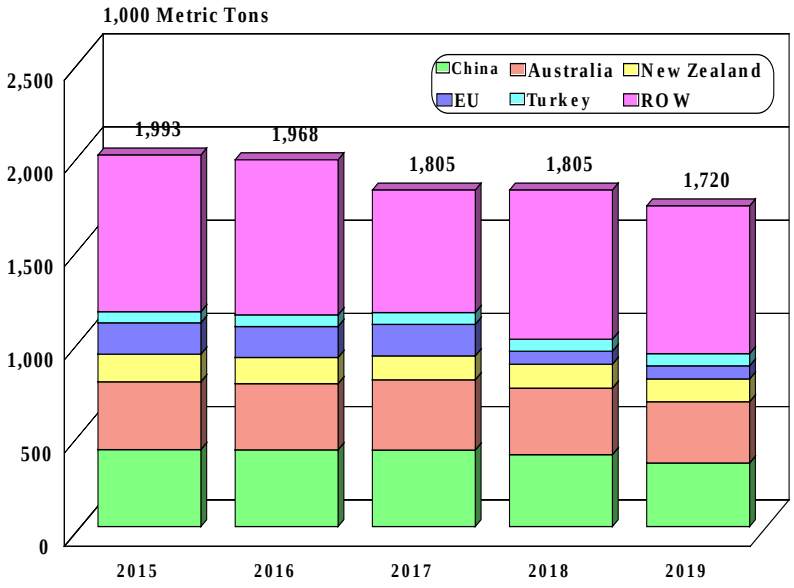
GLOBAL MARKETS FOR TEXAS WOOL[1]

Global production of wool was 1.7 million metric tons (MMT) during 2019. This total has fallen each year since 2015, when total production was nearly 2 MMT. Global wool production is led by China. During 2019, wool production for China was 341 thousand metric tons (TMT), down 72 TMT since 2015. Following China is Australia. During 2019, wool production for Australia was 328 TMT, 35 TMT lower than 2015.

The EU dropped from the third largest wool producer in 2017 with 169 TMT to the fourth largest for 2018 and 2019 after a decrease of 98 TMT. This is due to a lack of reporting of production of the twenty-eight EU countries, including the United Kingdom (UK) which makes up 66-70 TMT or about 40 percent of the entire EU wool production. During 2018 and 2019, only the UK had reported production. Together, these major producers account for 53–64 percent of the world's wool.

World Wool Production, 2015-2019



Source: FAO Stat - Livestock Primary Production

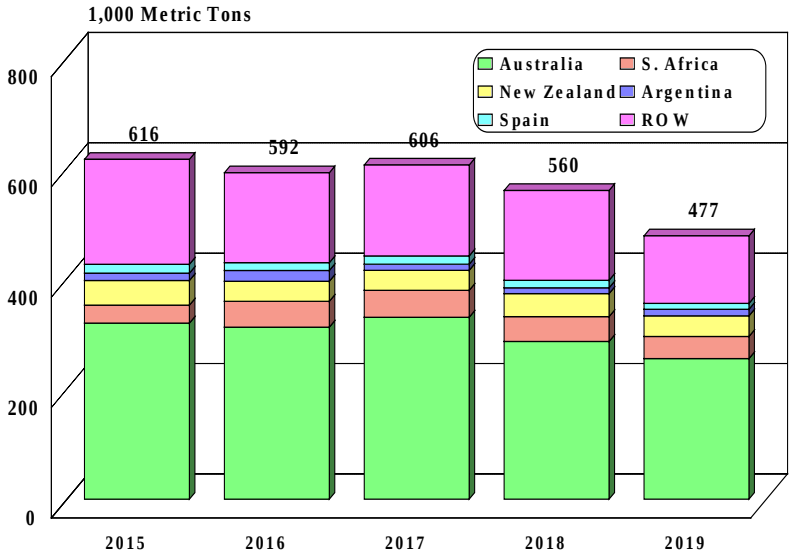
[1] *Global Markets for Texas Wool* is a report of the project Export Market Analysis for Selected Texas Commodities, funded by the Texas Department of Agriculture. For more information, please contact the Center for North American Studies, Department of Agricultural Economics, Texas A&M AgriLife Extension Service, College Station, TX, 77843-2124. 979-845-3070.

World exports of greasy shorn wool for 2019 of 477 TMT were nearly 100 TMT lower than years prior. Greasy wool exports typically have a year of higher levels followed by a year or two which are slightly lower. Australia is the largest exporter of greasy shorn wool, exporting 255 TMT during 2019. Exports from Australia were at the highest during 2017 with 329 TMT. Australia accounts for between 51–54 percent of world exports of greasy shorn wool. South Africa follows as the second largest exporter since 2016 with 40 TMT of greasy wool exports in 2019. South African greasy wool exports decreased 10 TMT since the peak in 2017. New Zealand's greasy wool exports during 2019 of 37 TMT were slightly lower than South Africa's.

Degreased wool exports are less than half of the amount as greasy wool. During 2019, exports were 186 TMT, down 49 TMT from 2018. New Zealand is the leading exporter of degreased wool, exporting 67 TMT during 2019. New Zealand's exports of degreased wool have been near at this level since 2016 after decreasing from 82 TMT in 2015. The United Kingdom, Mongolia, Australia, and Syria follow. These countries together exported 56 TMT of degreased wool during 2019.

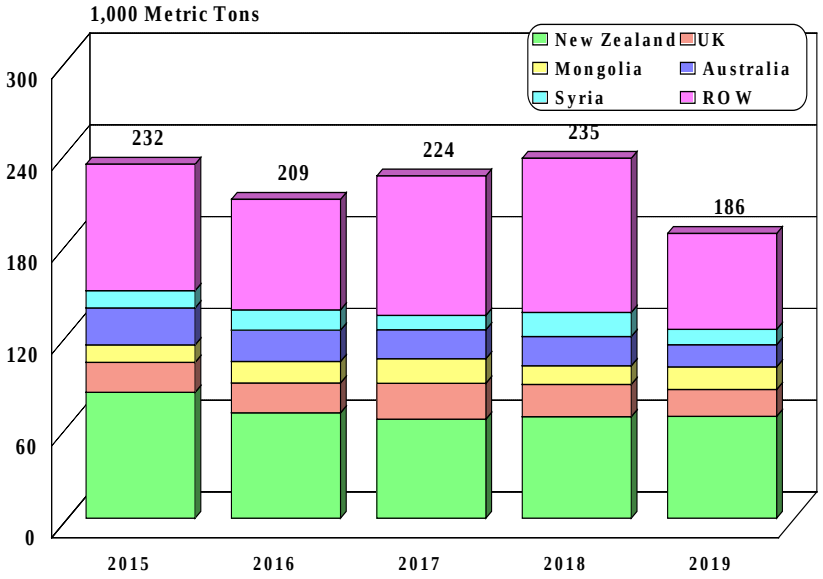
One main reason that has caused the decline in wool trade during 2019 and 2020 has been the global COVID-19 pandemic. Many countries implemented lockdowns, people took social distancing precautions like working remotely, and many people lost jobs. All of these factors resulted in consumers purchasing fewer wool products, so the need to export wool was lessened.

World Greasy Wool Exports, 2015-2019



Source: FAO Stat - Crops and Livestock Products Trade

World Degreased Wool Exports, 2015-2019



Source: FAO Stat - Crops and Livestock Products Trade

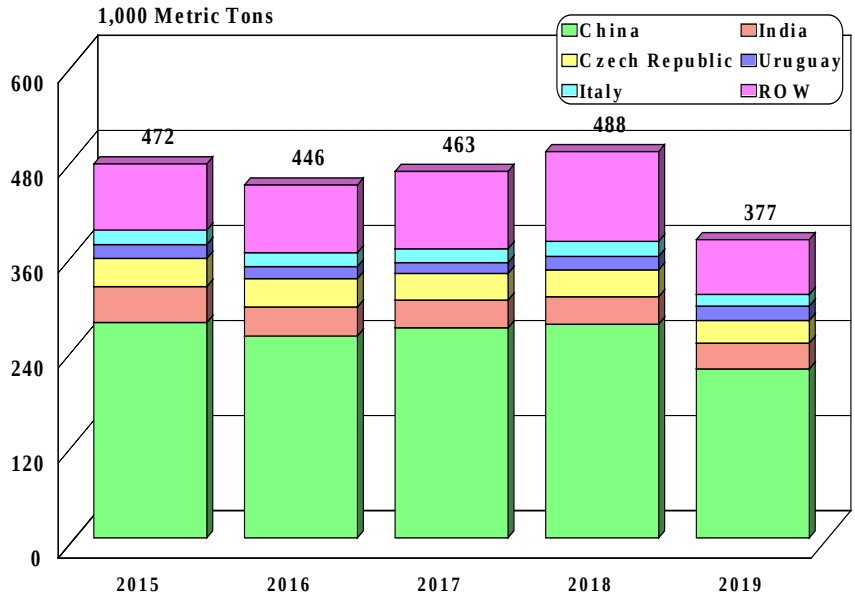
Greasy wool imports for the world were 377 TMT during 2019. In addition to being the largest producer of wool, China is the world's largest importer of greasy wool. During 2019, China imported 213 TMT of greasy wool, down 56 TMT from years prior. India follows, importing 32 TMT during 2019. This value is similar to the past with 2015 being 9 TMT higher than any year since. The Czech Republic and Uruguay follow as third and fourth largest importers.

If the current 27 EU countries, along with the United Kingdom, were reported together the entire region would be the second largest global importer of greasy shorn wool. Imports for the EU during 2019 were 78 TMT, the lowest year of total imports of greasy wool for the region since 2015.

Degreased wool imports during 2019 were reported to be 207 TMT. Similar to the market for greasy wool, China is the largest market for importing degreased wool. Chinese imports of degreased wool during 2019 were 63 TMT, 33 TMT lower than the 2018. Imports fell 17 TMT after 2015 to 66 TMT, degreased wool imports then rose to 96 TMT before falling to the 2019 quantity. India is now the second largest importer of degreased wool, having imported 34 TMT during 2019. With exception to 2019, the average amount of degreased wool imported by India is 49 TMT. The UK, Italy, and Lithuania are all also major markets for degreased wool and saw relatively little change from 2015 to 2019.

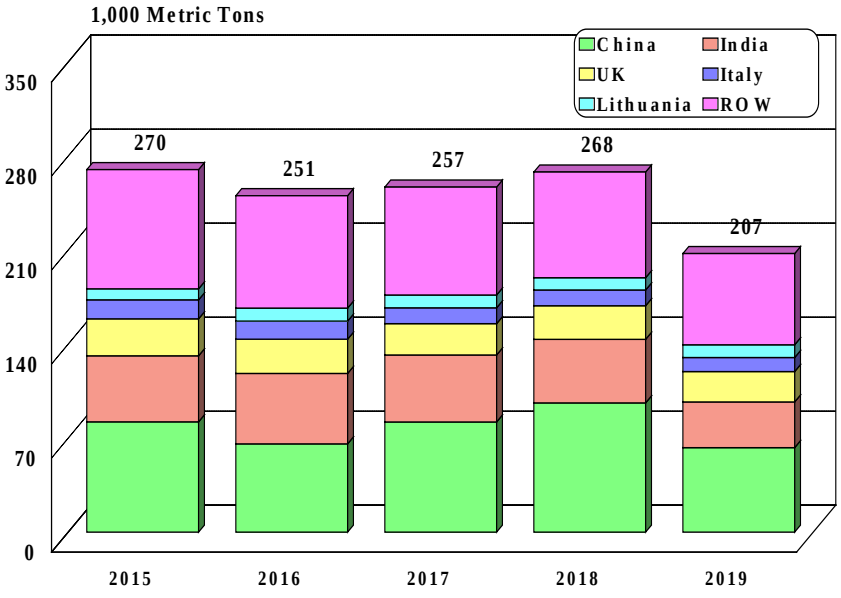
If EU countries were reported as a bloc, the EU would have been second for imports during 2019 and would have imported more than China during 2015 and 2016. In 2019, the EU imported 61 TMT of degreased wool, the lowest level of imports throughout this period. Total imports of degreased wool have declined every year since 2015.

World Greasy Wool Imports, 2015-2019



Source: FAO Stat - Crops and Livestock Products Trade

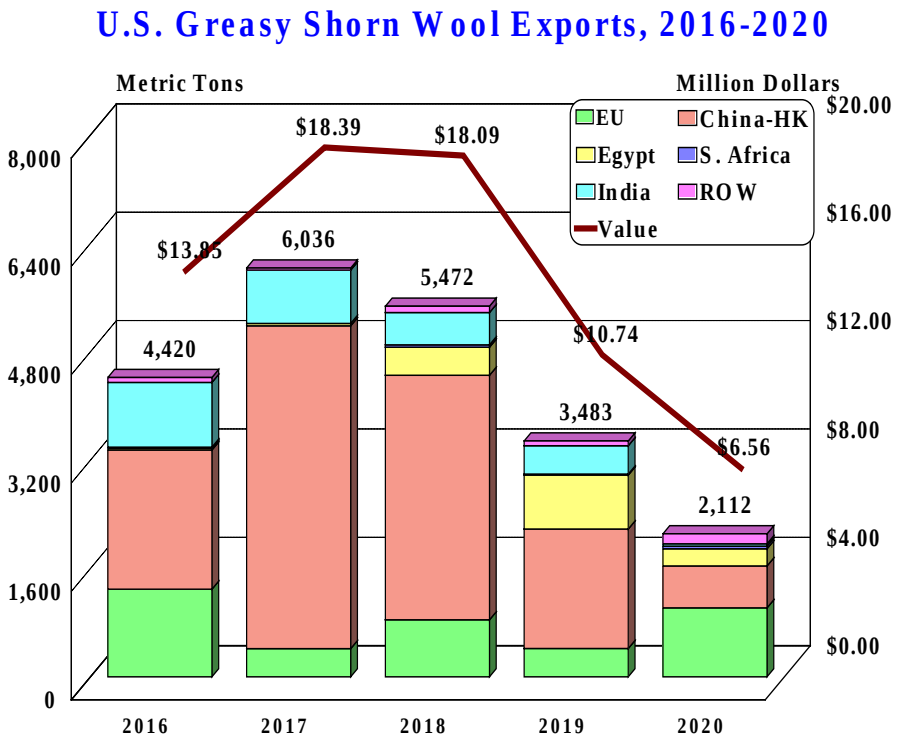
World Degreased Wool Imports, 2015-2019



Source: FAO Stat - Crops and Livestock Products Trade

U.S. Wool Exports

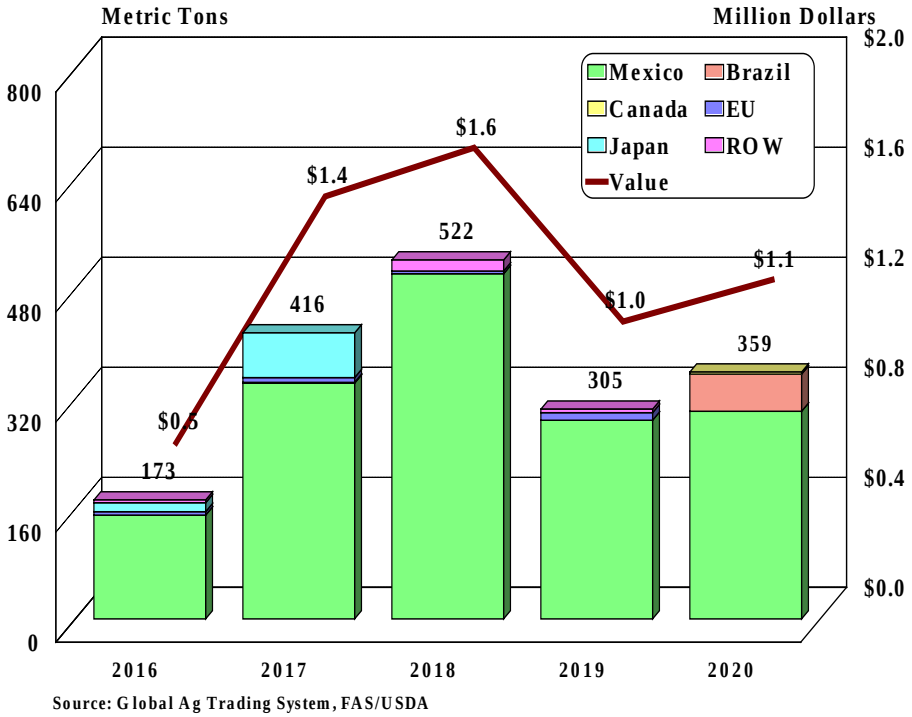
Greasy shorn wool is the largest variety of wool exported from the United States. During 2020, greasy shorn wool exports were 2.11 TMT valued at $6.56 million. For 2020, the EU was the largest market importing U.S. greasy wool at just over 1 TMT, a bit higher than the 800 metric tons (MT) average. Following the EU is China-Hong Kong (HK) which imported 618 MT during 2020, the lowest recent amount of wool exports from the United States to China-HK. Excluding exports in 2020, average U.S. wool exports to China are 3,049 MT. Egypt became a large market for U.S. wool after 2017 when exports grew tremendously. In 2020, 254 MT of wool was exported from the United States to Egypt. India is also a country that has been a large market for U.S. greasy shorn wool. Greasy wool exports to India fell from 956 MT during 2016 to 34 MT in 2020.



Source: Global Ag Trading System, FAS/USDA

Degreased shorn wool is a significantly smaller market than greasy wool with the majority of the supply going to Mexico each year. During 2020, 359 MT of degreased shorn wool with a value of $1.1 million were exported from the United States. Mexico imported 301 MT of degreased wool in 2020, just under the average of 317 MT since 2016. Mexico receives 82–96 percent of U.S. degreased wool exports.

U.S. Degreased Shorn Wool Exports, 2016-2020

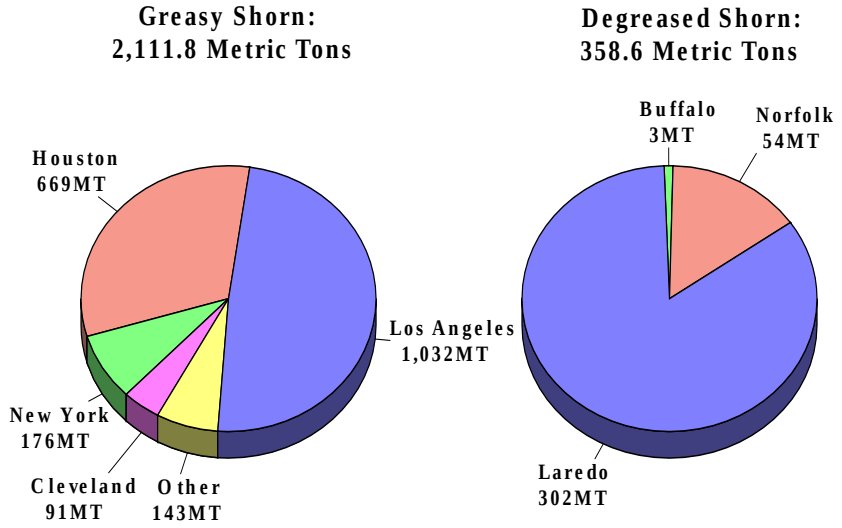


Source: Global Ag Trading System, FAS/USDA

Over 1,000 MT, nearly half, of the greasy shorn wool exported by the United States during 2020 left through the Los Angeles port district destined for China-HK, South Korea, South Africa, Egypt, and multiple EU countries. The Houston port district was the port district for 669 MT of greasy shorn wool exported during 2020. Wool leaving from Houston was shipped to Bulgaria, Egypt, India, and Italy. All of the 176 MT of greasy wool leaving the United States from the New York port district was destined for Bulgaria and the 91 MT from the Cleveland district went to the EU as well as the United Arab Emirates and Qatar.

The Laredo port district was responsible for 84 percent, 302 MT, of the degreased shorn wool exports from the United States during 2020, which was all sent to Mexico. The two other port districts that had shipments of degreased wool for 2020 were Norfolk and Buffalo. Degreased wool exports from the Norfolk district totaled 54 MT and were shipped to Brazil, the 3 MT of exports from Buffalo were exported to Canada.

U.S. Wool Exports by Port District, 2020



Source: U.S. Census Bureau from WiserTrade; exclusively shorn wool

Total U.S. wool production during 2020 was 10.4 TMT and has fallen every year since 2015. Production of wool in the United States is led by Colorado in 2020 where 1.13 TMT of wool was produced. Wyoming is the second highest wool producing state during 2020, producing just over 1 TMT. Wyoming has had a very consistent production of wool annually averaging 1,070 MT since 2015. California has seen continual decreases in production of wool since 2015 where production was 1.29 TMT, in 2020 production for the state is 907 MT. California was the top wool producing state from 2015 until 2019 despite decreasing production but is currently fourth following Utah. Texas rounds out the top five but has experienced decreasing production. Together these five U.S. states make up 44–46 percent of total wool production for the country.

U.S. Wool Production by State, MT

	2015	2016	2017	2018	2019	2020
Colorado	1,093	1,043	953	998	1,066	1,134
Wyoming	1,125	1,089	1,089	1,089	998	1,030
Utah	1,075	1,021	998	1,007	971	943
California	1,293	1,270	1,134	1,089	1,089	907
Texas	885	816	798	798	771	612
Other States	6,595	6,371	6,187	6,006	5,911	5,783
Total	12,066	11,610	11,158	10,986	10,805	10,410

Source: National Ag Statistics Services, NASS/USDA

Barriers to trade

U.S. wool exports face various tariff rates depending on the recipient country. There is no tariff in place for U.S. greasy or degreased wool entering into the EU or Mexico. Egypt has a 14 percent tariff set on both of these types of wool. China-HK has in place a tariff-rate-quota (TRQ) which increases after imports surpass a certain level. The Chinese tariff in place for greasy shorn wool from the United States is 26 percent and increases to 63 percent once imports reach a certain level, and for degreased wool it is 6 percent and increases to 43 percent above a certain volume. China has poorly defined criteria for applicants and unclear procedures for TRQ allocations, so the exact quota-level of the TRQ is unknown. India also has a tariff on U.S. wool which is set at 25 percent for imports of greasy wool and 30 percent for degreased wool.

Each country also has other requirements in place for wool entering the country. The EU, including the UK, requires a model declaration. Mexico has a requirement for a Health Certificate and India has Import Permit (IP) requirements. In addition to these, each country examined with exception to the EU also requires a Veterinary Certification (VC) for exports to their country.

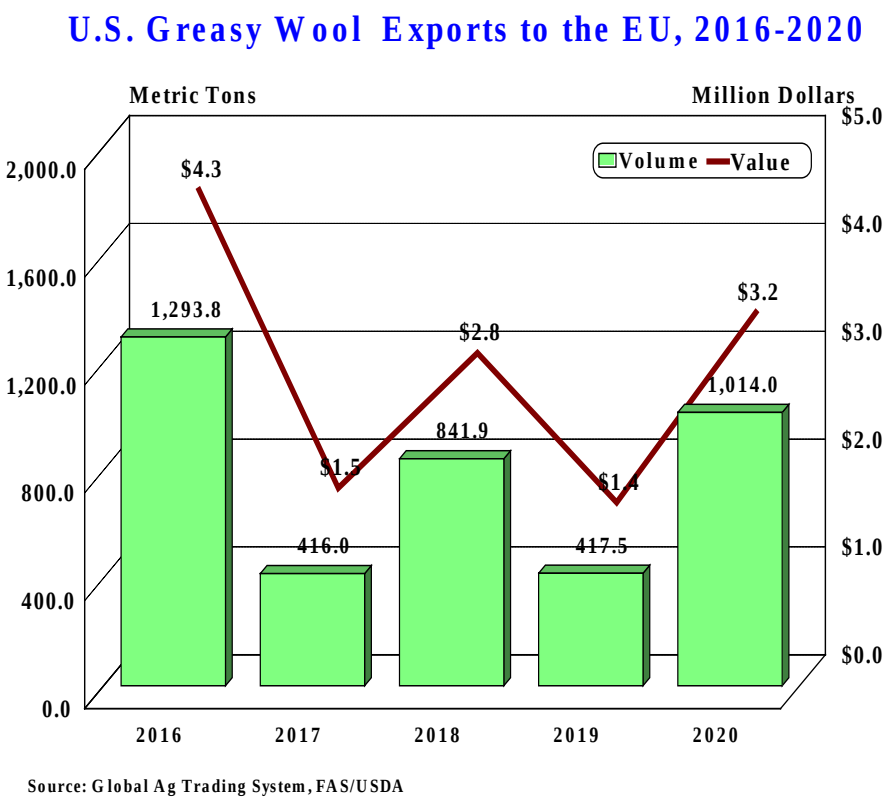
More information on VCs can be obtained by contacting the USDA Animal and Plant Health Inspection Services (APHIS) and reviewing country specific international regulations (IRegs) for animal product exports:

https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/export/iregs-for-animal-product-exports/CT_IRegs_Animal_Product_Exports_Home

U.S. Wool Exports to the European Union

The largest market for U.S. wool products during 2020 was the EU, which received just over 1 TMT of greasy wool with a value of $3.2 million. U.S. greasy wool exported to the EU follows a pattern of high export volume followed by a year with a lower volume. The largest markets in the EU for greasy shorn wool are Italy, Bulgaria, and Belgium.

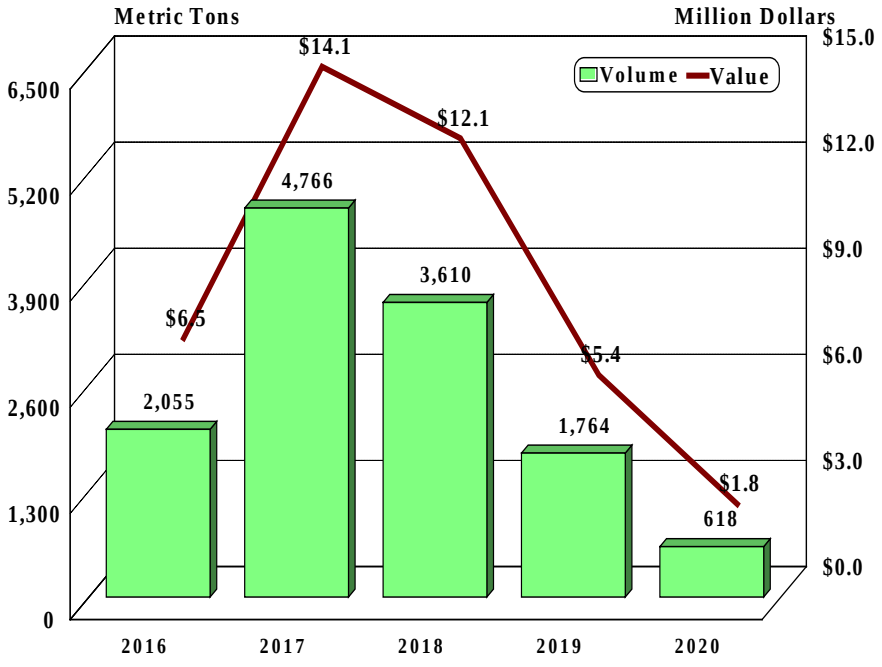
While the EU is a large market for both greasy and degreased wool products, very little degreased wool is exported by the United States to the EU – no exports of degreased wool to the EU from the United States were reported during 2020. The largest markets for degreased wool in the EU are the United Kingdom, Lithuania, Italy, and Germany. The United States faces tight competition in the European wool market against Australia, New Zealand, South Africa, and intra-EU trade. Brexit might open up opportunities for the US to capture a share of the United Kingdom wool market given trade agreement talks between both countries.



U.S. Wool Exports to China-Hong Kong

China-HK is the world's largest importer of wool, greasy and degreased, and the second largest market for U.S. wool products in 2020. During 2020, the United States exported 618 MT of greasy wool, valued at $1.8 million, to China-HK. This value is down substantially from past years due to the impact of the COVID-19 pandemic on demand for wool products. U.S. greasy wool faces competition in the Chinese market from Australia, South Africa, New Zealand, and Argentina along with many other countries.

China-HK also has a considerably large market for degreased wool. Similar to the EU market for degreased wool, very little is exported from the United States to China. Most recently 10.9 MT was exported in 2018. The market for degreased wool in China is mostly supplied by New Zealand, Mongolia, Russia, and Turkey.



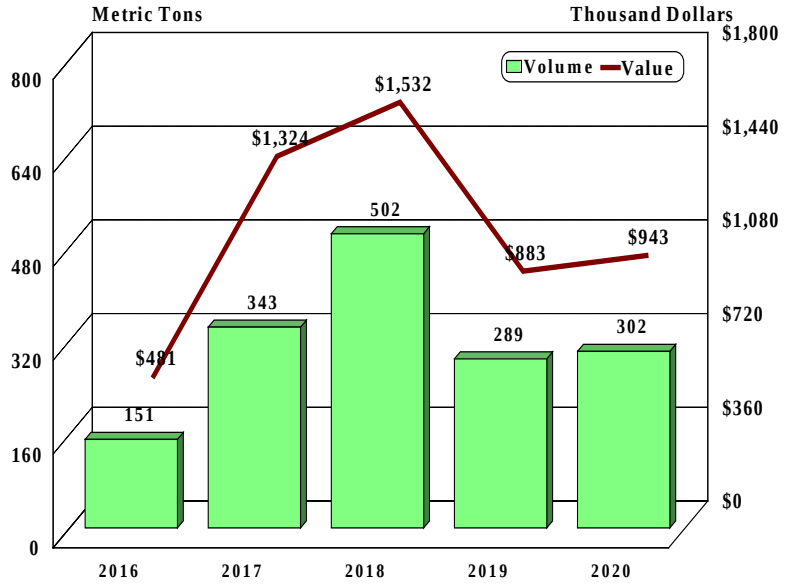
Source: Global Ag Trading System, FAS/USDA

U.S. Wool Exports to Mexico

During 2020, the United States exported 302 MT of degreased wool to Mexico valued at $943,000 an increase from 2019. Mexico is a relatively smaller market for wool with the United States being the largest supplier. New Zealand also exports similar quantities of wool to Mexico, followed by Spain and Argentina.

The market for greasy wool in Mexico is very small. During 2019, the United States exported 23.9 MT of greasy wool to Mexico and that was the only year of greasy wool exports to Mexico from the United States since 2016. New Zealand and Australia are also present in Mexico's greasy wool market and export similar quantities as the United States.

U.S. Degreased Wool Exports to Mexico, 2016-2020

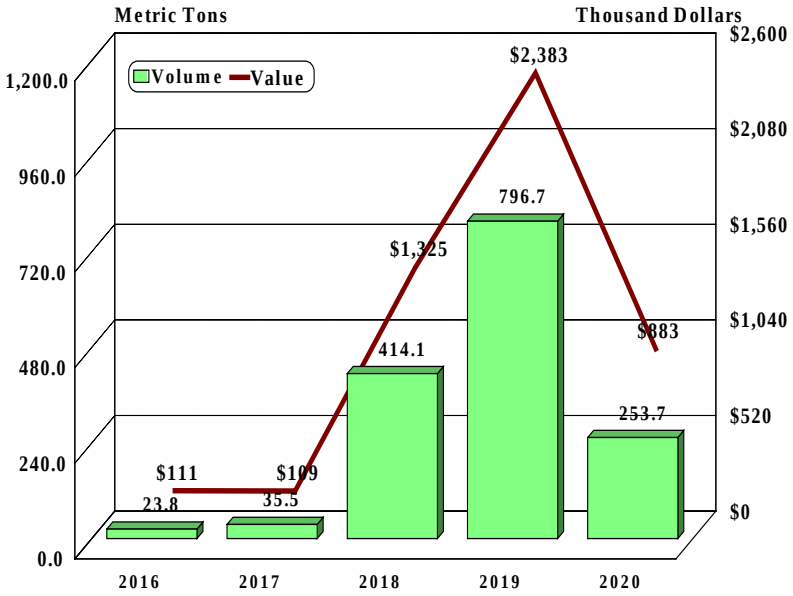


Source: Global Ag Trading System, FAS/USDA

U.S. Wool Exports to Egypt

Egypt became a major market for U.S. greasy wool exports after a substantial increase during 2018. During 2020, U.S. greasy wool exports to Egypt were 253.7 MT valued at $883,000. The United States is the second largest greasy wool exporter to Egypt, following Argentina and ahead of New Zealand and Spain. The Egyptian market for degreased wool is quite small. During 2019, 65.6 MT of degreased wool imports were reported, entirely supplied by Australia and the UK.

U.S. Greasy Shorn Wool Exports to Egypt, 2016-2020

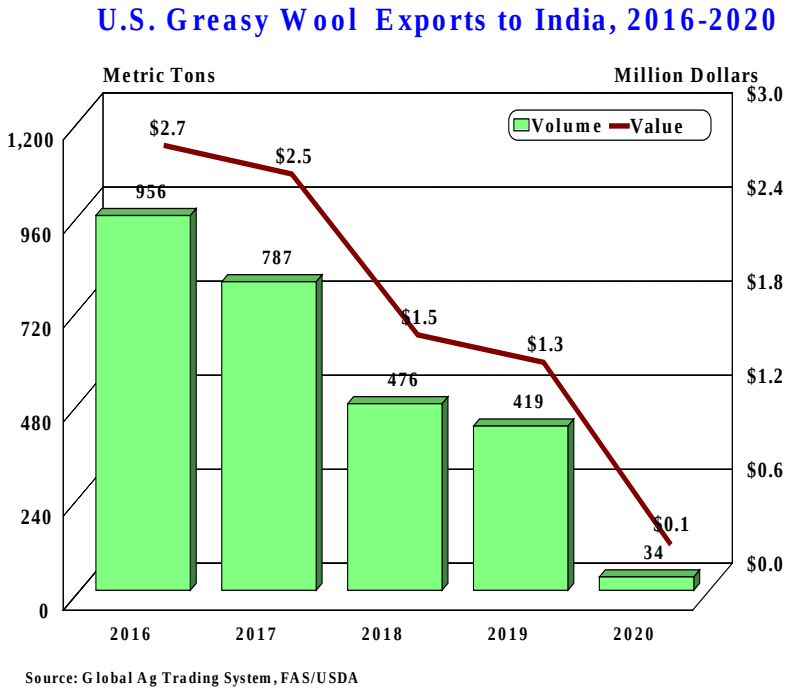


Source: Global Ag Trading System, FAS/USDA

The Indian Market for Wool Exports

India is the worlds' second largest wool importing country in both greasy and degreased wool products, behind China-HK. Since 2016 there has been a steady decrease in U.S. greasy wool exports to India. Wool exports to India have fallen from 956 MT in 2016, valued at $2.7 million, to 3.4 MT in 2020, valued at $132,000. This decrease was caused due to increasing wool production in India. Before 2016, imports were steadily growing because of declining production and sheep population in the country, and now has started to fall again due to increasing production in India. Despite this growth and lessening imports, the market for greasy wool in India is still very large. While many countries export greasy wool to India, the majority is exported from Australia, South Africa, Russia, and New Zealand.

The market for degreased wool in India is slightly smaller than for greasy wool in the country. The United States exports very little degreased wool to India despite the size of the market, 10.9 MT during 2019. The bulk of India's imported degreased wool come from New Zealand, Syria, and China.



Ethical Considerations in the Global Wool Industry

Wool production requires shearing the fiber from sheep which grow it naturally. The industry recently has been dealing with animal welfare concerns from some, both from inside and outside of the industry. The following excerpt is from an article discussing the ethical concerns some have towards wool production and steps being taken within the industry to address some of these concerns.

> *"Across the board, sheep welfare is a concern. Unsavory footage has been released on several occasions of wool-shearing operations in Australia and the United States.*

In these short clips, sheep are commonly seen being kicked, thrown, cut, and even having their limbs broken.

Australia is responsible for 50% of the world's wool, which is unfortunate because there it's common practice to sheer using a procedure called "mulesing". This entails sheep being forced to lie on their backs while huge chunks of skin are carved off the buttocks (generally without anesthetic). This renders the rear flank scarred and smooth, so as to prevent flies from laying eggs in the folds of the wool."

Whether or not the claims of animal mistreatment are valid, and whether they indicate a wide-spread situation or simply isolated incidents, they have affected many consumers' willingness to purchase products made from wool. These critiques and issues have led to the creation of the Responsible Wool Standard (RWS). This is an optional certification which producers can obtain after being audited to ensure that their wool production is made in a responsible fashion. Continued access to global markets, processors, and consumers may rely on Texas producers exploring and potentially implementing this or a similar sustainability/responsibility-type certification program.

Conclusion

The world market for wool is highly competitive but there is also opportunity for growth in the industry. One issue that arises is potentially high tariffs in markets like India and China, but there are relatively few non-tariff barriers to trade. U.S. wool exports account for about a quarter of the total wool production in the United States. This could indicate an opportunity for growth in exporting wool and an opportunity to become more competitive in these foreign markets. In addition to tariffs, the wool industry faces concerns of animal welfare and has been hit hard by the COVID-19 pandemic.

Each of the markets examined has room to expand exports for U.S. wool producers. Despite the challenges the industry is facing today, some reassurance can be found in the fact that there are many opportunities to expand into new markets or grow in large markets where U.S. wool is already present. New markets for the industry would be places like Uruguay and Turkey where exports of U.S. wool have been relatively small or zero. Moreover, growing in large markets would be places like China-HK, India, and the EU where demand is massive and the U.S. supplies relatively little. Overall, US wool exports are small and even in Mexico, U.S. wool faces competition from New Zealand despite California, Texas, and Colorado being three of the top five producing states.

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