CERTIFICATION AND RATINGS **COLLABORATION**



Market analysis and forecasts

Seafood Datasearch Report on Mexican Shrimp Market Issues May 2020

Prepared for the Certification and Ratings Collaboration by John Sackton, **Seafood Datasearch** jsackton@seafood.com

EXECUTIVE SUMMARY
NOTE AND UPDATE ON THE CURRENT CORONAVIRUS EMERGENCY
CURRENT SITUATION FOR SHRIMP MARKETS
Chart: Urner Barry Shrimp Price Comparison: Mexico wild, Gulf Wild Domestic, Latin America Farmed4
OVERVIEW OF MEXICAN SHRIMP SUPPLY AND MARKETS
FIGURE 1: BREAKDOWN OF US SHRIMP IMPORTS BY TYPE IN 2019 (US CENSUS DATA)6
FIGURE 2: BREAKDOWN OF US SHRIMP IMPORTS BY TYPE IN 2006 (US CENSUS DATA)7
FIGURE 3: MEXICAN SHARE OF U-15 SHRIMP
FIGURE 4: MEXICO'S MARKET SHARE IN US FOR 16-20 AND 21-25'S8
FIGURE 5: CHANGE IN PRICE OF MEXICAN U-15 WHITE SHRIMP9
FIGURE 6: PERCENTAGE CHANGES IN PREMIUM RECEIVED FOR MEXICAN U-15 SHRIMP10
CAUSES OF THE PRICE DECLINE FOR MEXICAN SHRIMP
FIGURE 7: 22 MONTHS OF IMPORTS THROUGH NOGALES
FIGURE 8: 22 MONTHS OF IMPORTS THROUGH OTHER PORTS AND DISTRICTS
FIGURE 9: LONG TERM CHANGES IN PORT OF ENTRY FOR MEXICAN SHRIMP OTHER THAN NOGALES
IMPACT OF THE EMBARGO ON NORTHERN GULF
WHO ARE THE MAJOR USERS OF MEXICAN SHRIMP?
VOLUME OF MEXICAN SHRIMP
FIGURE 10: TOTAL MEXICAN SHRIMP PRODUCTION BY SPECIES AS REPORTED BY FAO (FAO)
FIGURE 11: WILD CAPTURE (ATLANTIC AND PACIFIC) VS. AQUACULTURE
FIGURE 12: MEXICAN SHRIMP EXPORTS (INTRACEN)
FIGURE 13: OVERVIEW OF VOLUMES IN MEXICAN DOMESTIC AND EXPORT MARKET
TABLE 1: REGIONAL PRODUCTION DISTRIBUTION 20
RECOMMENDATIONS ON IMPROVING MARKET ACCEPTANCE IN THE US
CURRENT SITUATION
WHAT CAN BE DONE TO REVERSE THIS SITUATION?

EXECUTIVE SUMMARY

This report is a summary market analysis of Mexican shrimp coming into the US market. The focus is on wild-caught shrimp, which makes up the majority of Mexican shrimp exports to the US in the U-15 and 16-20 size ranges and is a substantial portion of exports in the 21-25 size range.

Mexican shrimp aquaculture produces more shrimp than the wild caught sector, but generally does not produce significant quantities of shrimp larger than 21-25.

The issue which led to this study is that the organizations working through the Certifications and Ratings Collaborative want to gain a better understanding of the supply chain for Mexican shrimp, and where that supply chain might be leveraged by buyers to improve sustainable practices and overcome some of the negative ratings that have been given to the Mexican shrimp industry.

Mexican white shrimp was the premium shrimp in the US market for many years. However, in the past few years, the premium paid for Mexican shrimp has declined precipitously.

There are three factors in this decline. First, according to interviews several larger shrimp buyers have moved away from Mexican shrimp due to sustainability concerns. Second, the growing availability of large white Vannamei shrimp from Asia in size ranges U-15 and 16-20 has put pressure on the Mexican export market. Third, the principal product form for Mexican shrimp, 5 lb blocks of frozen headless shrimp, is not gaining market share in the US but is declining as a percentage of all shrimp, as more foodservice users turn to peeled product.

Domestically within Mexico, it is primarily smaller size aquaculture and wild shrimp that is sold, as these are lower priced than the premium large shrimp.

There have been a number of efforts to improve sustainability practices, some of which have been quite successful at specific times, but overall the impact of these improvement projects has not been enough to affect overall industry practices, or its reputation in the marketplace.

Although there have been some cooperatives of small vessel (panga) fishermen who have adopted best practices, many others have not.

In March 2020, the US government imposed a full embargo on all Mexican shrimp caught in the area designated as critical habitat for the vaquita porpoise, using provisions of the Marine Mammal Protection Act.

The US could potentially escalate the embargo to cover other Mexican shrimp and seafood products, including aquaculture shrimp. However, there does not appear to be any movement in that direction, despite the Mexican government's inability to fund sufficient enforcement to protect marine mammals by shutting down illegal gillnet fishing.

Aquaculture production in Mexico is not fully certified by the GAA and its BAP program. In fact, Mexico has a lower percentage of its industry covered by BAP than some other Central and South American producers.

However, there continue to be many examples of 'best actors' in Mexico, which include both wild and aquaculture producers who fully comply and support the fishing regulations, and in aquaculture are certified by BAP. The finding of this study is that the erosion of the premium in Mexican shrimp has been largely due to market forces, not an explosion of illegal shrimp.

In seeking methods to reverse this decline, marketing communications and clear guidelines put forward through the Mexican Shrimp Council represent one path forward for those producers who are socially and environmentally responsible. Encouraging all major US buyers of Mexican shrimp to follow Council guidelines is perhaps a first step in regaining the value that exists in a responsible Mexican shrimp production environment.

Note and update on the Current Coronavirus emergency

This study was begun before the impacts of the coronavirus and subsequent economic dislocation were felt in the seafood industry. The foodservice market for seafood has largely collapsed as 70% to 80% of US restaurants that would use Mexican shrimp are shut down.

The retail market, while strong, has a different level of competition, where the ability of producers to meet MSC or BAP standards is even more important.

It is likely that there will be a long recovery, during which time shrimp markets will be subject to unpredictable forces which could lead to either oversupply and significant price collapse, or undersupply and a shortage induced rise in shrimp prices.

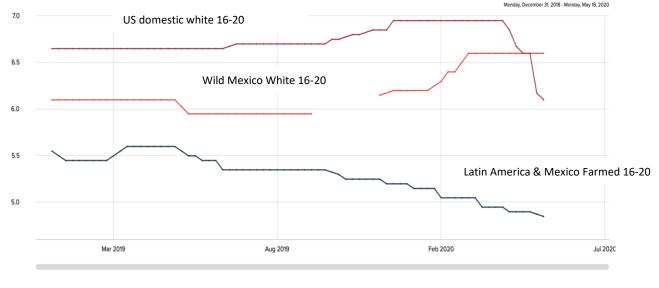
For this reason, the recommendations and conclusions in this report are for a 'normal' shrimp market and would have to be revisited if they were to address the current crisis in shrimp marketing.

CURRENT SITUATION OF SHRIMP MARKETS

Between when this project began and its completion the shrimp market was completely upended due to the impact of the Covid-19 pandemic.

This has had a major impact on shrimp prices, and the pandemic creates uncertainty about the shrimp outlook for the fall 2020 season.

UB Shrimp, Wild, Mexican, No. 1 White, fob WC, 16-20 Count



UB Shrimp, Wild, Mex., No. 1 White, 16-20 (Low)

---- UB Shrimp, Farm, Lat Am, White, 16-20 (Low)

---- UB Shrimp, Wild, Gulf Mex., Dom. White, 16-20 (Low)

Chart: Urner Barry Shrimp Price Comparison: Mexico wild, Gulf Wild Domestic, Latin America Farmed

The chart illustrates what has happened recently with Ecuador farmed shrimp, and US domestic Gulf shrimp, compared to wild Mexican whites.

First, before the pandemic, in the period from September to the end of February, there was strong foodservice demand for Mexican wild shrimp, and prices rose. As the season is now over and inventories are not an issue, there is no strong pressure on sellers to reduce prices.

By contrast, Ecuador's pricing to the US market has been falling since last fall. In September, China implemented a temporary import ban against a few Ecuador companies. This caused a market reaction, as Ecuador producers looked to other sales markets, including the US, which is not a normally favored destination. The increased volumes of headless shrimp from Ecuador began to weigh on the price.

Then the pandemic hit China, and Ecuador exports were halted altogether. This put further downward pressure on producers, who were also dealing with the outbreak of the pandemic in Guayaquil that seriously disrupted production. As can be seen in the chart, prices continued to decline.

The third item is Gulf domestic white shrimp. Similar to Mexican whites, the market paid an increasing premium for Gulf shrimp, which goes to many restaurants in the southern US.

However, this month prices have crashed. This is due to the upcoming new season and higher production, facing a shrimp market with extreme uncertainty.

Overall, shrimp prices have come down about 7.5% since the beginning of February, as the shock of the collapse of foodservice sales hit the market.

Since then, there has been a massive shift to retail sales, which has helped the products that sell primarily at retail, which include cooked and peeled shrimp, and peeled. The outlook has gone from extreme worry about lack of sales, to worry about lack of supplies.

The Asian markets, which supply 80% of US shrimp, have been slower than expected to recover production. This has strengthened the position of those within the industry who see a potential for a shortfall later this year and has allowed them to push up prices slightly.

But this does not apply to headless shrimp and the types of shrimp that are primarily foodservice. There is some increase in sales, but when new season production comes on stream, it has proved to be much more than the market can absorb.

This is the uncertainty that faces Mexican producers next season. At this time, it is impossible to tell whether lack of production in other areas will bring a premium demand for Mexican farmed and wild shrimp, or if the continued weakness of the US foodservice market dampens demand, as is currently happening with Gulf of Mexico shrimp.

Overall, the pandemic has meant a huge decline in shrimp sales at foodservice, as casinos, hotels, cruise lines and amusement parks have all shut down. In fact, about 1/3 of all US restaurants are currently closed, and as much as 25% of the independent restaurants may go out of business.

But sales at retail for seafood, including frozen shrimp, have soared. This has partially made up for some of the lost demand.

Because sellers are working off of inventory that was imported during the 1st quarter, when imports were at record levels, there has not been any pressure for panic selling or severe reductions in prices, except for those items where the new season is taking place.

The worst performing types of shrimp are those sold as headless 5 lb block, which is dedicated to foodservice and cannot be easily sold at retail.

This suggests that when the new shrimp season begins next fall, Mexican processors should consider whether retail product forms may be required to get better prices and market share.

Even as some restaurants reopen, the overall outlook for foodservice remains very bleak.

A second consideration for the fall is the darkening US economic outlook, with the federal reserve predicting unemployment at levels equal to the great depression in the 1930's. Few economists expect a quick or fast recovery. This is going to also impact both retail and foodservice seafood sales, as consumers will have less money to spend.

In 2008-09 seafood prices fell around 20% during and after the financial collapse. There is no reason not to expect that overall trend in these conditions as well.

OVERVIEW OF MEXICAN SHRIMP SUPPLY AND MARKETS

Mexico is the seventh largest shrimp exporter to the US. Over the past five years, Mexican shrimp has represented around 5% of the total US market.

The principal types of shrimp imported into the US are headless, shell on (HLSO) and raw peeled shrimp.

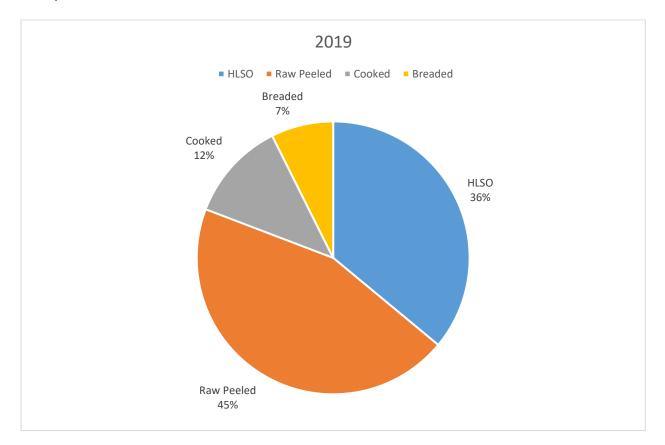


Figure 1: Breakdown of US Shrimp Imports by Type in 2019 (US Census Data)

Mexican shrimp exports are almost exclusively HLSO shrimp. This sector of the US market has been shrinking relative to the volumes of raw peeled shrimp. The reason is that foodservice, the primary users of headless shell on shrimp, has increasingly been buying raw shrimp for the labor savings in the kitchen.

So Mexican shrimp is primarily sold in a traditional form, which is being supplanted by other product forms.

To give a comparison, in 2006, HLSO represented 55% of the US shrimp market compared to 36% in 2019.

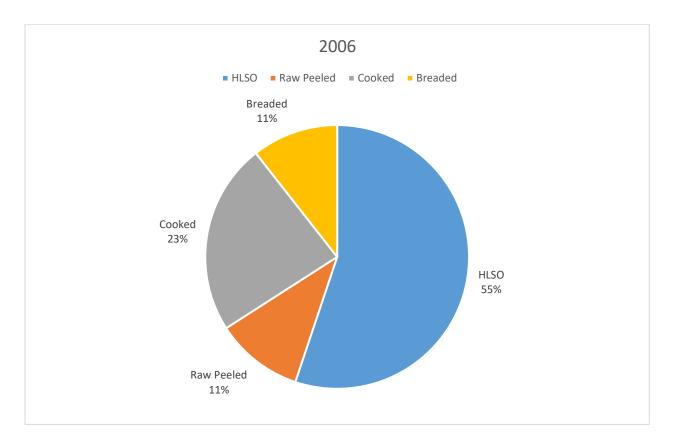


Figure 2: Breakdown of US Shrimp Imports by Type in 2006 (US Census Data)

Where Mexico has a greater market share is in the larger sizes of shrimp. Figure 3 shows the market share of Mexican shrimp for the U-15 size among the top countries exporting to the US

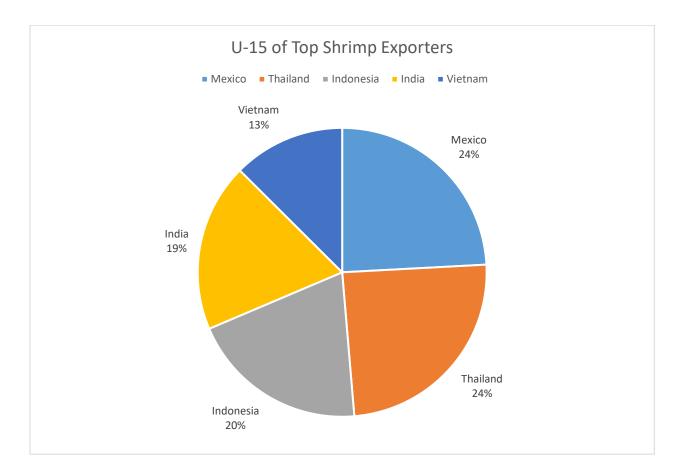


Figure 3: Mexican share of U-15 Shrimp

For smaller sizes, Mexico's market share is increasingly dwarfed by India and Indonesia.

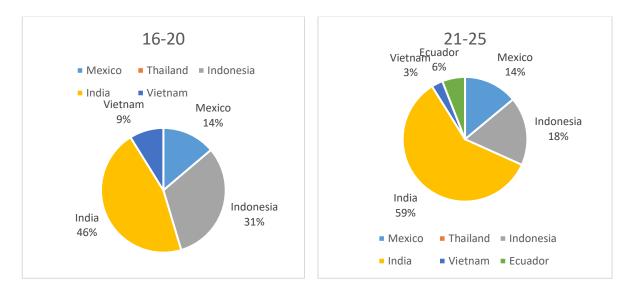


Figure 4: Mexico's market share in US for 16-20 and 21-25's.

The reason to show these figures is to establish where in the US shrimp market Mexican shrimp producers have leverage.

Two sources of large (U-15) shrimp sold in the US are wild Pacific white/blue shrimp and Farm raised black tiger shrimp. Mexico supplies about 60 to 70% of the large white shrimp sold in the US, and 20 to 25% of all large shrimp, including both whites and black tiger.

Most larger shrimp (16-20's, U-15, and larger) are wild shrimp. Mexican aquaculture's largest sizes are 21-25's. However with the increasing development of fast growing Vannamei brood stock, some Asian producers, especially in Thailand, are able to grow aquaculture shrimp to 16-20 and even U-15.

Mexican white shrimp used to command a substantial premium and were the most sought-after shrimp for foodservice. However, with the privatization of Ocean Garden, the marketing approach to selling wild Mexican shrimp changed dramatically.

Since 2015, the premium paid for U-15 Mexican over a farm-raised Latin American 16-20 has declined from 86% in 2015-16 to 29% in 2019-20.

The premium paid for Mexican whites over Urner Barry's farmed white shrimp index, which is an approximation of the average value of all farmed shrimp sold in the US, declined from 165% in 2015-16 to 81% in 2019-20.

Mexican producers have experienced this as a dramatic and long-lasting market decline. One question this study attempts to answer is why the price has declined.

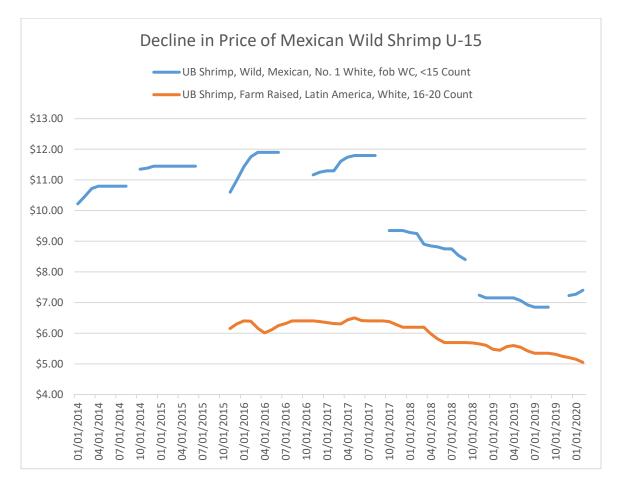


Figure 5: Change in price of Mexican U-15 white shrimp Source: Urner Barry Comtell Price Quotations

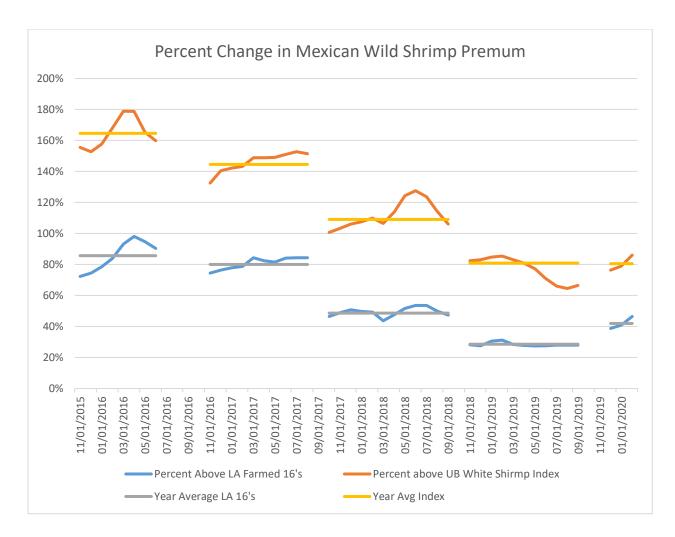


Figure 6: Percentage changes in premium received for Mexican U-15 shrimp Source: Urner Barry Comtell Price Quotations

These charts document the price decline for Mexican shrimp. They are based on Urner Barry Price reporting. Urner Barry provides a twice-weekly quote for Mexican wild shrimp by size. They also quote Farm raised Latin American shrimp, and they produce a white shrimp index which is a weighted average price of all shrimp sizes in the US market.

Figure 5 shows that the price premium for U-15 Mexican white shrimp was very significant, and that for four years this shrimp traded at a wholesale price of between \$10.00 and \$12.00 per lb.

Starting with the shrimp season of 2018 prices have fallen sharply, more so than shrimp prices in general.

CAUSE OF THE PRICE DECLINE FOR MEXICAN SHRIMP

There are two specific causes of the price decline that can be identified through our interviews and analysis.

For wild shrimp, the system of selling to maximize value has largely disappeared. When Ocean Garden had ties to the government, part of its mandate was to support the incomes of shrimp producers in Mexico. This meant advancing plants money to purchase shrimp and repaying themselves from the sales of shrimp during the year. This made maximizing the value of the product the primary goal because there was no call to return the capital until it was time to finance the next shrimp season. So the company could afford to hold inventory and limit sales when prices were unfavorable.

This is the same economic strategy that many large vertically integrated seafood companies use. This strategy in effect shielded some of the shrimp processing plants from the month to month pressures of the commodity market. Ocean Garden took on much of the commodity volatility risk.

Following privatization, Ocean Garden now sells on a consignment basis, where they pay 70% of the expected value of their shipment up front and charge the packer the interest and carrying costs on the loan, sales costs and commission from the remaining 30%.

There is constant pressure from shrimp processors to repay the loan as quickly as possible because not doing so harms the cash flow of the producers. Ocean Garden's mission is no longer impacted by the actual price of shrimp, but rather by how quickly they can sell into a commodity market. They have no incentive to hold inventory to gain a higher price, because they are under pressure from their packers to repay their loan and settle expenses.

This change has resulted in Mexican wild shrimp being priced more as a commodity product than a product sold exclusively through well capitalized integrated companies.

Another cause of the price decline, according to interviews with sellers, has been customer reaction to the years of high prices and the move to substitute products.

Foodservice margins are tight and as the cost of Mexican shrimp remained high compared to other shrimp, an increasing number of users switched to competing products.

Large shrimp from aquaculture, especially from Thailand, which is producing more 16-20, and even U-15, farmed white shrimp has taken market share in the US. This is due to genetic improvements and a fast growing cycle that has allowed farmers to be able to raise shrimp to large sizes and be profitable. In Thailand, there is a strong incentive to grow larger shrimp as these represent the most profit a farm can earn. In 2015, Thailand represented 3% of the U-15 shrimp sold in the US. In 2019, they represented 24%.

There have been suggestions that the price decline has been caused by a surge in illegal shrimp, especially as the Mexican government has cut back on budgets for enforcement and surveillance. We have not found much evidence of this. Instead, we can document this trend toward lower prices over several years, and it is simply not likely that any surge in illegal shrimp has been so long lived. For that reason, although there may be one or two instances where illegal shrimp is being sold at lower prices, this is not likely to be the primary cause of the market decline.

However, one analysis of possible IUU shrimp shipments was to look at whether other ports of entry into the US showed any unusual activity over the past two years.

To the extent that there have been reports of falsified records and comingling of IUU shrimp from the upper gulf with legally caught trawl shrimp, these have not been through use of alternative shipping routes. In other fisheries where there has been significant trade violating customs or fisheries policies, it has generally been possible to identify the routes such products have taken.

For example, the surge in IUU Russian crab coming into the US was via a huge increase in transshipping in S. Korea, where unmarked cases would be offloaded and repacked for the US.

In China, the imports of shrimp to avoid duty took place through Vietnam, and the surge of trade from shrimp exporters through Vietnam was clear evidence of the scale of this trade.

Nothing like that was found in examining Mexican shrimp imports into the US. We did see an increase in shipments through the San Diego customs district, but in other years we have seen similar increases, such as in 2013. It is unlikely that a 2 or 3% increase in the proportion of shrimp going through San Diego vs. Nogales is anything other than ordinary commercial variation.

So although we cannot determine the scale of any comingling of legal and illegal product, we can determine there is no alternative trade route that has sprung up to try and circumvent normal US inspections and customs.

This suggests that the comingling problem has to be addressed through enforcement and documentation in Mexico, and further, it is highly unlikely to have reached any scale that would impact market pricing.

12

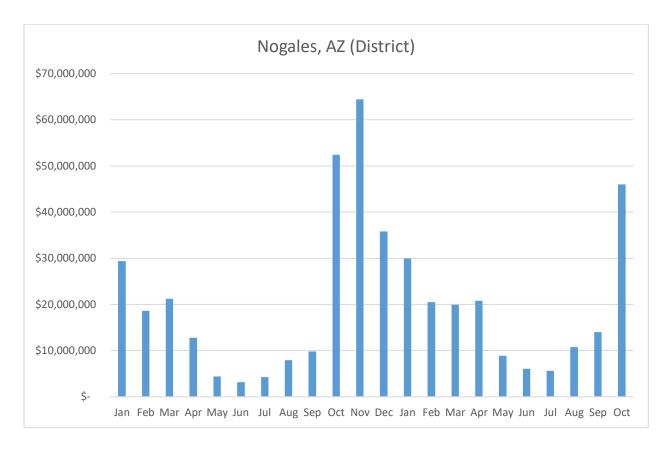


Figure 7: 22 Months of imports through Nogales Source: US customs data

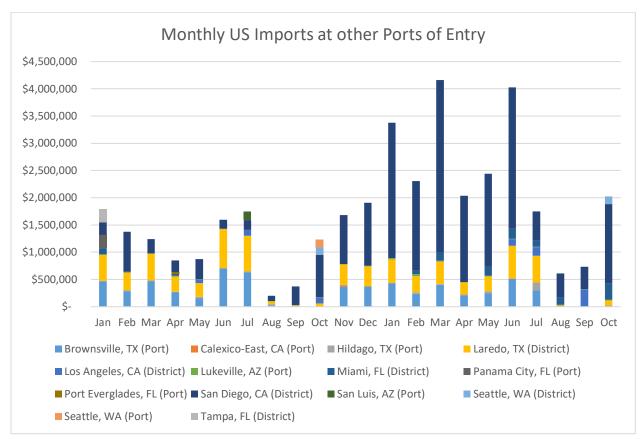


Figure 8: 22 Months of imports through other ports and districts

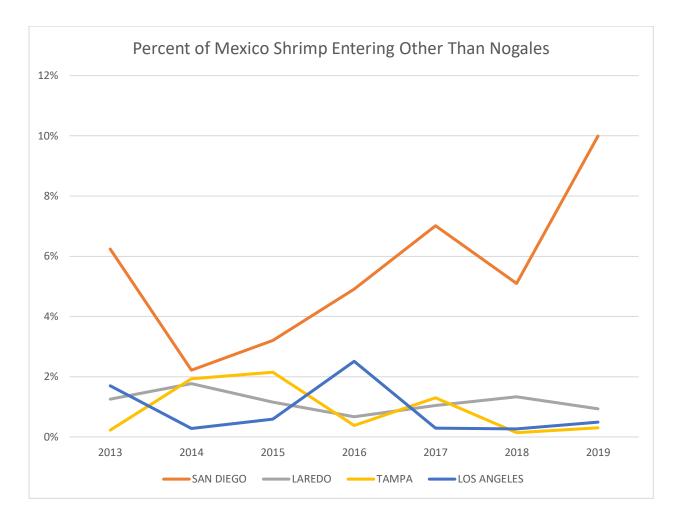


Figure 9: Long term changes in Port of Entry for Mexican shrimp Other than Nogales

IMPACT OF THE EMBARGO ON NORTHERN GULF

Mexico banned the use of traditional gillnets for shrimp fishing in the Upper Gulf in June 2017, but made an exception for enclosure nets (run around gillnets) used in the fishery for curvina and sierra.

In August of 2018, a US court ordered an embargo on gillnet caught shrimp. The grounds for the court finding was that the judge agreed with the plaintiffs in the lawsuit that NOAA had not enforced the protection requirements of the Marine Mammal Protection Act. In the fall of 2018, Mexico submitted their regulatory program to NOAA. NOAA found it comparable for protection of marine mammals, with one exception: the exemption for the two finfish fisheries.

In 2019, the new Mexican government did not enforce the proposed agreement, and instead submitted a new sustainability initiative. NOAA found that initiative was not a comparable regulatory program required under the MMPA. This was the basis for the March 2020 embargo, along with NOAA's claim that the Mexican government was not enforcing its own ban on gillnets.

As part of the 2018 lawsuit, brought by the Center for Biological Diversity and the Natural Resources Defense Council, the previous Mexican administration had offered a plan that would have

permanently banned gillnets in the Vaquita range in the upper Gulf. However, the new administration in Mexico has not indicated support for the plan delivered to the court. As a result, the injunction is still in effect, but the parties are arguing whether NOAA has taken sufficient action to prevent imports that the injunction should be dismissed.

In 2020, NOAA announced a new embargo against shrimp and 9 other species caught in the northern Gulf in the established range of the Vaquita. This new embargo has not yet had any significant impact on the market because the shrimp season is closed, and Mexican exporters had enough notice to send product across the border before the new documentation requirements came into effect.

The current embargo is under the authority NOAA was given in 2017 to implement import bans on seafood trade against those countries whose protections of marine mammals are judged to be not equivalent to US standards. The law allowed for a five-year grace period before any embargo's or trade restrictions could be implemented, but this was not applied in the case of protections for the vaquita porpoise because of its dire situation.

Going forward, the risk to Mexican exporters is a potential expansion of the embargo to more geographical areas. If the current embargo is found to have been insufficient and product from the banned area is found in the US, there is likely to be renewed pressure on NOAA to expand the embargo under the enforcement powers NOAA already has.

Continuing negotiations on Marine Mammal protection enforcement between Mexico and the US have so far not removed the threat of an expanded embargo, and this is more so given the current Mexican governments cutbacks in spending on marine science and enforcement.

Such an embargo could apply to any seafood NOAA chooses, including all farmed and wild shrimp if so designated. A more likely outcome is a restriction on wild shrimp from a larger portion of the Gulf of California.

The market problem of an embargo is that it makes a number of buyers lack trust in any products from the area where there are problems enforcing protections for marine mammals, and puts the burden on producers to document that their own shrimp products entering the supply chain are not comingled with shrimp illegally caught from embargoed areas, or from areas in violation of Mexican law.

Under the Lacey Act, the US can take enforcement action against any US seller of seafood products that have been taken in violation of the fish and wildlife regulations of another country. This prosecution can take place regardless as to whether the other country in question agrees with the violation or not, and regardless of whether the violation was prosecuted in the original country.

The most notorious application of these laws was the jailing of seafood importers who imported undersize lobster from Honduras, despite the Honduran government subsequently changing the law and asserting that no violation of lobster regulations took place.

According to interviews done with industry participants in December and January, the long-term impact of the inability of the Mexican government to control illegal fishing in the upper Gulf has led some major users to turn away from Mexican wild shrimp.

For example, Chicken of the Sea, owned by Thai Union, has said that they no longer carry Mexican shrimp. Another major user identified by industry was Trader Joe's. This retailer used to have a Mexican shrimp program that took more than 1 million pounds per year. However, due to the

sustainability concerns raised by NGO's around Mexican shrimp, Trader Joe's discontinued that program.

So the extension of the embargo and has the potential to further reduce the universe of buyers who will purchase Mexican shrimp. This has already contributed in some way, although likely small, to the price weakness currently seen in Mexican shrimp.

WHO ARE THE MAJOR USERS OF MEXICAN SHRIMP?

Volume of Mexican Shrimp

The volume of Mexican shrimp produced, and the volumes in the domestic market, were discussed in industry interviews and this information was compared with FAO data on production, and Intracen (International Trade Center) data on imports and exports.

Industry estimates were that farmed production was around 165,000 metric tons live weight, of which 80% is sold as HLSO, and the remaining is sold whole.

Wild production on the Pacific side was estimated at 30,000 tons live weight, and 8,000 to 10,000 tons of shrimp (product weight) was estimated to be imported.

Exports are estimated at around 40,000 tons, product weight.

These figures actually are reflected fairly well in FAO and trade data.

FAO reports that in 2017, aquaculture production was 157,000 tons; wild shrimp production on the Pacific was 68,000 tons, and wild shrimp production in the Gulf of Mexico was 26,000 tons.

Imports in 2018 included about 11,000 tons of cooked shrimp, primarily from China, and about 7000 tons for frozen shrimp from Guatemala and other Central American countries.

Exports totaled 36,000 product weight tons in 2018 of which 27,000 tons went to the US.

The following series of tables and charts details the history of shrimp production and availability over the past five years.

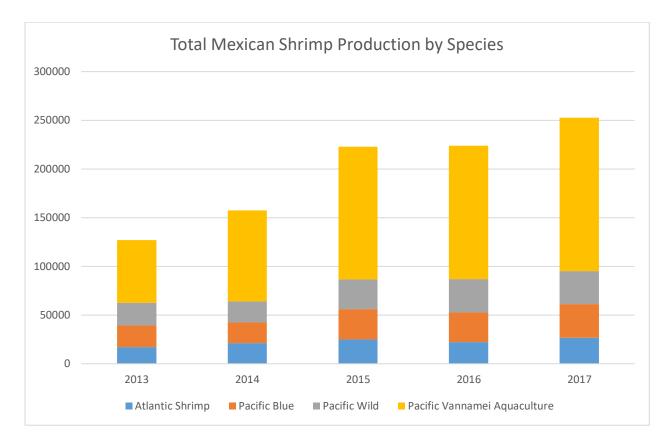
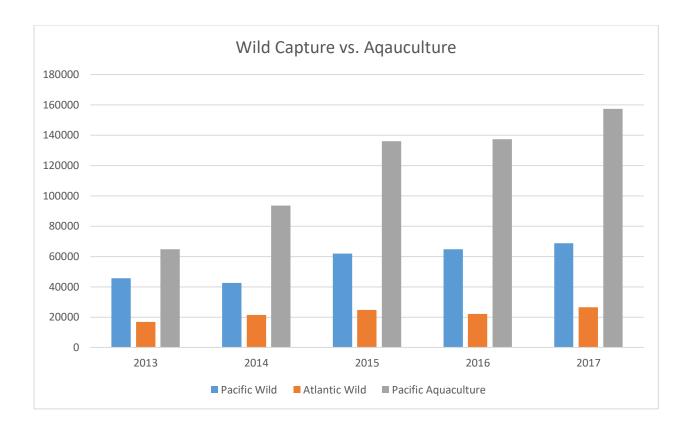


Figure 10: Total Mexican Shrimp Production by species as reported by FAO (FAO)

Pacific Wild in this chart includes Vannamei and yellowleg shrimp (Farfantepenaeus californiensis).





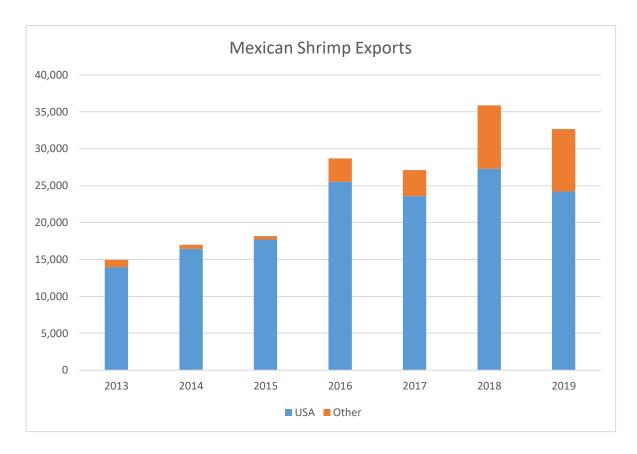


Figure 12: Mexican shrimp exports (Intracen)

Putting all this together into product weight provides an estimate of about 200,000 tons for total shrimp in Mexico, and the domestic consumption (at product weight) is around 160,000 to 170,000 tons after exports.

19

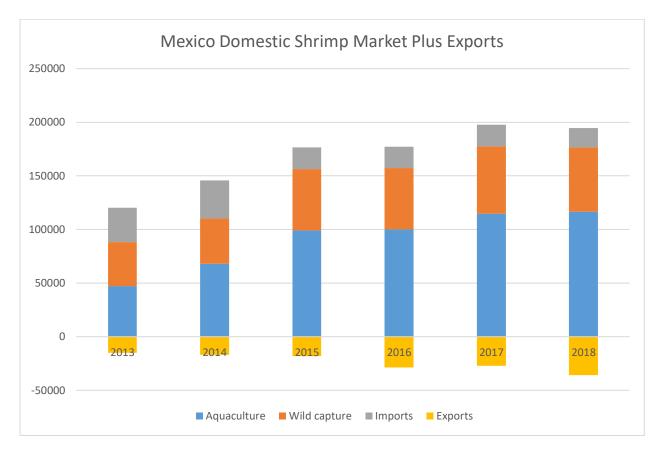


Figure 13: Overview of volumes in Mexican domestic and export market Source Seafood Datasearch based on FAO and export data, plus estimates for 2018.

The following table breaks down the region distribution:

	2013	2014	2015	2016	2017
Pacific Wild	45583	42620	61926	64663	68738
Atlantic Wild	16918	21344	24829	22119	26542
Pacific Aquaculture	64648	93474	136102	137269	157421

Table 1: Regional production distribution

Very little Atlantic shrimp is exported. For the purposes of our analysis on where buyers may be able to exert pressure for improvement in harvesting and aquaculture practices, our focus has to be on the 160,000 tons of aquaculture shrimp, and the 70,000 tons of wild pacific shrimp (live weight).

From industry interviews, it appears that there are around 850 shrimp trawlers working in the Gulf, and 20,000 to 25,000 pangas, or small boats with drift gillnets or other hand gear. Landings are split between these two sectors, with the trawl sector taking around 50% of the total production, and perhaps a larger proportion of the shrimp going to the export market.

The Sustainable Fisheries Partnership, a member of the Certification and Ratings Collaboration, has a Mexican Seafood Supply Chain Roundtable which has engaged in a number of initiatives to improve management and controls over the shrimp fishery and others.

The initiatives include a number of Fishery Improvement Projects, collaborations with partners in Mexico like Impacto Colectivo por la Pesca y Acuacultura Mexicanas (ICPMX), and efforts with major distributors and retailers, as well as importers in the US.

The membership of the roundtable reflects the US companies most active in importing and selling Mexican shrimp. They include

Major Mexican Shrimp Importers

Amende & Schultz/Promarmex Aquastar Eastern Fish Company Ocean Garden Meridian / Red Chamber

Other Significant Importers of Mexican Shrimp

Alfa Gamma Group Beacon Fisheries Catalina Offshore Products Del Pacifico Seafoods Deep Sea Shrimp Importing Company Delta Blue Aquaculture MiCal Netuno USA

Seafood Distributors

Artisan Catch (formerly Orca Seafoods) Beaver Street Fisheries BlackIndigo Foods Chefs Trading Fortune International Great Fish Company/ASC Seafood Incredible Fish Inland Seafood Quirch Foods Co. Santa Monica Seafood Sea Delight Seafarers Seattle Fish

Major Buyers

Iberostar USFoods

In terms of primary imports, the first five companies listed as major Mexican shrimp importers account for the majority of all Mexican shrimp imports, likely from 60% to 80% or more. Aqua Star and Meridian are both owned by Red Chamber.

Some of the other significant importers are specialists in Mexican shrimp and other products from the pacific coast of Mexico, such as Delta Blue and Del Pacifico, while others handle a small amount of Mexican shrimp along with their other products.

The seafood distributors all carry Mexican shrimp along with a large range of other products, while the buyers in the group include US Foods, one of the largest US broadline distributors, and Iberostar, a lodging group that supports sustainability with Mexican shrimp.

In 2019, four of the major importers (Amende & Schultz, Eastern Fish, Meridian, and Ocean Garden), implemented a system of control documents for processing plants. This involved having shrimp processing plants sign a certificate attesting to the fact that the shrimp they purchased and packed was from legal vessels, fishing with approved methods in legal areas, and was not comingled in any way with untraceable shrimp from the gillnet fishery.

RECOMMENDATIONS ON IMPROVING MARKET ACCEPTANCE IN THE US Current Situation

The current situation for Mexican shrimp producer has become more difficult. So far no actions have successfully reversed the decline in the Vaquita Porpoise population, which continues to be hurt by illegal gillnet fishing for totoaba, and illegal use of shrimp gillnets in closed areas.

As a result, the US has imposed a formal embargo on shrimp fisheries from the upper Gulf. In two years, the US will have the formal authority to embargo any seafood imports from Mexico if they deem that Mexico is not following equivalent marine mammal protection policies as are found in the US.

A few years ago the Mexican government undertook an initiative to ban drift gillnets in the upper Gulf and replace them with a different type of gear. They beefed up fisheries enforcement and provided programs to compensate artisanal fishermen for the lower efficiency of the new gear which cannot be deployed in the same manner as drift gillnets.

However, the new government in Mexico has reordered budget priorities, and as a result is no longer funding enforcement at the level many in the industry feel is required, nor are they any longer compensating fishermen.

As a result, fishermen have returned to using gillnets in an illegal manner, and the criminal syndicates that control illegal totoaba harvesting have become largely immune to local authorities.

Shrimp processors operating in Mexico are not in a position to refuse criminal syndicate demands to purchase and sell illegally harvested shrimp.

Although there is substantial interest in Mexico in developing stock assessment and control mechanisms, and good biological information, along with the traceability required for a legal fishery, this effort is in the beginning stages.

The above problems affect the wild shrimp fishery. There are also issues in Mexican shrimp aquaculture.

Mexico has fewer BAP certifications than other Latin American countries, and especially Ecuador.

For example, there are currently only 4 shrimp farms with BAP certification in Mexico, vs 15 in Ecuador. In terms of processing, there are 8 certified processors in Ecuador, vs. 6 in Mexico, and in terms of feed mills, there are 3 certified in Mexico, and 7 in Ecuador.

Based on industry interviews, the reason for this is that there was a significant consolidation in shrimp farming in Mexico following the EMS disease crisis in 2012 and 2013. Many farms that shut down were bought up by larger agricultural businesses. For these owners, shrimp is just one of their lines of business, and as a result they are sometimes more reluctant to put money into the certification process, especially if they are selling into the domestic market in Mexico.

What can be done to reverse this situation?

The issue around which this report is based is whether market pressure can be applied to speed up the process of compliance and the achievement of a legal sustainable wild fishery, and how certification can be increased in the aquaculture sector.

We have seen that the market position of Mexican wild shrimp has eroded. Furthermore, the conditions on the ground in Mexico have not improved in the way many hoped due to budget constraints and changing governmental priorities.

As a result, collaborative efforts within the private sector including buyers, importers, and producers, will be needed to make changes. This has been true for a number of years, and many of the members of the Certification and Ratings Collaboration have been working within the Mexican shrimp industry on this problem.

NGO's, including all members of the working group on this project, have been addressing the problem of sustainability in the upper Gulf for many years, in some cases more than a decade.

This has led to a group of co-ops working with Del Pacifico and Fair Trade to market a small amount (several hundred tons annually) of wild shrimp that has a yellow rating from Monterey Bay, and meets Fair Trade standards.

But the bulk of Mexican shrimp is hampered by the red avoid rating from Monterey Bay's Seafood Watch. This rating is used often by chefs in foodservice, and that is also the primary market for large Mexican shrimp.

In order to regain value for the Mexican industry, it is very important that more segments of the industry gain at least a yellow rating from Seafood Watch.

As described earlier, SFP has formed a Mexican Seafood Supply Chain Roundtable, formed to facilitate pre-competitive collaboration on sustainability efforts for seafood products imported in the US from Mexico, which includes all the major companies who import Mexican shrimp.

In particular, the supplier council includes the five biggest importers, who are Ocean Garden, Aquastar, Meridian/Red Chamber, Eastern Fish and Amende & Shultze. This group has agreed to require certification documents from Mexican packers attesting that their production does not include shrimp harvested using banned methods or from closed areas. This program is already being implemented.

Mexican suppliers and US importers have also recently formed the Mexican Shrimp Council.

In September of 2019, the major processors, along with Mexican shrimp producers, announced the reformation of the Mexican Shrimp Council. The council had an original purpose of promoting Mexican shrimp as the highest quality shrimp in the world.

The new council is moving to address sustainability and compliance issues by developing a code of conduct involving full traceability that they hope will become the foundation for social and environmentally responsible harvest, production, and sale of Mexican shrimp.

The shrimp council is administered by NFI, similar to their other sector councils, and provides a mechanism to both collect funds and establish standards. The council has developed a standard of conduct which all members must adhere to. The concept is that buyers can be assured that if their suppliers are part of the Mexican Shrimp Council, the shrimp they are purchasing is fully traceable and is caught according to existing regulations.

In other sectors, such as crab fisheries, NFI affiliated sector councils have been successful at developing a common front among North American importers and buyers and overseas producers to pressure governments to take specific fishery improvement actions.

There has also been significant funding for ICPMX, the Impacto Colectivo por la Pesca y la Acuacultura Mexicanas, which is a multi-stakeholder dialogue that includes all parties involved with the shrimp sector, from representatives of the fishing cooperatives and trawl companies to government departments, scientific efforts, shrimp processors, and buyers. ICPMX also addresses issues beyond the Mexican shrimp sector with other stakeholders as well.

Finally, a portion of the Mexican shrimp trawl fishery in the Gulf of California has applied for MSC certification, and has had a preliminary audit indicating which areas are scoring sufficiently well for MSC approval, and which areas need more work. The MSC approval, including FIPS that move this fishery towards an overall score sufficient to pass, are very important, as this could also have an impact on Seafood Watch's ratings of trawl caught Mexican shrimp.

This fishery, which produces about half of the wild shrimp harvest, is done by freezer vessels who catch and de-head and freeze shrimp at sea, leading to a very high-quality product. All the trawlers have transponders, and most comply with both closed area and seasonal regulations. As part of the assessment process, compliance with the closed area regulations will be assessed. If the assessment is positive, or the industry has made a commitment to the changes needed that is being measured and tracked, Shrimp from thise trawl fishery should not then be considered unsustainable.

The elephant in the room, regarding certification and the effectiveness of the Mexican Shrimp Council, is that civil control in some areas in the Northern Gulf of California is absent, and in these areas, processors will have no choice but to follow requirements of persons associated with drug cartels. If such persons request shrimp to be packed, and refuse to certify its origins, the processors literally have no choice, as no legal authority can protect them.

What is currently driving criminal interest in the illegal fishery is the value of totoaba swim bladders, which can be sold to China for thousands of dollars per kg. It has been illegal to harvest totoaba since 1975, and the fish was placed on the US endangered species list in 1979. Totoaba are vulnerable to gillnets and are a major reason for continued illegal gillnet fishing that is harming the vaquita porpoise. The illegal fishery is controlled by criminal interests, and although it does not interact directly with the shrimp fishery, it sustains criminal activity on the water that can spill over into the shrimp sector on occasion.

It appears that efforts to strengthen the Mexican shrimp council code of conduct, and to find ways that the NGO community could help structure that code of conduct and the necessary traceability could be a major point of agreement in moving forward.

The reason is that Mexican producers are facing a two-fold problem. One is convincing major American importers that the shrimp harvest can be conducted in a legal and sustainable way and in a manner that meets the requirements of the US Marine Mammal Protection Act.

The other is that the premium value in the market for Mexican shrimp has eroded. In our opinion, there appears to be some connection between the two developments, although each has many separate factors impacting it as well.

Regarding the market, Mexican shrimp is still sold primarily to the US in traditional 5 lb. headless blocks, which is a standard foodservice item. But the US foodservice industry has been moving away from this product form towards peeled shrimp. To achieve higher value with traditional product form, Mexican shrimp producers have to reclaim the reputation that they once had. This is harder when other competition is developing for large shrimp, especially from Thailand, but also from India and Indonesia.

Domestically, Mexico has a huge demand for shrimp. However the market is very undisciplined, and extremely price sensitive. There is a significant issue in Mexican supermarkets of selling shrimp with heavy glaze, reducing the price because of the water content. This is a common issue in many shrimp markets, such as in Brazil as well, where there is extreme consumer price sensitivity, and lack of enforcement of net weight standards.

Also the Mexican domestic market tends to take most of the smaller shrimp, produced both in early harvests from ponds, and from the wild fishery. Much of the Atlantic shrimp also goes into local markets. With the exception of a few international hotel chains, and some high end restaurants in Mexico city, there is little awareness or interest in the market around sustainability and protection issues.

In the US the big advantage of Mexican U-15 shrimp is that it is a wild product, and the Gulf of California is one of the best wild shrimp growing areas in the world. This can be brought out with a marketing council.

The other leg has to be real improvements in sustainability and protection of marine mammals. The strength of the Sustainable Fisheries Partnership has been its ability to unite major buyers, and to help industry implement FIPs in several Mexican shrimp and crab fisheries. But the weakness, self-described by SFP, has been in the lack of strong commitments from local Mexican producers and buyers.

Such commitments can only come from an organization that is based in Mexico, and one which links improvement in market value directly to improvement in the management of the shrimp fishery itself.

A number of actions continue to be helpful, from the supplier council, the fair-trade initiative, the ICPMX dialogue, and the MSC certification process for trawl caught shrimp.

A concerted effort to strengthen and work with the Mexican shrimp council, with the understanding that the organization represents both producers in Mexico and their customers in both Mexico and the United States, may prove to be an effective response to the complexity of the entire situation.

Another advantage of working with the Mexican shrimp council is that it, along with the NGO's active in Mexico, could begin to make the case to the main domestic markets about traceability and sustainability.

Notes on the Survey and Sources

This project was carried out through a combination of interviews with industry participants, original research, and discussions with members of the Certification and Ratings working group.

Industry interviews were carried out in December and January and included a selection of the major importers and Mexican producers. There was not time to reach downstream to their customers. Information on the Mexican domestic market was obtained from Mexican industry producer interviews, and from other knowledgeable industry persons who were not directly involved in the sale or distribution of shrimp in Mexico themselves.