JULY 2, 2019

2018 ANNUAL HONEY REPORT

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In past years we have provided this report in our May issue, following a February release of this data. However, due to the government closure this year, this report was not released until mid-May, 2019. Moreover, NASS has suspended collecting data from beekeepers with fewer than five colonies due to budget and program requirements. This data collection service was in its infancy, and provided valuable data for not only beekeepers, but the beekeeping industry in general. We are hopeful that the shut down and budget and program issues will be resolved so these valuable pieces of information can again be collected.

United States Honey Production Up 2 Percent for Operations with Five or More Colonies in 2018

United States honey production in 2018 from producers with five or more colonies totaled 152 million pounds, up 2 percent from 2017. There were 2.80 million colonies producing honey in 2018, up 4 percent from 2017. Yield per colony averaged 54.4 pounds, down 2 percent from the 55.5 pounds in 2017. Colonies which produced honey in more than one State were counted in each state where the honey was produced. Therefore, at the United States level yield per colony may be understated, but total production would not be impacted. Colonies were not included if honey was not harvested. Producer honey stocks were 29.1 million pounds on December 15, 2018, down 5 percent from a year earlier. Stocks held by producers exclude those held under the commodity loan program.

Honey Prices Down 2 Percent for Operations with Five or More Colonies in 2018

United States honey prices decreased 2 percent during 2018 to 216.6 cents per pound, compared to 219.9 cents per pound in 2017. United States and State level prices reflect the portions of honey sold through cooperatives, private, and retail channels. Prices for each color class are derived by weighting the quantities sold for each marketing channel. Prices for the 2017 crop reflect honey sold in 2017 and 2018. Some 2017 crop honey was sold in 2018, which caused some revisions to the 2017 crop prices.

Price Paid per Queen was 18 Dollars for Operations with Five or More Colonies in 2018

For operations with five or more colonies, the average prices paid in 2018 for honey bee queens, packages, and nucs were $18, $86, and $110 respectively. For operations with five or more colonies, pollination income for 2018 was $302 million, up 8 percent from 2017. Other income from honey bees for operations with five or more colonies in 2018 was $94.6 million, up 17 percent from 2017. These estimates along with expenditure and apiary worker information can be found later in this report.

Number of Colonies, Yield, Production, Stocks, Price, and Value – States and United States: 2017

[Operations with 5 or more colonies that also qualify as a farm. Colonies which produced honey in more than one State were counted in each State.]

Per Capita Honey Consumption 2018

We calculate per capita honey consumption each year using data from UADA NASS, USDA ERS, The Farm Service Agency and the US Census Bureau. From these sources, we calculate the amount of honey produced in the US in 2018, how much was left over from 2017, and how much honey was imported into the US in 2018. We then calculate the amount of honey that was used during the year, figuring exports during the year, honey put under loan, and honey stored by producers in their warehouses. Essentially it's honey in minus honey out equals consumption, divided by the population on July 1 of that year. It's the same formula every year.

We make some assumptions. We have to. USDA ERS has a figure on per capita consumption of many commodities, and they use a somewhat different analyses. They do have measurements for such things as waste at home, unconsumed but purchased and like measurements that will make some small differences. And there are amounts of honey that are purchased by importers and handlers that are in transit so don't get counted this year but will be caught next.

Our numbers are pretty straight forward, however, in that we use the same identical sources each year, allowing for adjustments this year on changes made by the various government agencies calculated last year.

For a change this year, we provide both 2017 and 2018 charts for number of colonies, Production, stocks, price and value. It show trends and changes a bit better when you can see the actual numbers.

Per Capita honey consumption and the average price of all honey in the U.S. for the following years:

2010 – 1.20 pounds/person, @ $1.60/lb.

2011 – 1.27 pounds/person, @$1.73/lb.

2012 – 1.26 pounds/person, @$1.95/lb.

2013 – 1.44 pounds/person, @$2.13/lb.

2014 – 1.55 pounds/person, @$2.17/lb.

2015 – 1.51 pounds/person, @$2.09/lb.

2016 – 1.60 pounds/person, @$2.12/lb.

2017 – 1.83 pounds/person, @$2.16/lb.

2018 – 1.7 pounds/person, @$2.16/lb.

Honey Consumption, population, prices 2010 – 2018

Year	million lbs	million lbs	millions		
Honey in		honey out	population	lbs/person	Price/lb $
2010	398	29	307	1.20	$1.60
2011	470	80	309	1.27	$1.73
2012	487	53	312	1.26	$1.95
2013	500	49	314	1.44	$2.13
2014	547	56	318	1.55	$2.17
2015	544	58	321	1.51	$2.09
2016	573	55	323	1.62	$2.12
2017	600	435	325	1.71	$2.19
2018	592	40	327	1.70	$2.16

Figures this year for honey in:

U.S. Production this year was 152.3 million pounds, plus imports of 442.6 million pounds (down 1.1% from last year), plus stocks held over from last year of 29.1 million pounds while there are still 1 million pounds on loan yet this year. This is a total of 594.9 million pounds of honey into the U.S. market during 2018. That's compared to 596.6 million pounds honey in in 2017.

Net Honey Out for the U.S., 2018:

We exported 9.7 million pounds of honey last year, down just a tad from the previous year. We stashed away for a later date 29.1 million pounds, and we put a million pounds on loan, to be recalled at a later date. This comes to 39.8 million pounds of honey taken out of circulation, so to speak during 2018. That's down just about 9% from last year.

Now, total consumption is calculated by taking all the honey in, subtracting all the honey out. This gives a total honey consumption for the year.

Honey In = 594.9 million pounds

Honey Out = 39.8 million pounds

Total Consumption = 555.1 million pounds

U.S. Population July 1, 2018 327.2 million people

Per capita consumption – 1.697 pounds of honey per person, or 27.15 ounces per person in 2018. That's down a half teaspoon from 2017's 1.71 pounds per person, or 27.4 ounces.

Of the honey consumed in the US in 2018, 152.3 million pounds was produced in the US, and 442.6 million pounds was imported….total 594.9 million pounds. We imported approximately 75% of the honey we used this year, while 25% was produced here.

It's interesting to note the gradual increase in honey prices, and in amount of honey consumed over time. Total consumption over the years since 2010 has increased from 369 million pounds, to this year's 555 million pounds – a 35% increase over all. Meanwhile, per capita consumption has increased from about 1.2 pounds to 1.7 pounds per person – a 29% increase per person. So you could say that, yes, each person in the US is eating more honey each year, the real gain is because there are more people, about 7% more now than in 2010.

Where this honey is produced each year hasn't changed much by looking at the top 10 honey producing states chart. North Dakota reported having 19% of all the colonies in the US last year. It was rumored that last summer you could walk all the way across North Dakota stepping only on beehives and your feet would never touch the ground. That may be a stretch, but not by much. Those colonies produced fully 25% of all the honey produced in the US last year also. Comparatively, the bottom five of the top ten producing states produced only 16% of all US honey last year. Utah may say they are the beehive state, but North Dakota has the numbers to show they should be.

As an aside, sort of, we include also a chart here of some of the costs and incomes US beekeepers have, as measured by the USDA from 2015 – 2018. These numbers now are only for beekeepers with 5 or more colonies, and include basics like queens, packages, nuc, varroa control and feed costs, plus income from various sources, and number of employees. This now four year data set gives a picture of what's remained rather steady, and certainly what hasn't.

Coupled with that is the gradual value of the honey crop increase each year, while the number of colonies, and basically production remains essentially constant. The average number of colonies counted each year since 2010 is 2577. It remained below that until about 2010, then has been moving up a bit each year until 2018. With that has seen the increase over time of the value of the US honey crop. Couple these numbers with the basic message the media uses to make news, that is: Bees are disappearing. The real message is that beekeepers are working harder to keep, and even increase the number of colonies in the US to accommodate the increased demand for pollination, especially almonds, and to have adequate bee populations available to sell to other beekeepers.

Colonies and Value of Production

Year	Colonies (million)	Value (million US$)
2000	2.620	132.8
2001	2.506	133.1
2002	2.574	228.3
2003	2.599	252.1
2004	2.556	199.6

2005	2.413	161.0
2006	2.393	158.4
2007	2.443	159.8
2008	2.342	232.7
2009	2.498	215.1
2010	2.692	285.7
2011	2.491	261.9
2012	2.539	283.5
2013	2.640	320.1
2014	2.740	387.4
2015	2.660	329.7
2016	2.775	343.0
2017	2.683	334.2
2018	2.803	333.5

The takeaway from these two charts is extremely clear. Costs to maintain colonies are variable, both by year, and by location. This isn't new. It costs more and takes more work to keep bees in some places, think northern Minnesota, than others, think Mississippi. That's a given. That costs in both of these places aren't steady or predictable is new, and is an ongoing issue for beekeepers. Profits, too, are unpredictable, and it is true that it is more expensive to control the ongoing issues of pests and deal with low level, but unrelenting pressures of agricultural pesticides, almost everywhere.

However, the numbers have another story that must not be neglected. Over an 18-year span the number of colonies has remained relatively steady, in spite of maintenance and replacement costs. Meanwhile the value of the honey, just honey, not packages, nucs or queens, has almost tripled.

Of course to stay in business income must increase to accommodate those increasing costs, and it pretty much does. It is unfortunate that there are not numbers to reflect

income from the bees these beekeepers have sold. Packages certainly have gone up, but new players in the selling-bees game are selling nucs and complete hives rather than spend a lot of energy making honey that is, at best, barely profitable.

Value of Honey Imports into the U.S., by country, 2018, Million U.S.$

Argentina – $88.8

India – $83.2

Brazil – $81.6

Vietnam – $61.1

Canada – $ 47.9

New Zealand – $37.2

China – $20.0

Ukraine – $17.2

Mexico – $13.3

Thailand – $10.1

Turkey, Spain, Germany, Australia, and France total – $24.2

These countries total 96.1% of U.S. imports, 2018, with a value of $485 million

Exports from U.S. totals, 2018 (in metric tons)

2015 – 5,107

2016 – 5,047

2017 = 4,491

2018 – 4,398

Imports to US, 2018 totals (In metric tons)

2015 – 175,243

2016 – 166,477

2017 – 203,069

2018 – 200,760

That total import value, shown in the Value of Honey Imports chart, comes to $504.2 million dollars, compared to the value of U.S. produced honey last year at $333.5 million dollars. An interesting figure – 25% of the honey we consumed cost us about 40% of the total value of the honey we consumed.

In 2017 we imported 67% of the honey we consumed, so that number has increased this year, and with the prices available, it is, sadly, no surprise. Prices per pound bulk for imported honey in Feb this year look like this:

Argentina, $0.99 – $1.30 depending on color

Brazil, Organic – $1.25 – $1.37, depending on color

India, $0.87 – $$0.96, depending on color

Uruguay, $0.93

Vietnam, $0.81 – $0.89, light amber only

One country you will note that is not on this chart is China. Much speculation has arisen as to why…they once were huge exporters to the US each year, and still make some contributions ($20 million in 2018), even with tariffed honey sales. Argentina leads the pack this year, however, and has for a bit. Followed closely by India and Brazil. Notable decreases came from Mexico this year, down 54%, Vietnam down 53% and even Argentina was down this year over past years. When looking at average price per pound for US honeys across all states, the range is $1.83 – $7.37, with an average of $2.16. It's tough to compete on price alone when looking at these prices.

LOOKING AT SOME EXPORTING COUNTRIES

INFORMATION

The countries below are gargantuan honey exporters to the world, accounting for more than three quarters of all the honey in the world that was exported last year, figured in U.S. dollar value.

China – $249.3 million (11.2 % of all exports) (In 2017, the last year we have data for, China exported to just 8 countries 48.3 million pounds of honey, worth US $222.4 million)

New Zealand – $245.2 million (11%) In 2018 New Zealand exported to the US 3.7 million pounds of honey with a US$ value of $18.6 million, or, that's $5.06 on average for every pound of manuka honey sent here.

Argentina – $175 million (6.3%)

Germany – $140 million (5.4%)

Mexico – $120.4 million (5.4%)

Spain – $107.3 million (4.8%)

India – $102.4 million (4.6%)

Ukraine – $98.2 million (4.4%)

Brazil – $95.4 million (4.3%)

Hungary – $86.7 million (3.9%)

Belgium, Vietnam, Canada, Romaina, Poland combined – $298.4 million (13.3%)

These 15 countries accounted for approximately 77% of all honey exports in 2018

(China's value is a result of sheer volume of honey exported)

Worldwide, purchases of imported natural honey totaled US$2.2 billion in 2018

Overall, the cost of natural honey imports declined by an average -3.3% for all importing countries since 2014 when natural honey purchases were valued at $2.3 billion. Year over year, imported natural honey retreated by -4.7% from 2017 to 2018.

From a continental perspective, European countries bought the highest dollar worth of imported natural honey during 2018 with purchases costing $1.2 billion or 52.3% of the global total. In second place were North American importers at 23.8% while 20% of worldwide natural honey imports were delivered to Asia.

Smaller percentages were sold to customers in Oceania (2.4%), Africa (1.1%) and Latin America (0.3%) excluding Mexico but including the Caribbean.

Below are the 15 countries that spent the most on imported natural honey during 2018.

1. US: $504.2 million (22.5% of total natural honey imports)
2. Germany: $305.7 million (13.6%)
3. Japan: $145.4 million (6.5%)
4. France: $129.5 million (5.8%)
5. United Kingdom: $128.3 million (5.7%)
6. Italy: $100.4 million (4.5%)
7. Belgium: $72.9 million (3.3%)
8. China: $70.1 million (3.1%)
9. Spain: $68 million (3%)
10. Netherlands: $66.9 million (3%)
11. Poland: $62 million (2.8%)
12. Saudi Arabia: $57.8 million (2.6%)
13. Australia: $52.6 million (2.4%)
14. Switzerland: $39.8 million (1.8%)
15. Hong Kong: $32 million (1.4%)

By value, the listed 15 countries purchased 81.9% of all natural honey imports in 2018. Within parenthesis is the percentage of overall natural honey shipments.

Among the above countries, the fastest-growing markets for natural honey since 2014 were: Australia (up 32.9%), Netherlands (up 32.6%), Japan (up 21%) and China (up 19.6%).

Those countries that posted declines in their imported natural honey purchases were led by: Saudi Arabia (down -32.9%), Hong Kong (down -17.1%), France (down -15.7%) and United States (down -13.4%

Some Individual Countries…

China

According to the National Bureau of Statistics, China's honey production has been increasing steadily over the years. In recent years, the domestic market share is growing. The following table lists the China's honey exports and the proportion of domestic sales in the period 2001-2016 (units: 10,000 mt).

Year	Total Output	Export	Proportion of Export	Domestic Consumption	Domestic Consumption
2001	25.2	10.7	42.4	14.5	57.5
2002	26.5	7.6	28.67	18.9	71.33
2003	29.9	8.4	28.1	21.5	71.9
2004	29.3	8.2	28.0	21.1	72.0
2005	29.32	8.8	30.0	20.5	70.0
2006	33.3	8.1	24.3	25.2	75.7
2007	35.4	6.4	18.1	29.0	81.9
2008	40.0	8.5	21.25	31.5	78.75
2009	40.2	7.2	17.91	33.0	82.09
2010	40.1	10.1	25.1	30.0	74.9
2011	43.1	9.98	23.15	33.12	76.85
2012	44.8	11.0	24.55	33.8	75.45
2013	45	12.5	27.7	33.8	75.1
2014	46.82	13	28	33.84	72.2
2015	50.5	14.48	28.6	35	69.3

2016	70	12.83	18.3	40	57.1

This table shows that, in 2001, honey production was 252,000 mt, export 107,000 mt and about 145,000 mt were for the domestic market of consumption. By 2016, the yield of honey was 700,000 mt, and 128,300 mt were exported, the volume of the domestic consumption was about 400,000 mt, which is 2.75 times of the domestic sales in 2001. If each person buys 0.5 kg honey, over 1,300,000,000 Chinese people need over 650,000 mt, so the market potential is stunning!

In spite of the negative media coverage, China still exports considerable volumes of honey. The following table shows the exports to the main destinations in 2017, the latest data available.

Country	Value (USD)	Volume (kg)
Japan	73,056,708	30,109,142
UK (EU)	54,403,933	29,664,811
Belgium (EU)	25,164,242	11,389,802
Spain (EU)	17,820,548	8,897,182
Poland (EU)	17,595,171	9,087,237
Australia	12,997,760	6,406,581
Germany (EU)	10,733,514	4,936,745
Netherlands (EU)	10,723,586	5,498,740

Because of the many fake honey products in China, quite a few Chinese prefer to buy imported honey. The following table shows the import figures of the Chinese Customs regarding the 2013-2017 period, the latest available.

Year	Import (KG)	Amount (USD)
2017	5,660,034	91,297,418
2016	6,031,955	72,771,567
2015	6,517,661	74819215
2014	5,791,684	58,629,975
2013	4,856,713	42,932,079

This honey is respectively from New Zealand (Manuka), Australia, Germany, Thailand, France, Russia, Malaysia, Chile, Italy, Portugal, Swiss, UK, Spain, Canada, Greece, Taiwan Region, Kyrgyzstan, Brazil, Denmark, Mexico, Hungary, Poland

India

In India reports indicate that they are having a good crop for 2018 and as a result their prices have softened slightly from a year ago. In India, they produce their White/ELA crops first followed by Light Amber. Because packers are reported to have good coverage at this time offers for India honey have been slow. However, India's honey production has grown by 200%, exports by 207%

As per the latest data from India's National Bee Board, under the Department of Agriculture, the country's total honey production reported in 2017 – 2018 was 105,000 metric tons (MTs), compared to the 35,000 metric tons in 2005-2006. Today, India also has as many as 35 million bee colonies, compared to 8 million during 2005-2006. The number of beekeepers, beekeeping companies and honey societies has also increased and as of January 2019, the country had 9,091 registered people in the apiary business.

While the per capita honey consumption is as low as 50 grams per year in India, globally it ranges from 250 to 300 grams, with Germany topping in per capita honey consumption, with a whopping 4.4 pounds per year. In Asia, Japan is the biggest consumer of honey, with per capita consumption of up to 2 pounds per year.

With international demand for honey growing, India exports 50 per cent of the commodity and, in the last 12 years, exports have increased by 207 per cent.

Alongside production of honey, exports have also increased in recent years, with Germany, US, UK, Japan, France, Spain and Italy being the main markets. India, during 2017 – 2018, exported a total of 51,547 (MTs) whereas the exports were 16,769 MTs during 2005 – 2006," according to data from the National Bee Board.

The government plans to set up an Integrated Beekeeping Development Centre (IBDC) in every state and so far, there are 16 such IBDCs at Jammu and Kashmir, Haryana, Uttarakhand, Himachal Pradesh, Delhi, Punjab, Uttar Pradesh, Madhya Pradesh, Bihar, Manipur, West Bengal, Tripura, Arunachal Pradesh, Andhra Pradesh, Tamil Nadu and Karnataka.

Importantly, pollination by honey bees at vast farms and cultivable lands has increased crop yield manifold. Agriculture experts say the additional yield obtained after pollination is 15 to 20 times more than the money generated from the hive products. It has been proven that legumes, vegetables, fruits and other crops give

better yield, ranging from 50 per cent to as high as 6,000 per cent, when crops are pollinated.

As per the latest government estimates, large-scale employment in the beekeeping sector is estimated to generate three hundred thousand man-working days by maintaining 10,000 bee colonies.

But climate change is beginning to impact beekeeping as honey bees in India are being hit by diseases and the recent harsh winter has affected nectar secretion in many parts of India.

Natural Honey Exports by Country

Following is information on several of the exporters of honey to the U.S. to gain perspective on the importance of each. Global sales from natural honey exports by country totaled US$2.2 billion in 2018.

Overall, the value of natural honey exports fell by an average 5.7% for all exporting countries since 2014 when natural honey shipments were valued at $2.4 billion. Year over year, global exports of natural honey decreased in value by 7% from 2017 to 2018.

Among continents, European countries accounted for the highest dollar value worth of natural honey exports during 2018 with shipments amounting to $876.1 million or 39.2% of total international honey sales. That percentage compares with 23% from Asian exporters, 15.5% from Latin America excluding Mexico but including the Caribbean, and 12.4% from Oceania (mostly New Zealand trailed by Australia). Smaller percentages came from shippers in North America (9.1%) and Africa (0.6%).

The 4-digit Harmonized Tariff System code prefix for natural honey is 0409.

Natural Honey Exports by Country

Below are the 15 countries that exported the highest dollar value worth of natural honey during 2018.

1. China: US$249.3 million (11.2% of total natural honey exports)
2. New Zealand: $245.2 million (11%)
3. Argentina: $175 million (7.8%)

4. Germany: $140.5 million (6.3%)
5. Mexico: $120.4 million (5.4%)
6. Spain: $107.3 million (4.8%)
7. India: $102.4 million (4.6%)
8. Ukraine: $98.2 million (4.4%)
9. Brazil: $95.4 million (4.3%)
10. Hungary: $86.7 million (3.9%)
11. Belgium: $77.7 million (3.5%)
12. Vietnam: $67.7 million (3%)
13. Canada: $61.2 million (2.7%)
14. Romania: $49.3 million (2.2%)
15. Poland: $42.5 million (1.9%)

By value, the listed 15 countries shipped over three-quarters (77%) of all natural honey exports during 2018.

Among the top exporters, the fastest-growing natural honey exporters since 2014 were: New Zealand (up 45.8%), Canada (up 33.1%), India (up 32.7%) and Ukraine (up 5.3%).

Those countries that posted declines in their exported natural honey sales were led by: Vietnam (down -49.1%), Mexico (down -18.1%), Poland (down -17.4%), Argentina (down -14.4%) and Spain (down -13.6%).

Argentina

In Honey news around the world, Argentina still appears to have an average to good crop this year. The Northern region evidently experienced some poor weather conditions but the main southern crop did not seem to be affected as much. However, the volume of white Argentine honey could be impacted which could affect the ratio of 34/40/50 in color honey that is sold. Reports are that the crop is delayed but there has been little demand at this time. In Brazil however, due to the recent

good crops Organic prices continue to remain softer than a year ago due to the additional inventory they are carrying.

Argentina is the second largest producer of honey in the world, but its bees are dying at a rate of 30% every year, according to the Centre of Investigation on Social Bees (CIAS). It was made clear in 2018 that Argentina's economy depended heavily on crops and exports, as one of the worst droughts in recent years caused the country to lose US$7 billion, pushing it even further into the economic crisis emblematic of the past year.

The Food and Agricultural Organisation (FAO) stated that Argentina is the third-largest exporter of honey across the globe, and with honey production in massive decline in the South American country, this could have unwanted negative consequences on the economy.

However, a reduction in the bee population due to disease and pesticides is not only going to affect the production of honey. Bees are indispensable for pollinating a plethora of plants and crops. They pollinate 70 of the 100 crop species that feed 90% of the world, and are responsible for $30 billion a year in crop production.

Canada

In Canada the early reports indicate that the Canadian crop would be in the 70-80 MT range were understated as their crop is now being projected in the 90-93 MT range which is similar to the past 2-3 crops. For this reason there was still inventory available in Canada with their prices remaining somewhat soft although slightly firmer than Argentine prices. Due to fairly good demand for Canada honey the past few months much of their inventory has now been depleted but the exchange rate is still fairly favorable so prices have remained stable.

Canada is a significant exporter of honey to the U.S., and, certainly a close neighbor. They produce on average just over 40 metric tons per year, with Alberta producing almost half of that annually. They have just short of 800,000 colonies, again with Alberta at about 300,000, run by nearly 11,000 beekeepers.

The EU

The EU also plays an important role in the international honey game. They are major importers of honey, and, with the status change in Chinese imports into the US, the EU has absorbed much of what used to be sold here. In 2018 they had 17.5 million hives, run by about 650,000 beekeepers, with Estonia leading the way with 3 million

hives. Overall, the EU is about 60% self-sufficient, with imports needed to cover local demand. The main suppliers are China, with about 40% of that market, and the Ukraine with about 20%. Even so, the EU is the second largest honey producer in the world after China at 230,000 tons.

EU Imports, 2018 (in tons)	Value in Euros/Kg
Uruguay – 4550	2.26
Brazil – 4587	3.34
Cuba – 4974	2.4
Chile – 7540	2.96
Mexico – 20,860	2.82
Argentina – 25,405	2.34
Ukraine – 40,997	1.83
China – 80,242	1.3
Internal and Others – 225,669	2.17

Global Import and Export Markets

If a country is looking for a market for honey, or, is looking to expand it's beekeeping and honey production industry, they first need a place to sell that honey over and above internal consumption. Below is a list of net importers…that is, they buy more than they sell, thus creating a positive market for other countries. These are the highest negative net exports for natural honey during 2018. Investopedia defines net exports as the value of a country's total exports minus the value of its total imports. Thus, the statistics below present the deficit between the value of each country's natural honey import purchases and its exports for that same commodity.

1. United States: -US$478.7 million (net export deficit down -14.6% since 2014)
2. Germany: -$165.2 million (down -3.4%)
3. Japan: -$145.1 million (up 21.2%)
4. France: -$97.5 million (down -19.2%)

5. United Kingdom: -$94.8 million (down -14.3%)
6. Italy: -$69.9 million (up 56%)
7. Saudi Arabia: -$50.5 million (up 0.6%)
8. Netherlands: -$48.6 million (up 18.9%)
9. Switzerland: -$33.4 million (up 3.4%)
10. Hong Kong: -$28.7 million (down -10.9%)
11. Sweden: -$23.6 million (up 19.4%)
12. Australia: -$20 million (up 60.4%)
13. Poland: -$19.5 million (up 294.5%)
14. United Arab Emirates: -$19.2 million (down -25.5%)
15. Singapore: -$16.4 million (down -9.7%)

United States has the highest deficit in the international trade of natural honey. In turn, this negative cashflow confirms America's strong competitive disadvantage for this specific product category but also signals opportunities for natural honey-supplying countries that help satisfy the powerful demand from American consumers.

The following countries posted the highest positive net exports for natural honey during 2018. Essentially, these are the world's honey sellers. Investopedia defines net exports as the value of a country's total exports minus the value of its total imports. Thus, the statistics below present the surplus between the value of each country's natural honey exports and its import purchases for that same commodity.

1. New Zealand: US$244.9 million (net export surplus up 46.1% since 2014)
2. China: $179.1 million (down -11.2%)
3. Argentina: $175 million (down -14.4%)
4. Mexico: $120.4 million (down -18.1%)
5. India: $99.2 million (up 31.6%)
6. Ukraine: $98.1 million (up 5.6%)
7. Brazil: $95.2 million (down -3.4%)

8. Hungary: $86.7 million (up 0.2%)
9. Vietnam: $65.5 million (down -50.5%)
10. Spain: $39.3 million (down -36.8%)
11. Bulgaria: $38.8 million (down -0.6%)
12. Romania: $37.8 million (down -17.8%)
13. Canada: $32.4 million (up 92.1%)
14. Chile: $29 million (up 5.7%)
15. Turkey: $25.6 million (up 35.8%)

New Zealand has the highest surplus in the international trade of natural honey. In turn, this positive cashflow confirms the Oceania island nation's strong competitive advantage for this specific product category.

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The numbers shown here are not surprising by any degree. That's too bad, because some game changing management practices are even today occurring in the US honey market that will have an effect on these numbers in he next few years. Chief among them is the not-so-gradual shift from honey production income to pollination income coupled with the sales of bees income in the U.S.

Beekeepers figured out some time ago that the battle of honey prices from off shore is going to be both difficult and competitive when it comes to price, but for a time there was no alternative. And, unfortunately, quality isn't a major factor in the honey game. Imported honey, for the most part, is acceptable to US customers, as shown by steadily increasing per capita consumption. So, if you can't sell honey at a profit, then sell what you can sell and make your profits there. And pollination, fortunately, can't be imported, so there is definitely growth in that sector. Crops needing pollination, especially almonds but certainly other crops, are stable to increasing, thus demand for colonies is the same. That's a good thing.

To accommodate increased demand for pollination colonies, and, at least for awhile the increased demand from the sideline and hobby market for bees, beekeepers are looking at producing….just bees. And, like pollination, you can't import those, either. It's easier than honey, too. You don't have to worry about honey and mite treatments

interfering with each other, and you can balance the needs of pollination with the ability to sell those extra bees afterwards. Win, win.

Coupled with this is the growing use of indoor wintering technology. And, basically, technology in general. Beekeepers, and beehives, are getting smarter about environmental manipulation and control, and keeping bees alive in northern Minnesota may be a bit easier in the not too distant future. Stay tuned for that.

Tariffs, too, are playing some role in honey prices and availability but that promises to be only a short term benefit. But any is better than none, so watch that front also.

So, production up, which is good, especially when prices are down, but imports continue to be a sharp pain if you are in the honey business. Selling bees for pollination and to meet the demand for more colonies seems to be a brighter future for US beekeepers. Watch this space.