



INTERNATIONAL HONEY MARKET

Anticipating the International Honey Market in the 21st Century

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Presented at the AHPA Convention, January 7, 2015

(Courtesy of American Bee Journal)

Introduction

During the large and impressive pan Latin American Beekeepers Convention held near the majestic ecosystem surrounding the massive Iguazu Falls last September, I described several features of a new Era which our industry is entering.

This is an Era of Comprehensive Information. Fortunes were made for some in the past by a monopolization of both information and “spin” on that information. With journals like the *American Beekeeping Journal*, the *Alberta Bee News* of Canada, *Bee Culture* and publications from producing countries such as Australia, internet access, international meetings of the honey industry and regular communication among international beekeeping organizations and exporter associations, the depth, breadth, accuracy and contemporaneousness of information about facts and trends in the market have reached an unprecedented level. Knowledge and openness have superseded manipulated information.

This is an Era of Traceability, Transparency and the Rule of Law. The mandate to know your suppliers has been reinforced by organizations such as True Source and government agencies committed to the enforcement of national and international law in trade. The imperative to be able to trace and document the supply chain, assess its integrity and its quality control regimens is increasing. A correlative mandate is to know your customers, their integrity, financial strength, their reasonableness and fairness, their customers and the quality and image of their products and marketing. As the honey industry has suffered and witnessed elaborate schemes and collusion to gain unfair market advantage through circumvention, transshipment, false Customs entries and adulteration of products, it becomes more and more obvious that honest producers and exporters of honey must become more knowledgeable about their customers and the customers of their customers. Traceability and Transparency are steadily becoming a two-way street with information flowing in both directions.



Ron Phipps addresses members of the American Honey Producers Association in January.

The Deferred Prosecutions by the US Department of Justice and the Class Action Lawsuits have underscored the need to know your customers and the integrity of their suppliers. The March to Monopoly which the industry witnessed quickly morphed into a March to Bankruptcy and the consequences of that bankruptcy have not fully unfolded. After the Financial Crisis of 2008 and the following Great Recession, the Banking Systems are more rigorously pursuing regimes of “know your customers.”

This is an Era of Enhanced Food Safety. The need for stricter measures to assure purity, non-adulteration and non-contamination is growing within both producing and consuming countries and these efforts must achieve greater international harmony so that risks to producers, exporters, importers, packers and further down the chain are reasonable and based upon scientifically accurate and realistic assessment of health risks.

This is an Era of Creative Marketing. The life blood of an industry is always expressed in its Creative Marketing, Product Development, Increased per Capita Consumption and consumer perception of value. The International Honey Industry has tremendous opportunities to enhance the Creative Marketing of Honey which will lead to new products, increased per capita consumption, enhanced perception of value and ultimately increased prices and increased return to all segments of the international and domestic honey industries.

The National Honey Board received faithful and intelligent leadership from its CEO Bruce Boynton, who is retiring as of the end of 2014. The new CEO Ms. Margaret Lombard was chosen, among other reasons, for her expertise in Creative Marketing.

We expect the honey industry will witness from the efforts of its individual members and its macro organization an explosion of Creative Marketing for this wonderful and unique product of nature during the remaining decades of this century.

USA Honey Market Statistics

The flow and production of honey within the USA, just like the production and movement (trade) of honey internationally are subject to multiple variables. At present currency fluctuations with a weakening EURO, Canadian Dollar and Yen have altered preferred destinations. Nations are devaluing their currencies to get competitive advantage over their neighbors, both near and far. William White, advisor to Angela Merkel of Germany, stated “we’re seeing true currency wars.” Because the US Dollar has been comparatively strong the US has become the preferred market for many honey exporting countries including Argentina and Brazil. Production patterns and climatic conditions also play powerful roles in determining the flow of honey.

US Honey Imports from Asia – Jan.-Nov. 2014

Vietnam	89,248,097 pounds
India	42,960,287

Thailand	5,767,841
Taiwan	4,992,641

Honey Imports from the Americas

Jan.-Nov. 2014

South America

Argentina 81,877,249 pounds

Brazil 41,616,466

Uruguay 11,956,904

North America

Mexico 16,713,750

Canada 11,468,665

Emerging Honey Exporting Countries – USA imports

Ukraine 10,519,320 pounds

Turkey 4,677,148

Pakistan 1,615,546

While economic and political tensions are more intense in some areas and nations, when the global economy is so integrated it is impossible for any nation to remain unaffected by global macro realities. It is more a question of degree and timing. The honey industry must bear this in mind with some modesty and realism.

During the past several years honey prices rose, especially as Government and Industry efforts coalesced to successfully curtail circumvention of Chinese honey. But there is always a real danger of reaching a Point of Inflection after which prices will plummet. This has happened to soybeans and petroleum during the past year. Price pressure on American honey packers from both food manufacturers and retailers has grown.

At the end of 2014 I had a long interview with an editor visiting from Germany compiling a new book on an agricultural based industry. For a decade prices in that industry rose and rose to unprecedented levels until resistance erupted which led to a reduction of consumption by 80% and a collapse of prices.

The prevailing geopolitical and geo-economic situation remains fraught with tension and perils whose outcome cannot be fully predicted. In the past months, Europe and Japan have entered recession, and China has slowed down and faces an impending housing bubble. Russia is economically vulnerable. Cumulative deficits remain exceedingly high with progress, where such exists, being expressed in the reduced rates at which national deficits grow. Commodity prices, including soybeans, corn, and petroleum experienced dramatic declines. These declines illustrate again the old agricultural adage: High prices are their best cure. Low prices are their best cure. As producers of both food and energy sought to catch the high tide of soaring prices, surpluses, at least temporary surpluses – erupted and prices plunged to unanticipatedly low levels. Dead inventory surpluses for many commodities characterize the present.

2014 Honey Prices

Canadian White and ELA \$4410/ton

2.16/lb. Jan-Nov 2014 average

Argentine White \$3310/ton

1.78/lb. Jan-Nov 2014 average

Indian White \$2712/ton

1.49/lb. Jan-Nov 2014 average
Mexican White 1.80/lb.
Jan-Nov 2014 average

Source: National Honey Report

Sweetener Consumption in the USA
NHB Study by Dr. Ron Ward

US total honey consumption is rising but per person consumption of honey has been nearly unchanged for the last 25 years.

Honey	1 lb. per capita
Sugar	75 lbs./per capita
HFCS	40 lbs./per capita
Glucose	15 lbs./per capita
Dextrose	3.5 lbs./per capita

US Total and Per Capita Honey Consumption 1986-2009 (1 lb./person)

Argentina

Argentina's summer crop (December-January, our June-July) developed very slowly causing the extraction to be late. Adverse weather was the reason, as well as severe temperature swings, thunderstorms and heavy rains. The general estimate is for a crop of 55,000 metric tons (121,250,000 pounds). Beekeepers are reluctant sellers.

Political jockeying for next year's election is underway. Argentina continues to experience economic stress, a weakening peso which is counter-balanced by soaring inflation. The biggest factor is the doldrums of the soybean market. Argentina, like other countries, had converted large amounts of pasture lands and alfalfa fields to extensive soy bean production. Prices fell from levels around \$1,500 to levels within the \$900 per ton range and inventories are stagnant, warehouses full. The early Spring honey crop in the north was weak and reduced. That crop, which is normally about 15,000 metric tons, is mostly of citrus, mesquite and eucalyptus honey. The summer crops of clover and alfalfa in Buenos Aires and La Pampas are more promising this year. This is not only a factor of weather but soybean fields are fallow due to the collapse of soybean prices and warehouses choked with the old 2014 crop. We anticipate there are still prospects for a better Argentine 2015 honey crop quantitatively and qualitatively. This too will create downward price pressure. Since U.S. and Canadian packers bought heavily from the domestic 2014 honey crop, there is not urgent pressure to buy. Until that pressure asserts itself, prices will remain unsettled.

Brazil

The Brazilian Real also weakened after September 2014. The BRIC (Brazil, Russia, India and China) countries which had been the darlings of the stock market when developing countries were on an upward surge, are all searching for ways to navigate the global recessionary climate in Europe and Japan. The Euro has fallen during recent years from 1.60 to 1.12/\$1.00.

Vietnam

Vietnam exporters have provided some statistics on the production patterns relative to floral sources. This is very helpful and important information. (See Table)

During the past 3-4 years, honey production in Vietnam has been significantly influenced by the development of *Acacia mangium* which is a tree found in their wild forest area. The honey may qualify as certified organic honey once the proper certification processes are done. Some of this honey is mild in flavor and light light amber in color. But the chemistry of this type of honey, along with the prevailing climate and weather patterns at the time of production, often leads to dark light amber which rapidly changes into amber and dark amber honey. This chemistry and processes of rapid darkening have been studied and confirmed by scientists from the University of Malaysia.

Vietnamese Floral Sources

Type	Amount estimate (MT)	Percentage	Months of collection	Color ref.	Collecting Samples
Coffee	7,000	12.72%	11,12,1,2	LA (50, 60 ppm)	Tropical, hot season
Cashew	2,000	3.63%	11,12	LA (50,60 ppm)	Tropical hot season
Rubber	18,300	33.28%	12,1,2,3,4	LA (50,60 ppm)	Tropical hot and cooler
Acacia	18,500	33.64%	5,6,7,8,9,10,	LA -> Amber (50- 90)	Hot season, some in the cooler area with beautiful color
Lychee	1,100	2%	3,4	LA (40- 60)	Cool season in the northern area
Longan	5,100	9.28%	3,4, 7, 8	LA, Amber (70-80)	Hot and some cool
Other mix floral	3,000	5.45%	12, 1, 6,7,8,9	LA, Amber, Dark amber (45, 50, 70, 80,90)	Hot and cool
Total	55,000	100%			

The dilemma has emerged throughout the industry of whether we change specifications to light amber/amber and keep an attractive price. The bottling honey industry faced a similar challenge when both the USA and Argentina reduced their production of clover and alfalfa honey to floral sources that produce more ELA honey. Color specifications changed from White to White/ELA. The dilemma of price vs. color has now emerged in the industrial/ingredient sphere.

Leaders of the Vietnamese beekeepers reported that total number of bee hives increased from 800,000 to 1,300,000 in the past 5 years. Honey production continues from December to September with the overwhelming predominance of production being Light Amber to Amber as is typical of tropical and semi-tropical countries. “There are many reasons why beehives and honey production are increasing year by year in Vietnam.

- Vietnam has many floral sources and various trees which can produce honey.
- Vietnam has developed vigorous bee populations which can produce high quantity honey and good yields per hive.
- Beekeepers have learned high technology in beekeeping and know how to manage their bees.
- The Vietnamese Government has paid considerable attention in the beekeeping industry and the vital role bees play within the ecosystem and agricultural production.

Beekeepers are encouraged to develop their business,” stated Vietnamese experts in apiculture. Beekeeping also enhances the living standards of ethnic minorities in mountainous regions.

The growth of Vietnam's honey industry parallels that of its large coffee and cashew nut industries. Vietnam is the 2nd largest coffee exporter after Brazil, due to the high yield robusta production that developed after the 1980s. Cashew exports to the world for 2014 are estimated at 133,000 metric tons and valued at over \$1 billion. The rate of growth of cashew exports has been 12%/year for the past 4 years. New coffee plantations are being added year by year. (Source: Vietnam Trade and Promotion Agency.) The rapid and steady growth of Vietnamese cashew and coffee production is correlated with the steady growth of the Vietnamese honey industry and Vietnam's commitment to the expansion of agricultural production.

After the devastation from the protracted Vietnam War which ended in 1975, the World Bank and other international groups provided aid and assistance, much as happened in Europe after WWII. With the financial and technical aid Vietnam developed a vigorous agricultural economy. The US and Vietnam have cooperated on many of these projects. During the Apimondia Conference held in Hanoi, scientists and apiculturalists from Sweden, Canada, Britain, the USA, Cuba and Southeast Asia came together with the Vietnamese Beekeepers Association and the Vietnamese Ministry of Agriculture to discuss how to successfully develop a vigorous beekeeping industry in compliance with international standards.

China

With 2016 approaching, the honey industry must confront the possibility, if not inevitability, that the methodology for assessment of antidumping duty rates may alter, as a consequence of the provisions of bilateral US-China agreement for China to enter the World Trade Organization, which promised to end surrogate country analysis. The Chinese government is giving signals that this change is expected.

There are powerful and large economic, geo-political and environmental interests binding the two largest global economies which include powerful interests in agriculture, high technology and finance which want to see bilateral relations smoothed, not exacerbated.

The widespread and cunning schemes witnessed over the past decade to evade and circumvent Chinese honey and other products subject to prevailing US anti-dumping orders have not endeared either industry or the USA government to Chinese trade practices. The examples of cunning, nimble and persistent schemes to evade existing antidumping orders are legion. The current Chinese leadership speaks of the need to weed out corruption at high and low levels. But no one in the US government or US industry honey industry has seen the Chinese government functioning as an important source of the solution to the problem of circumvention and transshipment. Will this change?

Of increasing concern is China's systemic policy of encouraging Direct Outside Investment (DOI). China has purchased factories, mines, energy resources, financial institutions and agricultural interests all over the world. Given the extremely low interest rate environment for Bonds, China is using its foreign exchange holdings to purchase hard assets. In the US we have seen the purchase of units of IBM, Smithfield, the Chase Building in Manhattan, the Waldorf Astoria, and prime farm lands in California.

The Chinese are purchasing such hard assets either directly, or through surrogates such as hedge funds and law firms. To what extent this has happened, or is happening, in the honey industries of Europe, the USA and South America is a question arousing great curiosity and concern. What is clear is that Chinese businesses and the government are seeking to use their vast foreign exchange reserves to achieve horizontal and vertical integration, national and international integration. Chinese businessmen have sought to buy American beekeeping operations and honey trading companies in a number of countries.

China is building a vast high speed rail system which has been called "The New Silk Road." This system will link China with the Indian sub-continent, Iran, Turkey, the Middle East, Eastern Europe, and Russia. A Chinese billionaire is engaged in attempting to construct a new canal linking the Pacific and Atlantic oceans through Nicaragua. China has already invested in Myanmar's harbors, infrastructure, factories and mines and has for the past six decades cultivated close economic and government ties.

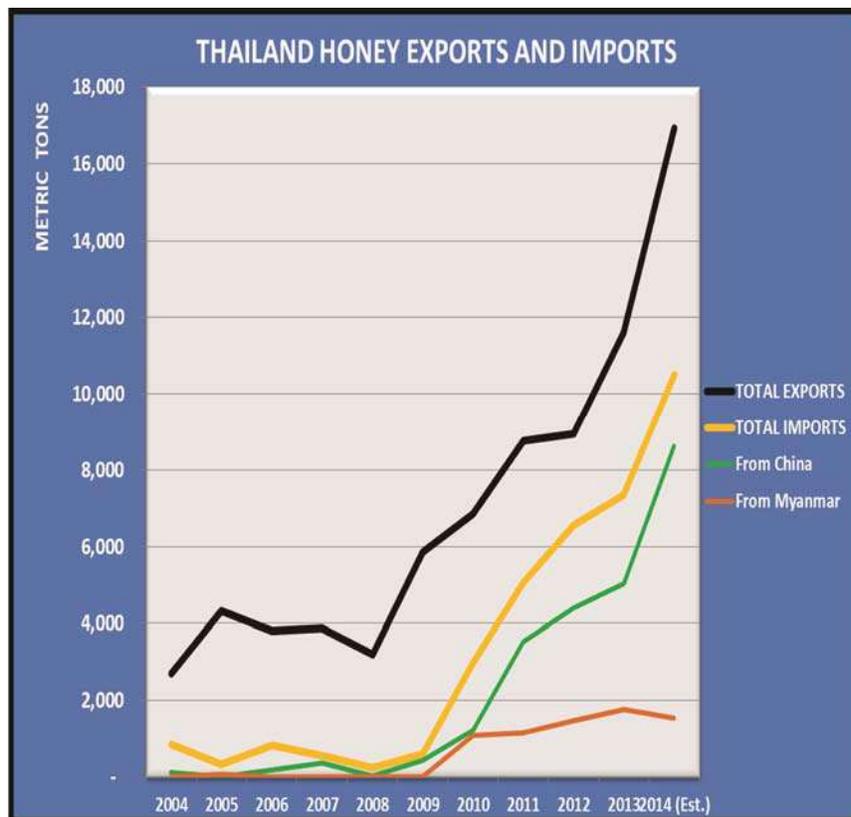
As we look to the development of the 21st century, we cannot wisely fail to note and instead ignore the 800 pound gorilla in the room. China will play a very important role in the international honey industry, both as producer and consumer of honey. The industry hopes that China will develop in such a manner that its honey

industry will be responsible and constructive, adopting good beekeeping practices and processing techniques to ensure the safety and purity of its product. The growing population of 1.6 billion could become significant consumers of their domestic honey and honey from around the world. Already, China is currently the world's largest consumer of French wine. The Chinese people have become part of the globalization of culture.

Beyond Honey Gate

Circumvention of honey to avoid antidumping duties has not ceased. One thing the industry and the government have learned from the past decade is that those who collude to circumvent are clever, persistent, cunning and nimble. When one door is closed, they seek to open another door. Honey Gate, called the biggest food fraud in U.S. history, is vivid and rich with lessons. It is serving as a model for investigations in other industries with antidumping orders. Different parts of the government are jointly watching and monitoring so that new patterns of export and the circulation of honey can be detected. The legal responsibility for purchasing circumvented products is reaching deeper down the supply chain. We have seen the implications for packers engaged in collusion in the Deferred Prosecution Agreements. The government is working to make sure retailers and manufacturers using circumvented honey are aware of their legal vulnerabilities.

In his speech to the AHPA in January 2015, Prof. Norberto Garcia, President of the IHEO, gave an illustration of aberrational data showing a tremendous surge of Thailand honey exports which may be directly linked with a tremendous surge of Thailand's imports of honey from both China (5,000 metric tons at \$1.82/kg. from Sept. 2013-Aug. 2014) and China's immediate neighbor Myanmar.



Source: Prof. Norberto Garcia, President, International Honey Exporters Organization

Another aberration is with a country that produces mainly extra light amber (50mm) honey with a strong orange hue. This honey is associated with a history of high residue levels of a certain antibiotic. In 2014 that country greatly increased their exports to the US and a significant part of the honey changed from ELA to white. The residue disappeared and the floral sources also changed. Packers reported this honey and floral

sources were reminiscent of rapeseed. We continue to see changes in honey exporting countries despite the absence of any credible associated honey production.

Recently a Chinese company has been offering resin technology, designed to remove residues, antibiotics, pollen and signs of country of origin, to honey exporting companies in various countries. Dozens of units have been sold, according to the manufacturers. The technology, which is several decades old, introduces water and then removes it to eliminate antibiotics. These techniques also remove pollen and components of honey which contribute to color, turning darker honey to lighter colors. The technology is also advertised as effectively disguising country of origin. Current definitions of honey preclude such processed product from being sold as honey.

Nuclear magnetic resonance technology (NMR), which is being developed to identify various honey sources and types, could be used to identify resin-processed honey by reporting the absence of naturally occurring components of honey in resin-processed sweeteners. The effectiveness of the NMR test ultimately depends upon establishing a comprehensive data base of the world's honey. Argentina's honey industry has already begun to cooperate with the laboratories developing this test for honey. American, Canadian, Brazilian, Vietnamese and Australian honey producers would benefit from doing the same.

The need for a global data base is illustrated by an allegation by the French of massive adulteration of American wine. That allegation was made about 20 years ago. Laboratories extrapolated NMR profiles for French wines on North American wines, failing to account for differences in soil composition. Primary data from authenticated sources can help provide the information that the laboratories need for proper identification of substances. The use of NMR, based upon a comprehensive data base, can help detect the illegal use of resin technology in the honey industry.

Due to the absence of clear internationally harmonized tolerance levels and testing limits, as exist for most foods, the risk for domestic and foreign honey producers, importers, exporters, packers, and buyers further down the supply chain persists. The attraction of residue-free honey creates the temptation to use the resin technology, due to its role as a method to remove residues as well as mask true country of origin, thereby, facilitating circumvention. Opposition to the resin technique is growing.

It would be a deep irony if the only honey that is entirely free of residues and antibiotics is neither USA honey nor honey legitimately and authentically produced by others, but circumvented Chinese honey. The amount of residue-free honey available for consumption is small. This is the unspoken reality for both domestic and imported sources of honey. Farmers protect their vulnerable crops and beekeepers their vulnerable bees which means that honey does not dwell in a Mythical Realm of Ultra Purity. The need to establish reasonable tolerance levels is increasingly recognized by domestic beekeepers, exporters, packers and importers.

Climate Change

Climate change hovers over the fate of humanity. The UN Climate Change Report of 2014 makes the concerns of over 95% of the world's leading climate scientists crystal clear.

According to the studies of NASA and the Administration of Oceans and Atmospheric Studies and Japanese agencies, the warmest year recorded since 1880, when global climate records began, was 2014. The three warmest years occurred during the past decade: 2005, 2010, 2014.

The 3 recent years of consecutive drought in California constituted the worst drought in 1,200 years. Given the huge importance of California to American and global agricultural production, including very important phytochemically rich crops like almonds, fruits, etc., farmers drilled deep wells into the geological water reserves which are incapable of being replenished by rain. This is like removing lubricants from the traditional car engine, but in the case of what geo-physicists call the "geological water reservoir" the lubricant and buffer which reduces friction among geological tectonic plates, reduction of the reservoir threatens more severe and intense earthquakes. As the 2015 convention was being held, northern Texas suffered a week of repeated earthquakes. Though relatively modest in scale, these earthquakes were unprecedented. They are likely caused by fracking which also taps into geological water reserves. A recent study by Chinese and Indian scientists indicated the severity of the melting of the glaciers. Of China's 37,000 glaciers by the Himalayan Mountain

Range and the Tibet/Qinghai Plateau (The Roof of the World), 13% of the ice mass has decreased. As glaciers reflect 95% of solar energy back into space, the disappearance of such a significant amount of ice threatens the agricultural production and the availability of potable water for 3-4 billion people.

Climatologists are concerned by the fact that the record warm years of 2010 and 2014 occurred in the absence of El Nino. When El Nino warms the Pacific Ocean, tremendous amounts of heat are transferred from the ocean to the atmosphere increasing the volatility, severity and intensity of extreme weather events. The international honey industry cannot escape such volatility. Even Pope Francis, along with other religious leaders of many faiths, has called out that we must see the Earth as a beautiful garden over which we must exercise responsible stewardship.

Creative Marketing

For the Year 2015, honey has been named “Flavor of the Year.” As we look to the future we must anticipate new developments in both product development and marketing. The functional and health attributes of honey will be further scientifically documented and play an increasing role in the marketing of honey. The beauty of production, the fascinating and ancient history, and the romance, variety and diversity of honey will be further explored and exploited. Consumer demand is evolving and the diversity of honey will play a similar role in the honey industry in the evolving wine and tea industries. Conventional honey, organic honey, filtered honey, strained honey, creamed honey, raw honey, GMO-free honey, flavored honey, residue free honey, local honey, national honey and international honey may all play their respective roles. The glory of honey is manifested in its immense qualitative diversity.

The health, romance, history and diversity of honey will appeal to the mind and spirit, and both the palate and palette of consumers.

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Report distributed January, 2015

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