic commercial beekeepers.

The complaint alleges a sustained and systematic pattern of fraudulent conduct which flooded the U.S. market with fake honey, in violation of the Racketeer Influenced and Corrupt Practices Act (RICO), state and federal antitrust laws, and California's unfair competition law, resulting in injury to domestic beekeepers.

Specific allegations include: suppressing the price of genuine honey, bringing in fake honey to the U.S. market, trying to harm and eliminate competitors by selling mislabeled fake honey at low prices, causing financial detriment to domestic beekeepers, and deceit of consumers.

This is the most significant and serious complaint of food fraud issued in the U.S. in the honey sphere. Such action is not without precedent, but this action takes place in a national arena and in the context of growing awareness by governments, judicial systems, consumer advocates, scien-

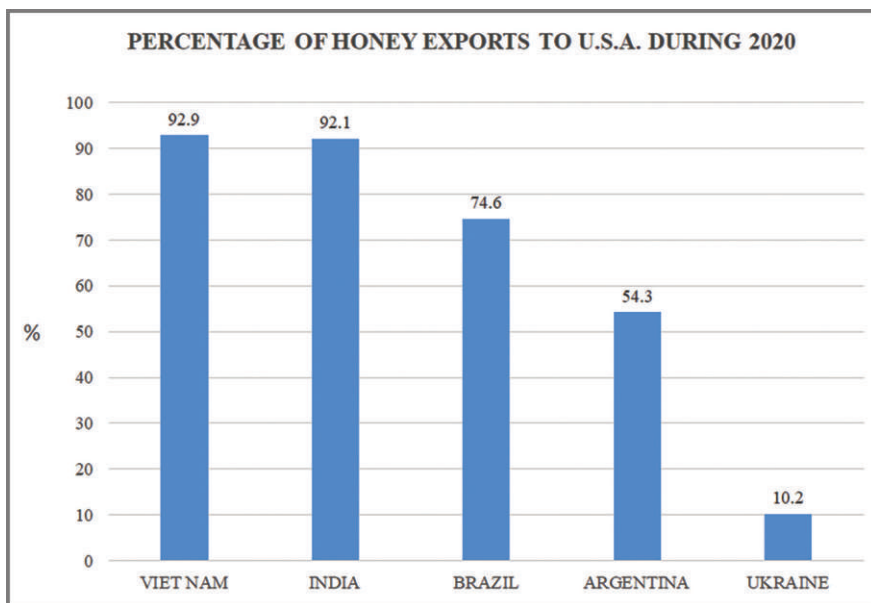


Chart 2. Percentage of Exports to the USA

tists, and the media of the devastating consequences of food fraud.

There are numerous reports of class action suits for economically motivated adulteration in the U.K. and other countries, where the national beekeeping industries and injured honey packers and producers have taken or are contemplating legal action. One example of these international efforts is the Honey Authenticity Project, whose leaders have been fighting both honey adulteration and dumping-level prices for a decade.

THE MEDIA

In past months there have been numerous articles about honey and food fraud, including from the BBC, Vice News, Down to Earth Magazine (India), Chinese news reports, and the Daily Mail (U.K.), which are bringing to the forefront the subtlety, arrogance and duplicity with which food fraud in the honey sphere has harmed beekeepers in many producing countries, including the U.S., Australia, India, Canada, U.K., France, Argentina, Brazil, and Chile.

The Indian magazine Down to Earth published a 40-page detailed investigative article on honey fraud in December 2020, titled "It's not Honey." It is the most dense and devastating description of honey fraud that we have seen in recent years. (See my previous report in the February 2021 ABJ.)

The wonderful documentary film "The Pollinators," which is available to stream on Amazon Prime or YouTube, is a vivid, beautiful, comprehensive and relevant work, describing the beekeepers' relation to agriculture and the deeper consequences of increased stresses on bees. It is a visual delight and an educational source of illumination, which brings together prominent beekeepers including Bret Adee and Dave Hackenberg, the environmentalist Bill McKibben, Dr. Jeff Pettis (current President of Apimondia and former director of a USDA bee lab), and other scientists expert in regenerative agriculture.

CLIMATE AND CROPS

It was announced by the United Nations that 2020 was the third hottest year in recorded history. Scientific American changed their reference from "Climate Change" to "Climate Emergency" in the spring of 2021. The "State of the Global Climate 2020" report, by the U.N.'s World Meteorological Organization, reiter-

ates earlier findings regarding the increases of both land and ocean temperatures, which occurred despite the recent cooling effects of La Niña. The West Coast of the United States has very low levels of water compared to normal, and water restrictions have been announced for seven states in the West and Southwest.

The meteorological forecast indicates the West may be entering a state of "mega-drought." In middle April, North Dakota's subsoil moisture was only 5% of normal. Similar conditions exist in southwestern South Dakota and Saskatchewan, Canada. Wildfires in both states erupted in the spring. If these conditions persist, many beekeepers will bring only a small percentage of their beehives to North Dakota. Mount Rushmore in the upper Midwest was closed in March due to fire danger.

In 2020, despite the global economic slowdown from the pandemic, China was the only major country to increase its emissions of greenhouse gases, accounting for 53% of such emissions, representing approximately 150% of the total emissions from the U.S. and Europe combined. Speakers at the Climate Summit on Earth Day have called upon China to close 60 of its coal burning factories every day. Similar demands call upon China to cease exporting coal factories to other countries.

Just as greenhouse gases emitted from one nation cannot be confined within its national borders, the pernicious effects of the coronavirus and the pandemic it provoked cannot be confined within China's borders, but instead cover every nook and cranny of this planet.

While this report focuses on macro-

tendencies and major events, as cited above, there is not enough space to provide a detailed country by country analysis. But as an example, Brazil reports the honey crop in its Northeast will need more rain to continue. The crop of eucalyptus organic honey from the Southeast will have a 65-70% loss. During the second half of the year, Brazil's organic honey crops are smaller and increasingly sensitive to the weather. Climate change is threatening the size of the crop of authentic organic honey for which demand continues to increase. Steep price increases for organic Brazilian honey began in early 2021 and are continuing.

SCIENCE OF DETECTION OF ADULTERATION AND FOOD FRAUD

History has shown how subtle and nimble are those who make huge economic gains from food fraud. Fortunately, there is a growing involvement of independent academic scientists and experts in apiculture who are collaborating with government scientists, and some private for-profit laboratories. Those scientists include Prof. Stephan Schwarzingler, Dr. Enrique Bedascarrasbure, and many others.

Further international studies of illicit modes of honey production and contemporary modes of adulteration of honey are underway.

APIMONDIA 2019

Apimondia's biannual convention, held in September 2019, in Montreal, Canada, represents a fundamental turning point. Norberto Garcia and the Canadian Honey Council diligently collaborated to create a major event in the forum on honey adul-

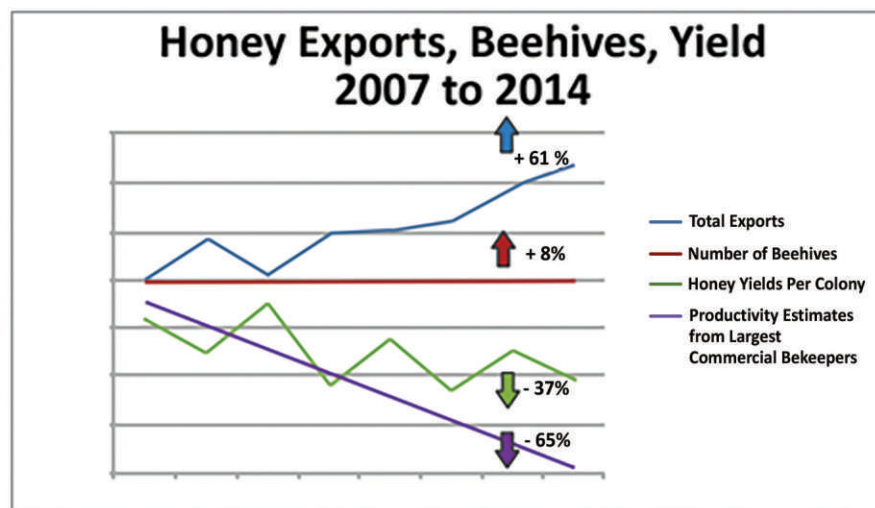


Chart 3. Four Variables

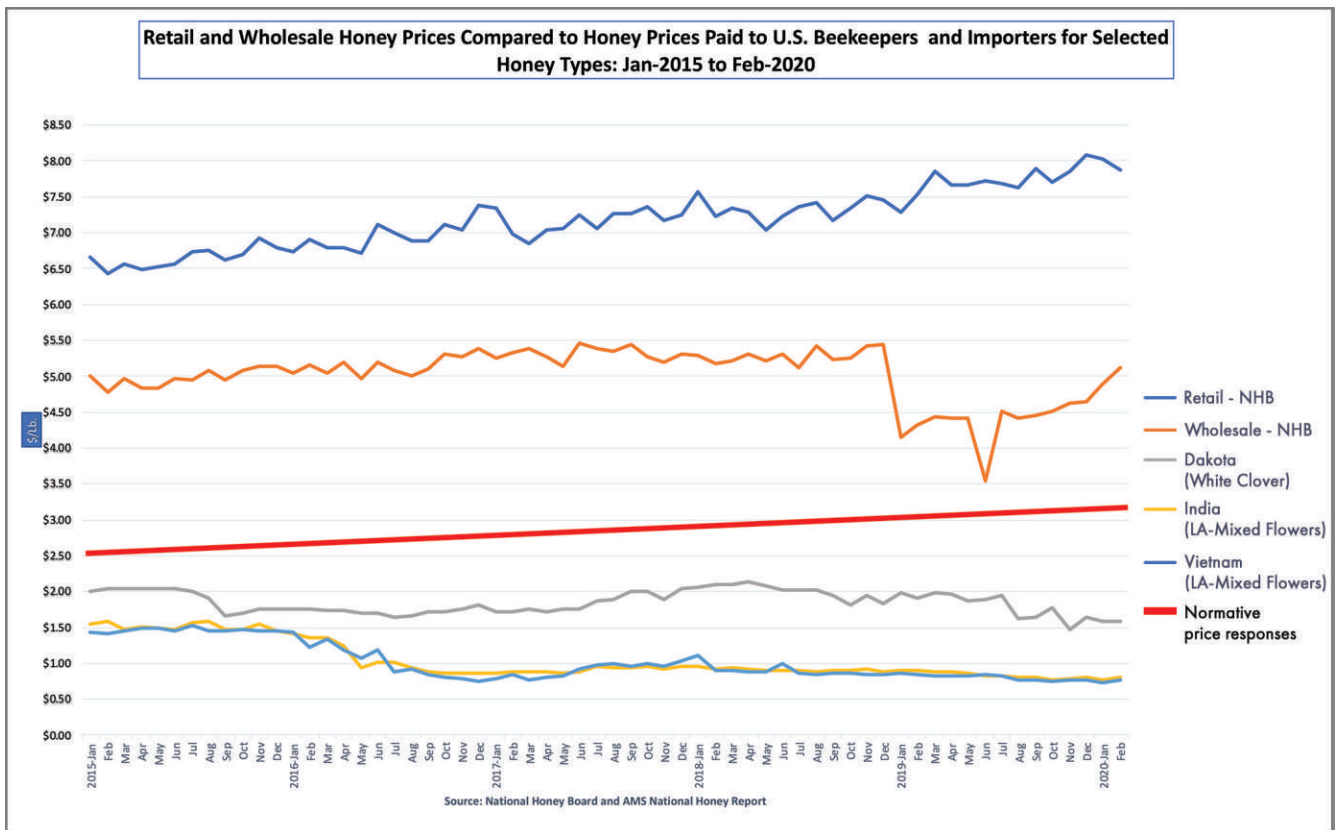


Chart 4. Retail, Wholesale, Beekeeper and Imported Honey Prices

teration, which attracted a thousand participants from all over the world to discuss many aspects of the issue of adulteration of honey. Among the major speakers were Dr. Stephan Schwarzinger, Dr. Cord Luellmann, Dr. Lea Heintz, Dr. C. Kunert, Dr. Enrique L. Bedascarrasbure, and Dr. Gudrun I. Beckh. To our surprise, our “Four Variables” chart (Chart 3, first printed in my report in that month’s ABJ) describing the conundrum in the international honey industry was independently and repeatedly cited by four or five of the major speakers. That chart was formed from international data regarding total honey production, total exports in the category of “honey” and clear trends in productivity. It laid bare the essence of what is an existential dilemma for the beekeepers of the world or, as Prof. Michael Roberts has aptly expressed it, put beekeepers in the status of an endangered species.

As an example of the growing academic interest in honey, both the Food Law Lab at Harvard University and the Resnick Center for Food Law & Policy at UCLA have taken up these issues. A Honey Adulteration Symposium was held by the Honey and Pollination Center, University of California Davis on April 22, 2021. Prof.

Michael Roberts was a keynote opening speaker. Chris Hiatt, Vice President of the AHPA, was the concluding speaker. Chris presented information, based upon Prof. Norberto Garcia’s analysis, that indicated that several producing countries had increases in their beehives of 15% and concurrent increases in their honey exports of 200%. The contradictions are startling and transparent.

Another chart that tells the tale of adulteration is Chart 4, prepared by Dr. Stan Daberkow, economist emeritus of the U.S. Department of Agriculture:

I have added the red line in the above chart to represent normative prices for authentic honey in a context where the market is not distorted by adulterated honey, dumping of honey and/or market manipulation. On the assumption that the honey sold in the market was 100% authentic, we could expect retail prices to have risen from their high to a level of about \$10/lb. With annual per capita consumption of 1.5 lbs./year, that would mean that per capita expenditures for honey would be about \$15/year/per person. When we consider how that cost contrasts with the per capita expenditure on soft drinks, mineral waters, wine, and desserts, we can see that that is

a modest expenditure. It should also be noted that marketers have long understood that when very low prices are associated with products, the perception of the value of those products diminishes. Already, in farmers markets, upscale grocery stores and gift shops, authentic honey is often sold at \$17-25/lb. The addition of the red line is offered to suggest how a market can become more vigorous, and at the same time remain realistic, when that market is freed from the scourge of adulteration and conspiracies to manipulate markets. Honey, if marketed creatively, has a much greater potential to benefit all segments of the industry, not just a small group at the expense of the majority.

This chart demonstrates the huge gap between retail honey prices, wholesale packer prices and the low prices from several countries; the gap between the normative and the actual prices of honey represent the magnitude of the losses to beekeepers. The study by two Apimondia committees on the Direct Economic Impact of Decreasing Prices of Honey, issued in June 2020, and published by the American Honey Producers Association, quantified that loss as over US\$1 billion.

If and when demand increases,

retail prices remain high, the cost of production of honey increases, and supply and productivity both decrease, the laws of economics suggest that prices should rise substantially and the gap between inputs and selling prices should narrow.

Illicit modes of production underlie the large quantities of inexpensive "honey" which have dominated and pervaded the market for a decade. The rapid and frequent extraction of unripened honey and the blending of inexpensive bio-engineered sweeteners have allowed the production and domination of cheap "pseudo honey" whose costs of production are extremely low.

CONCLUSION

There is an international confluence of factors against food fraud and economically motivated adulteration. These factors include: 1) national and international government

attention to the matter of food fraud and the security of the food supply; 2) increased attention by judicial systems to systemic violations of law; 3) the media; 4) growing awareness of Corporate Social Responsibility; 5) growing consumer demands for food authenticity; and 6) increased collaboration between academic, private and government scientific efforts, with independent scientific laboratories playing a prominent and pivotal role.

Austin Adey, an electrical engineer in systems analysis, has beautifully described beekeepers as Stewards of the Hardest Workers on the Planet. I have described beekeepers as Guardians of Food Authenticity, Global Food Security and Ecological Sustainability.

Authenticity is a virtue that during the past decade has been on a protracted vacation, as a series of international articles, Apimondia conferences and other events demonstrate. A mar-

ket cannot remain vigorous and vibrant if the producers are compelled to lose money in selling their products and de-incentivized from production. The major actions and developments described above are transformative and foreshadow very fundamental changes in the international and American honey markets.

Mr. Phipps is President and founder of CPNA International, Ltd. He is a former member of the National Honey Board and Co-Chairman of the Committee for the Promotion of Honey and Health. He was a recipient of a National Science Foundation Fellowship in the Philosophy of Theoretical Physics. He was an Organizer of the 2020 Beethoven Festival by the CPI at the magnificent Planting Fields Arboretum. In 2017 he was appointed Vice President of the Apimondia Scientific Commission on Beekeeping Economy. He has worked with FDA to develop a research protocol for the global diversity of honey. e-mail: info@cpnaglobal.com