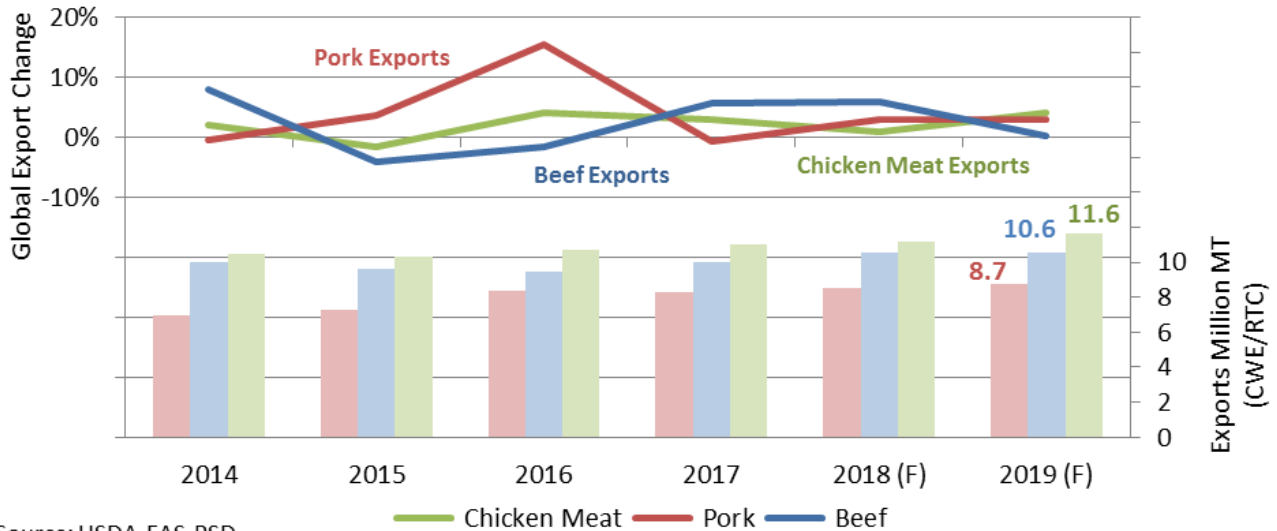




Livestock and Poultry: World Markets and Trade

Pork and Chicken Meat Trade Strengthen, Beef Trade Slackens in 2019



Source: USDA-FAS-PSD

- **Beef** exports are forecast flat at 10.6 million tons, as shipments from Brazil, Argentina, and the United States offset declines by Australia and India. Growing global beef demand will provide opportunities for major exporters to increase market share in key markets.
- **Pork** exports are forecast 3 percent higher, buoyed by strong demand in Asia and Latin America. Pork prices remain competitive, bolstering shipments to most markets. The European Union will remain the top exporter, followed by the United States.
- **Chicken meat** exports are forecast a robust 4 percent higher to a new record. Shipments by major traders are fueled largely by rising consumption in developing markets, such as the Philippines, Angola, Cuba, and Ghana. Brazil's ability to adapt to new Saudi Arabian market conditions (non-stun slaughter) bolsters export recovery, albeit volumes will remain below historical highs.

Major Exporters: 2019 Forecast								
Beef			Pork			Chicken Meat		
Country	Production	Exports	Country	Production	Exports	Country	Production	Exports
United States	↑ 4%	↑ 3%	EU	↔ 0%	↑ 3%	Brazil	↑ 2%	↑ 2%
Brazil	↑ 3%	↑ 5%	United States	↑ 5%	↑ 4%	United States	↑ 2%	↑ 3%
Australia	↓ -5%	↓ -7%	Brazil	↑ 3%	↑ 7%	EU	↑ 1%	↑ 5%

Table of Contents

Beef and Veal

Overview.....	3
Beef Summary Tables	
Cattle Summary Tables	
<i>Special Article:</i>	
<i>Marginal Growth Forecast for Canada Cattle and Beef Production.....</i>	<i>8</i>

Pork

Overview.....	12
Pork Summary Tables	
Swine Summary Tables	
<i>Special Article:</i>	
<i>Hog Markets React as African Swine Fever Spreads in China.....</i>	<i>17</i>

Chicken Meat

Overview.....	22
Broiler Meat Summary Tables	
<i>Special Article: Technical Notes Regarding New Chicken Meat PSD Series.....</i>	<i>25</i>

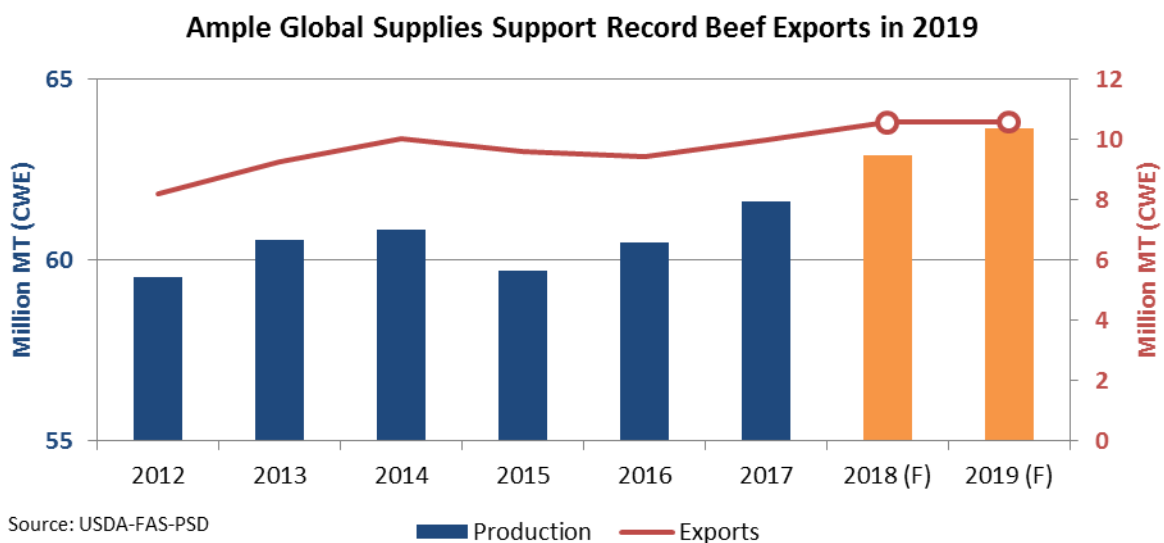
Notes to Readers.....	27
------------------------------	-----------

Beef and Veal

Global production is forecast to grow slightly (1 percent) in 2019 to 63.6 million tons, primarily from gains in Brazil, the United States, and Argentina. Brazil's expansion is driven by steady domestic demand and solid export growth to key Asian markets. Argentina's growth is driven by rising weights in response to stronger export demand for heavier animals. Australia's persistent hot and dry weather conditions have led to deteriorating pasture conditions, high grain prices, and low water supplies, forcing more cattle into feedlots. With lower expected cattle numbers at the start of 2019 beef production is forecast lower. To the extent herd rebuilding occurs in 2019 fewer animals may be available for slaughter.

Global exports in 2019 are forecast flat at 10.6 million tons as shipments from Brazil, Argentina, and the United States will offset declines by Australia and India. Australia's herd rebuilding efforts will become its priority in 2019 potentially providing opportunities for major exporters to increase market share on growing global beef demand. China and Hong Kong's ever-rising beef demand will remain strong as stagnant domestic production and looming disease uncertainties in competing meat proteins fuel consumption.

U.S. production and exports: Production is forecast up 4 percent in 2019 to a record 12.7 million tons reflecting recent calf crop increases. Exports are forecast up 3 percent to a record 1.5 million tons, almost 12 percent of production. Ample supplies, competitive prices, and Australia's waning production will spur U.S. shipments to key markets such as Japan, South Korea, Mexico, and Canada.



Beef and Veal Production - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2014	2015	2016	2017	2018	2019 Oct
Production						
Brazil	9,723	9,425	9,284	9,550	9,900	10,200
European Union	7,443	7,684	7,880	7,863	7,915	7,800
China	6,890	6,700	7,000	7,260	7,325	7,400
India	4,100	4,100	4,200	4,250	4,300	4,330
Argentina	2,700	2,720	2,650	2,840	2,950	3,000
Australia	2,595	2,547	2,125	2,149	2,300	2,180
Mexico	1,827	1,850	1,879	1,925	1,960	2,000
Pakistan	1,685	1,710	1,750	1,780	1,800	1,820
Turkey	1,245	1,423	1,484	1,399	1,400	1,400
Russia	1,375	1,355	1,335	1,336	1,340	1,355
Others	10,156	9,379	9,384	9,329	9,402	9,413
Total Foreign	49,739	48,893	48,971	49,681	50,592	50,898
United States	11,075	10,817	11,507	11,943	12,286	12,725
Total	60,814	59,710	60,478	61,624	62,878	63,623
Total Dom. Consumption						
China	7,277	7,339	7,759	8,227	8,530	8,705
Brazil	7,896	7,781	7,652	7,750	7,850	8,045
European Union	7,514	7,742	7,898	7,832	7,935	7,820
India	2,018	2,294	2,436	2,401	2,635	2,705
Argentina	2,503	2,534	2,434	2,547	2,450	2,425
Mexico	1,839	1,797	1,809	1,841	1,865	1,890
Russia	2,297	1,967	1,849	1,840	1,823	1,810
Pakistan	1,627	1,636	1,685	1,722	1,741	1,761
Turkey	1,247	1,455	1,495	1,424	1,489	1,469
Japan	1,225	1,186	1,215	1,277	1,316	1,320
Others	12,082	10,806	10,848	10,761	10,884	11,127
Total Foreign	47,525	46,537	47,080	47,622	48,518	49,077
United States	11,241	11,275	11,676	12,052	12,206	12,657
Total	58,766	57,812	58,756	59,674	60,724	61,734

Notes: Includes meat of other bovines for certain countries. India includes carabeef (water buffalo). From 2015, the following countries are excluded: Albania, Azerbaijan, Cote d'Ivoire, Georgia, Ghana, Jamaica, Senegal and Uzbekistan. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Beef and Veal Trade - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2014	2015	2016	2017	2018	2019 Oct
Total Imports						
China	417	663	812	974	1,200	1,320
Japan	739	707	719	817	835	850
Hong Kong	646	339	453	543	560	600
Korea, South	392	414	513	531	560	565
Russia	932	622	524	516	495	470
European Union	372	363	368	338	370	370
Egypt	270	360	340	250	300	330
Chile	241	245	298	281	310	320
Canada	272	269	243	229	240	250
Mexico	206	175	188	196	210	220
Others	2,085	1,969	1,880	1,920	1,927	1,987
Total Foreign	6,572	6,126	6,338	6,595	7,007	7,282
United States	1,337	1,528	1,366	1,358	1,373	1,406
Total	7,909	7,654	7,704	7,953	8,380	8,688
Total Exports						
Brazil	1,909	1,705	1,698	1,856	2,100	2,200
India	2,082	1,806	1,764	1,849	1,665	1,625
Australia	1,851	1,854	1,480	1,485	1,630	1,510
New Zealand	579	639	587	593	603	589
Argentina	197	186	216	293	500	575
Canada	378	397	441	465	500	515
Uruguay	350	372	421	436	440	415
Paraguay	389	381	389	378	380	360
European Union	301	305	350	369	350	350
Mexico	194	228	258	280	305	330
Others	601	685	664	666	650	635
Total Foreign	8,831	8,558	8,268	8,670	9,123	9,104
United States	1,167	1,028	1,160	1,297	1,435	1,472
Total	9,998	9,586	9,428	9,967	10,558	10,576

Notes: Includes meat of other bovines for certain countries. Indian exports are carabeef (water buffalo). From 2015, the following countries are excluded: Albania, Azerbaijan, Cote d'Ivoire, Georgia, Ghana, Jamaica, Senegal and Uzbekistan. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Cattle Stocks - Selected Countries Summary
(in 1,000 head)

	2014	2015	2016	2017	2018	2019 Oct
Total Cattle Beg. Stks						
India	300,600	301,100	302,600	303,600	305,000	306,500
Brazil	207,959	213,035	219,180	226,045	232,350	238,150
China	103,000	100,450	100,275	99,173	96,850	94,700
European Union	87,619	88,406	89,152	89,152	88,439	87,290
Argentina	51,545	51,545	52,565	53,515	53,715	54,215
Australia	29,291	29,102	27,413	24,971	25,500	25,200
Russia	19,564	19,152	18,879	18,638	18,564	18,500
Mexico	17,760	17,120	16,615	16,490	16,584	16,815
Turkey	14,533	14,345	14,128	14,222	14,500	14,990
Canada	12,050	11,640	11,610	11,535	11,575	11,520
Others	75,956	44,598	44,152	44,311	44,353	44,383
Total Foreign	919,877	890,493	896,569	901,652	907,430	912,263
United States	88,526	89,143	91,918	93,705	94,399	95,000
Total	1,008,403	979,636	988,487	995,357	1,001,829	1,007,263
Production (Calf Crop)						
India	66,000	67,000	67,500	68,200	68,700	69,000
China	47,900	49,000	50,000	50,500	50,900	50,850
Brazil	49,600	48,220	48,250	48,735	49,500	50,700
European Union	29,280	29,900	30,100	29,180	29,000	28,900
Argentina	13,300	14,200	14,000	14,200	14,700	14,300
Australia	11,063	9,394	6,600	9,050	9,000	8,800
Mexico	6,750	6,850	7,100	7,485	7,700	7,900
Russia	6,670	6,620	6,600	6,705	6,700	6,760
New Zealand	5,440	5,040	5,060	4,728	4,850	4,766
Canada	4,496	4,198	4,272	4,358	4,340	4,340
Others	18,214	13,686	13,727	14,192	14,225	14,350
Total Foreign	258,713	254,108	253,209	257,333	259,615	260,666
United States	33,522	34,087	35,093	35,808	36,500	36,675
Total	292,235	288,195	288,302	293,141	296,115	297,341

Notes: May contain other bovines. From 2015, Colombia and Venezuela are excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Cattle Trade - Selected Countries Summary
(in 1,000 head)

	2014	2015	2016	2017	2018	2019 Oct
Total Imports						
Turkey	50	203	494	896	1,200	1,000
Egypt	200	170	300	250	250	340
Canada	45	36	32	141	180	190
China	316	129	133	121	135	150
Russia	75	94	63	66	90	65
Others	615	37	47	49	41	42
Total Foreign	1,301	669	1,069	1,523	1,896	1,787
United States	2,358	1,984	1,708	1,806	1,885	1,960
Total	3,659	2,653	2,777	3,329	3,781	3,747
Total Exports						
Mexico	1,177	1,213	1,130	1,203	1,200	1,200
European Union	499	810	997	1,031	1,100	1,000
Australia	1,297	1,336	1,154	928	1,000	950
Brazil	649	212	293	407	850	900
Canada	1,267	860	789	663	670	660
Others	380	337	434	482	573	435
Total Foreign	5,269	4,768	4,797	4,714	5,393	5,145
United States	108	73	69	193	190	195
Total	5,377	4,841	4,866	4,907	5,583	5,340

Notes: May contain other bovines. From 2015, Colombia and Venezuela are excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

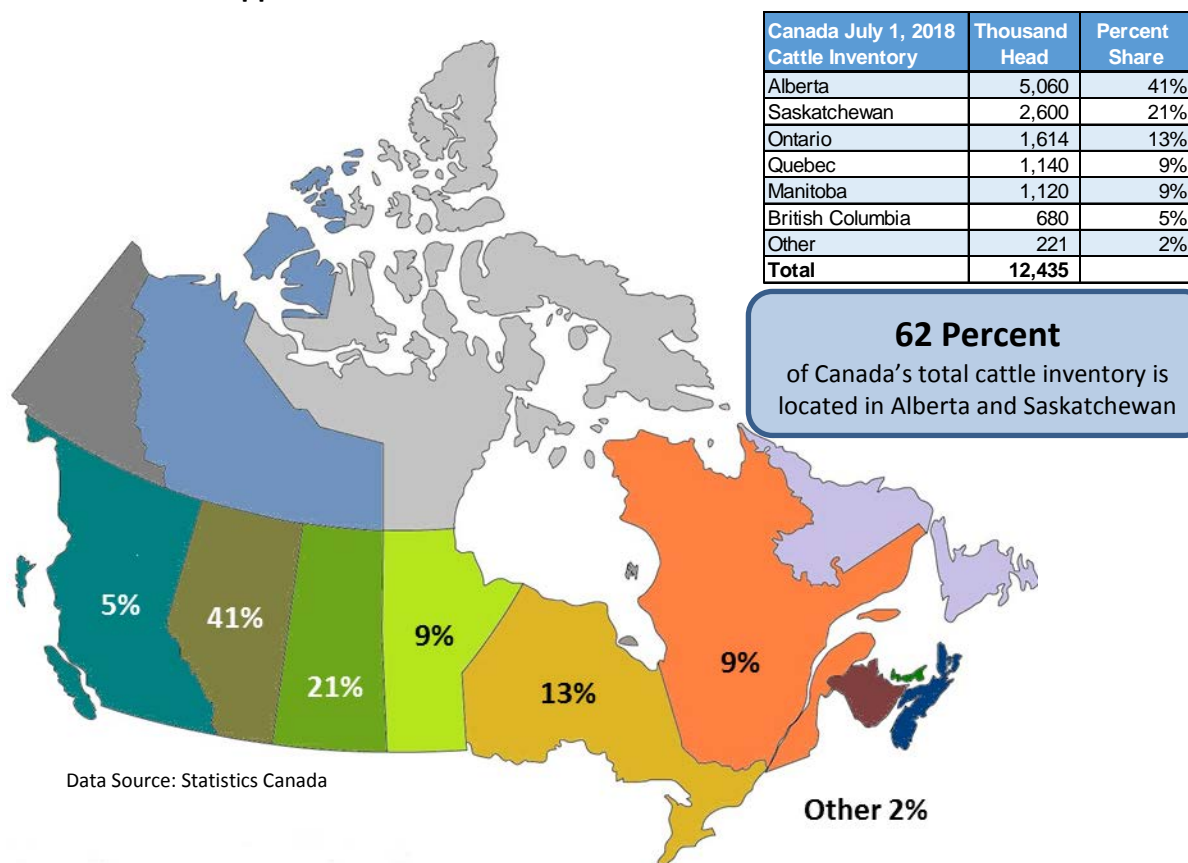
Marginal Growth Forecast for Canada Cattle and Beef Production

Tyler Cozzens, Agricultural Economist

HIGHLIGHTS:

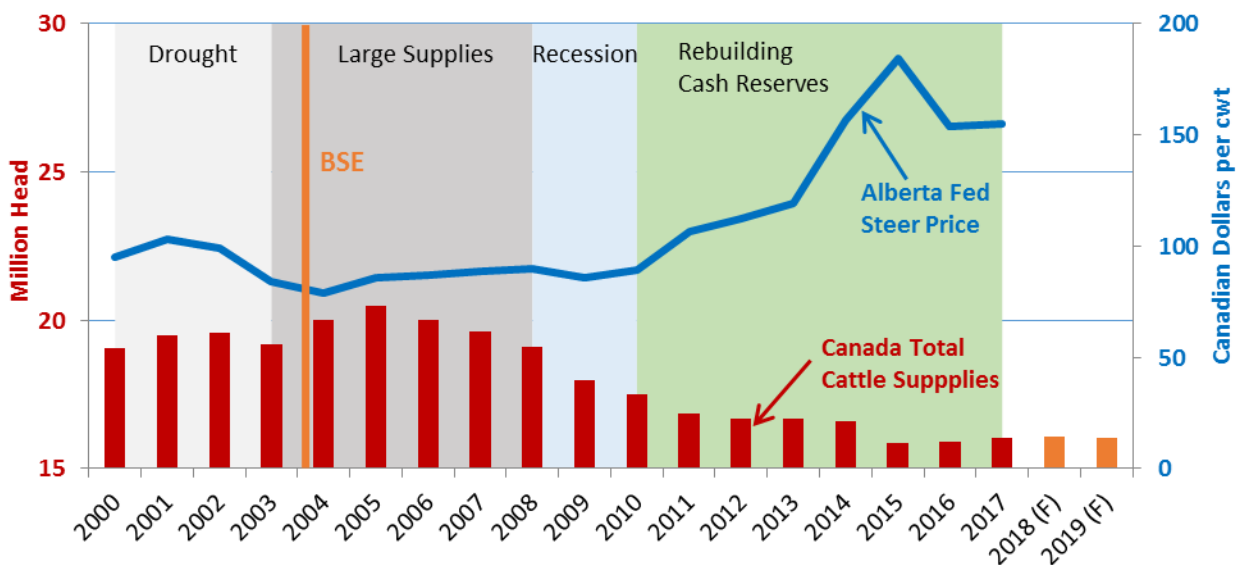
- Canada's beef production is forecast flat for 2019 following 3 percent growth in 2018 as available cattle supplies constrain expansion efforts.
- More than three-quarters of Canada's beef exports are traditionally destined for the U.S. market.
- Newly operational Harmony Beef plant in Calgary, AB seeks to supply growing Asian markets and EU under EU-Canada Comprehensive Economic and Trade Agreement (CETA).

Canada's Cattle Supplies Focused in Western Prairie Provinces of Alberta and Saskatchewan



Canada's cattle industry has faced many challenges, resulting in a declining herd size from a high of 20.5 million head in 2005. Much of Canada's cattle production is located in Alberta and Saskatchewan which holds 41 and 21 percent, respectively, of the total supplies as of July 1, 2018. From 2000-2003, Canada experienced drought conditions which increased cattle marketings and pressured prices. The situation was compounded with the detection of bovine spongiform encephalopathy (BSE) in May 2003 which reduced demand for Canadian beef. Inventories then grew as cattle marketings declined, pressuring prices and producer returns. The recession of 2008 only exacerbated the circumstances. Since 2011, producers have been rebuilding cash reserves as cattle prices have started to rise but are still hesitant to expand production.

Canada Cattle Supplies Lower as Prices Remain High



Source: USDA-FAS-PSD, CanFax

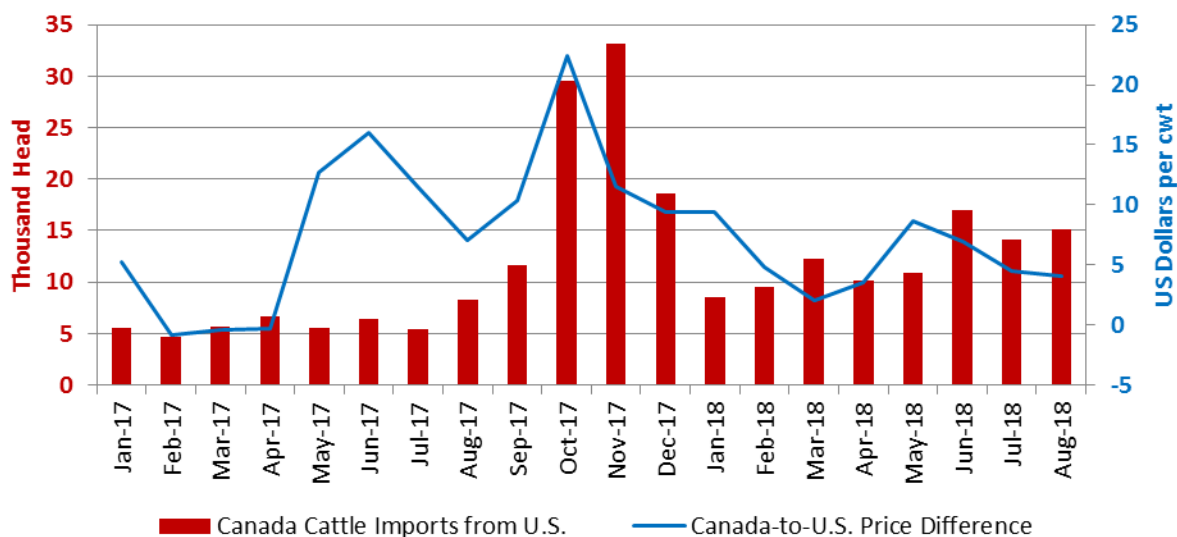
Current State of Canada's Cow-Calf Sector

As the average age of producers (approximately 56 years) rises, industry consolidation seems likely to continue with smaller-scale producers exiting and larger-scale producers seeking to expand. Potentially more profitable crops, such as canola, are increasing the competition for the same land as cattle. Feed supplies have recently been somewhat of a constraint as limited supplies and higher foreign demand have pressured available supplies of feed barley and wheat. However, silage and forage crops provide an option and if prices are advantageous producers can import corn from the United States. Feedlot space, particularly in Alberta, is available but feeder cattle prices have not encouraged further expansion in the cow-calf sector.

Spike in Fourth Quarter 2017 Canada Cattle Imports

In 2017, Canada imported 141,000 head of cattle and 75 percent (107,000) of those were shipped in the second half of the year. Canada's cattle imports increased nearly fivefold over 2016 levels. In 2017, during the combined months of October and November, Canada imported nearly 63,000 head. Although imports only account for just over 3 percent of production, the pace of shipments for the first half of 2018 steadily grew and exceeded 2017 levels. The primary type of cattle imported in 2017 and through September of 2018 from the United States was feeder cattle for placement and weighing less than 700 pounds. Further exacerbating the impacts of the Canadian cow-calf sector's consolidation on feeder calf supplies was the late winter storms during March and April of 2018. The storms occurred during key calving months in western parts of Canada and the United States which increased death loss. Alberta producers noted calving death losses ranging in the 20-25 percent range last spring season. Although this may not be representative of all Canada, since Alberta is the largest cattle-producing province, these losses could affect the availability of feeder cattle for placement in the coming months.

Price-Driven Demand for U.S. Feeder Cattle Shipments to Canada



Source: IHS Markit, USDA-AMS

Canadian feedlots have been actively purchasing cattle from U.S. markets. This is indicated by the pace of imports through the first seven months of 2018 which is nearly double 2017 volume levels. These imports have been largely driven by lower-priced U.S. feeder cattle which can be sourced and shipped to Canadian feedlots cheaper than purchasing similar cattle domestically. Feedlot operators are seeking to take advantage of otherwise empty livestock trucks, following delivery to U.S. slaughter facilities, by purchasing competitively priced U.S. feeder cattle and shipping across the border for feedlot placement. The price difference between Canadian feeder cattle (Alberta feeder) and U.S. feeder cattle (Oklahoma steer) in the 500- to 600-pound category was as much as \$22.41 per hundredweight (cwt) U.S. dollars in October 2017. More recently, the price difference has been in the \$5 to \$10 per cwt range, but the pace of shipments has remained strong in September which is the start of the key placement period. There have been fewer southbound cattle for slaughter; for example, Canada exported 663,000 head of cattle in 2017 for processing in U.S. facilities which is nearly 16 percent lower than 2016 levels of 789,000 head. This may be an indication that more cattle are being kept to supply the Canadian market.

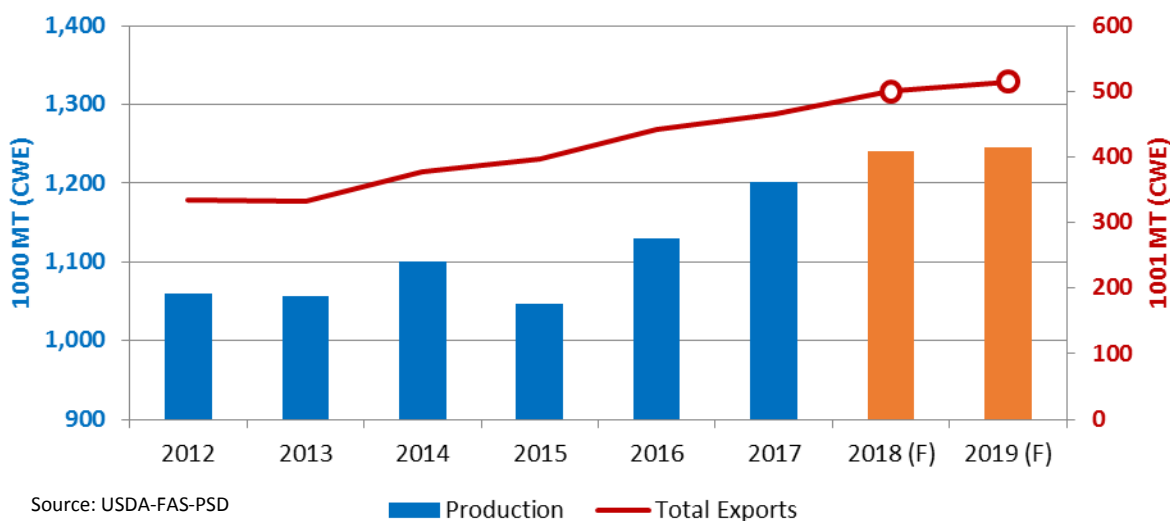
Harmony Beef Plant Seeking to Supply Growing Niche Markets

In 2017, the Harmony Beef plant, located near Calgary, Alberta, came online as an operation seeking to produce high-quality beef for the domestic and international markets. The Cargill and JBS plants in Alberta are much larger in size than Harmony Beef, but the facility does have capacity to expand and process up to an additional 400 head per day. Harmony Beef is focusing on higher end niche markets not only domestically but also in key Asian markets, such as Hong Kong, Japan and China. With the new EU-Canada Comprehensive Economic and Trade Agreement (CETA) the EU may be a budding market for Canadian beef, but meeting the EU beef import requirements and developing EU-eligible cattle in the Canadian herd may be limiting factors.

EU-Canada Comprehensive Economic and Trade Agreement (CETA)

The EU and Canada Economic and Trade Agreement (CETA), which entered into force September 21, 2017, removed import tariffs on 50,000 metric tons (MT) of beef and veal. As a result of the agreement, Canada is no longer included in the EU High-Quality Beef (HQB) quota. Following CETA, the 2017/18 overall HQB quota amount decreased from an initial 48,200 MT to a total of 45,711 MT for the year due to Canada no longer participating as it now has a country-specific quota. The EU provisional quota fill numbers for the 2017/18 year showed that Canada supplied 0.33% of beef under the quota. A new quota of 45,000 MT for the 2018/19 year opened on July 1, 2018. Canada's year-to-date beef and beef product exports, through July, are up nearly 8 percent compared to last year's quantity levels and exports to the EU are up over 50 percent, albeit, the EU exports have typically accounted for less than one percent of Canada's total exports.

Canada Beef Production and Exports Forecast to Rise Marginally



Canada Beef Exports an Integral Part of Production

Canada's beef production is forecast to grow marginally to 1.25 million tons MT carcass weight equivalent (CWE) in 2019 following an estimated 3 percent growth in 2018 to 1.24 million tons (MT CWE) as available cattle supplies will constrain future expansion efforts. Beef exports are destined primarily for the United States which historically has accounted for over three-quarters of Canada's shipments. The number two destination for Canadian beef has been Hong Kong, followed by Japan, Mexico, and China rounding out the top five markets in 2017. Although these four markets currently make up only 18 percent of Canada's exports, shipments to these destinations have remained steady. Canada's 2019 beef exports are forecast to grow 3 percent to 515,000 MT; 2018 is estimated to rise 8 percent to 500,000 MT. Exports account for approximately 40 percent of beef production each year.

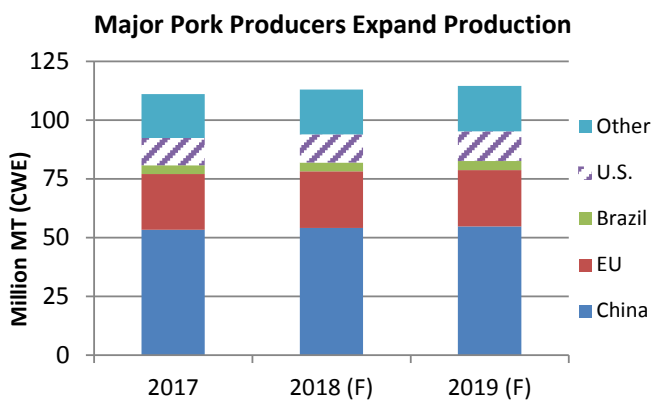
For more information, contact: Tyler Cozzens | USDA-FAS, Office of Global Analysis, Global Commodity Analysis Division | Tyler.Cozzens@usda.gov, (202) 690-2993

Pork

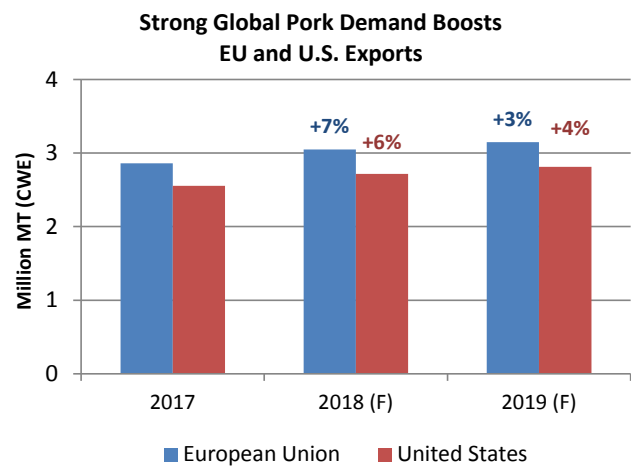
Global production is forecast up 1 percent in 2019 to 114.6 million tons on continued expansion in China and the United States. The global economy continues to grow, boosting demand for pork in most countries. Production is forecast 1 percent higher in China as a larger sow herd and improvements in productivity boost the pig supply. However, the recent discovery of African Swine Fever (ASF) in China has impacted hog movement and prices, resulting in a slower rate of expansion relative to last year. EU production will decline marginally as lower hog prices and higher feed costs will drive a small reduction in the breeding herd.

Global exports are forecast almost 3 percent higher in 2019 driven by strong global demand. The European Union will remain the top exporter, buoyed by higher demand in Asia, especially China. Brazil's exports will rebound as growth to China and Hong Kong offset the loss of previous top market Russia. Import demand will also strengthen in Latin America, as favorable prices and changing preferences boost per-capita pork consumption. Mexico's imports are forecast 5 percent higher and Colombia 29 percent higher on robust demand. South Korea's imports will decline as near-record expected imports during 2018 are expected to lead to high stocks.

U.S. production and exports: Production is forecast up 5 percent in 2019 on higher hog slaughter and heavier carcass weights. Despite lower hog prices this year, producers intend to farrow more hogs during 2019, driven by substantial investments in production capacity over the past 2 years. Lower pork prices and steady gains in global pork demand will drive exports nearly 4 percent higher in 2019, following 6-percent growth in 2018. Retaliatory tariffs on U.S. pork will limit U.S. shipments to China, but lower prices are expected to propel growth to top market Mexico.



Source: USDA-FAS-PSD



Pork Production - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2014	2015	2016	2017	2018	2019 Oct
Production						
China	56,710	54,870	52,990	53,400	54,150	54,800
European Union	22,540	23,249	23,866	23,663	24,100	24,000
Brazil	3,400	3,519	3,700	3,725	3,675	3,775
Russia	2,510	2,615	2,870	3,000	3,235	3,310
Vietnam	2,431	2,548	2,701	2,741	2,675	2,735
Canada	1,805	1,899	1,914	1,959	1,960	1,970
Philippines	1,402	1,463	1,540	1,563	1,600	1,630
Korea, South	1,200	1,217	1,266	1,280	1,375	1,415
Mexico	1,135	1,164	1,211	1,267	1,310	1,360
Japan	1,264	1,254	1,279	1,282	1,285	1,285
Others	5,733	5,503	5,482	5,547	5,601	5,684
Total Foreign	100,130	99,301	98,819	99,427	100,966	101,964
United States	10,368	11,121	11,320	11,611	11,992	12,621
Total	110,498	110,422	110,139	111,038	112,958	114,585
Total Dom. Consumption						
China	57,194	55,668	54,980	54,812	55,725	56,525
European Union	20,390	20,871	20,747	20,817	21,065	20,865
Russia	3,021	3,016	3,192	3,338	3,250	3,300
Brazil	2,846	2,893	2,870	2,941	2,992	3,042
Japan	2,543	2,568	2,626	2,741	2,785	2,806
Vietnam	2,414	2,526	2,647	2,703	2,660	2,730
Mexico	1,836	2,017	2,091	2,180	2,305	2,405
Korea, South	1,660	1,813	1,894	1,926	2,010	2,122
Philippines	1,600	1,637	1,734	1,803	1,869	1,929
Taiwan	875	937	902	929	933	933
Others	6,889	6,654	6,660	6,854	7,079	7,281
Total Foreign	101,268	100,600	100,343	101,044	102,673	103,938
United States	8,544	9,341	9,475	9,540	9,760	10,273
Total	109,812	109,941	109,818	110,584	112,433	114,211

Note: From 2015, the following countries are excluded: Albania, Armenia, Congo (Brazzaville), Gabon, Georgia, Ghana, Jamaica, North Korea, Kyrgyzstan, Moldova, Switzerland and Trinidad and Tobago. From 2016, Venezuela is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Pork Trade - Selected Countries Summary
1,000 Metric Tons (Carcass Weight Equivalent)

	2014	2015	2016	2017	2018	2019 Oct
Total Imports						
China	761	1,029	2,181	1,620	1,750	1,875
Japan	1,332	1,270	1,361	1,475	1,510	1,525
Mexico	818	981	1,021	1,083	1,175	1,235
Korea, South	480	599	615	645	735	685
Hong Kong	347	397	429	463	475	490
Philippines	199	175	195	241	270	300
Canada	214	216	215	222	230	235
Australia	191	220	210	215	225	230
Colombia	71	64	66	99	140	180
Taiwan	63	107	77	111	120	130
Others	1,406	1,155	1,123	1,210	991	1,031
Total Foreign	5,882	6,213	7,493	7,384	7,621	7,916
United States	459	506	495	506	483	481
Total	6,341	6,719	7,988	7,890	8,104	8,397
Total Exports						
European Union	2,164	2,390	3,131	2,860	3,050	3,150
Canada	1,220	1,239	1,320	1,336	1,350	1,365
Brazil	556	627	832	786	685	735
Chile	163	178	173	171	185	195
Mexico	117	128	141	170	180	190
China	277	231	191	208	175	150
Russia	5	7	25	37	45	50
Australia	37	36	38	43	49	45
Vietnam	21	30	65	50	35	30
South Africa	14	17	15	18	18	20
Others	105	82	49	62	48	47
Total Foreign	4,679	4,965	5,980	5,741	5,820	5,977
United States	2,310	2,272	2,377	2,556	2,717	2,813
Total	6,989	7,237	8,357	8,297	8,537	8,790

Note: From 2015, the following countries are excluded: Albania, Armenia, Congo (Brazzaville), Gabon, Georgia, Ghana, Jamaica, North Korea, Kyrgyzstan, Moldova, Switzerland and Trinidad and Tobago. From 2016, Venezuela is excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Swine Stocks - Selected Countries Summary
(in 1,000 head)

	2014	2015	2016	2017	2018	2019 Oct
Total Beginning Stocks						
China	474,113	465,830	451,130	435,040	433,250	440,000
European Union	146,172	148,341	148,716	147,188	150,000	148,900
Brazil	38,844	39,395	39,422	39,215	38,829	38,235
Russia	19,081	19,405	21,345	21,888	23,058	23,850
Canada	12,835	13,180	13,630	13,935	14,250	14,200
Korea, South	9,912	10,090	10,187	11,487	11,273	11,800
Mexico	9,775	9,788	10,043	10,229	10,410	10,540
Japan	9,537	9,440	9,313	9,346	9,280	9,260
Ukraine	7,922	7,492	7,240	6,816	6,236	5,930
Belarus	3,267	2,925	3,205	3,145	3,156	3,100
Others	2,098	2,308	2,272	nr	nr	nr
Total Foreign	733,556	728,194	716,503	698,289	699,742	705,815
United States	64,775	67,776	68,919	71,545	73,445	75,750
Total	798,331	795,970	785,422	769,834	773,187	781,565
Production (Pig Crop)						
China	729,927	696,600	672,500	689,500	708,000	712,000
European Union	261,750	265,287	266,000	267,000	271,500	269,000
Russia	37,000	39,830	41,477	43,600	46,500	46,950
Brazil	38,470	39,050	39,635	40,230	40,000	40,400
Canada	27,197	28,983	28,812	29,109	28,600	29,000
Korea, South	16,812	17,600	19,504	18,191	20,478	20,880
Mexico	17,300	17,300	17,700	18,100	18,500	18,950
Japan	17,050	16,700	16,900	16,785	16,695	16,600
Ukraine	9,527	9,624	9,296	8,767	8,100	8,650
Belarus	4,850	5,200	5,200	5,325	5,350	5,300
Others	5,022	4,921	5,028	nr	nr	nr
Total Foreign	1,164,905	1,141,095	1,122,052	1,136,607	1,163,723	1,167,730
United States	114,856	121,411	125,939	129,467	133,966	137,810
Total	1,279,761	1,262,506	1,247,991	1,266,074	1,297,689	1,305,540

Notes: The notation of a month beneath a year conveys the month in which the forecast for that year was released. nr - represents "no reporting" countries (data sets excluded beginning in 2017). From 2017, the following country is excluded: Australia.

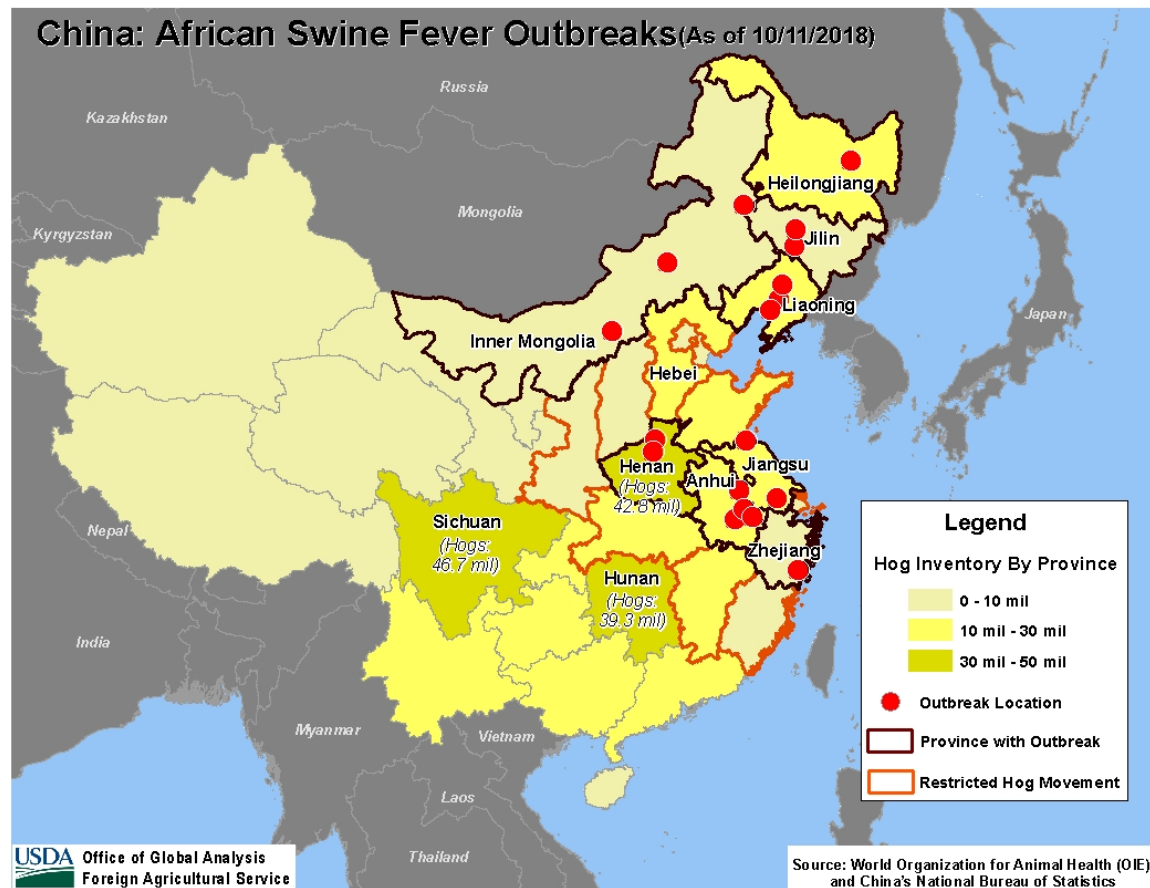
Swine Trade - Selected Countries Summary
(in 1,000 head)

	2014	2015	2016	2017	2018	2019 Oct
Total Imports						
Mexico	14	42	20	42	35	35
Ukraine	22	22	4	8	15	18
Belarus	5	8	9	6	8	8
China	9	4	8	6	10	8
European Union	1	3	3	6	8	8
Korea, South	2	2	3	5	5	5
Russia	8	2	8	6	4	4
Canada	3	6	3	3	3	3
Brazil	0	1	0	1	1	2
Japan	1	0	1	1	1	1
Others	0	0	0	nr	nr	nr
Total Foreign	65	90	59	84	90	92
United States	4,947	5,740	5,656	5,600	5,625	5,400
Total	5,012	5,830	5,715	5,684	5,715	5,492
Total Exports						
Canada	4,960	5,776	5,672	5,614	5,400	5,400
China	1,737	1,696	1,552	1,557	1,600	1,600
European Union	567	436	288	339	600	500
Ukraine	1	1	27	33	15	15
Russia	0	2	7	6	8	10
Brazil	3	4	2	5	6	6
Belarus	0	1	5	2	0	0
Japan	0	0	0	0	0	0
Korea, South	0	0	0	0	0	0
Mexico	0	0	0	7	0	0
Others	0	0	0	nr	nr	nr
Total Foreign	7,268	7,916	7,553	7,563	7,629	7,531
United States	19	41	48	59	57	65
Total	7,287	7,957	7,601	7,622	7,686	7,596

Notes: The notation of a month beneath a year conveys the month in which the forecast for that year was released. nr - represents "no reporting" countries (data sets excluded beginning in 2017). From 2017, the following country is excluded: Australia.

Hog Markets React as African Swine Fever Spreads in China

Lindsay Kuberka, Agricultural Economist



Map updated 10/10/2018

China's pork production has been in expansion mode, but the recent discovery of African Swine Fever (ASF) increases uncertainties for the sector. As of October 10, 31 outbreaks have occurred in eight provinces – a geographic area that accounts for over 50 percent of China's hogs. The true scale and potential spread of the disease are still unknown. However, transportation and marketing restrictions in affected and neighboring provinces have already disrupted supply chains and led to diverging local prices for hogs. Uncertainty and lower expected hog prices due to these outbreaks will slow the growth of hog production and boost demand for pork imports during 2019.

ASF Spreads across Eight Provinces in Two Months

Since the first discovery in Shenyang on August 1, ASF has spread quickly to seven other provinces. Outbreaks have been found primarily on small farms with limited biosecurity compared to larger commercial farms. China has shed over 60 million small producers since 2002 through industry consolidation and modernization, but the latest statistics in 2016 showed there were still more than 40 million operations each raising less than 500 head. These operations accounted for nearly half of national hog production. The preponderance of small farms and the outbreaks' rapid and wide geographic spread demonstrates the vulnerability of the industry to disease.

In response to the disease, movement of hogs from affected provinces has been prohibited, and shipping hog products has been banned from some regions. On September 11, the Ministry of Agriculture and Rural Affairs (MARA) banned live auctions and inter-provincial movement of hogs in 10 provinces which neighbor ASF-infected provinces. Intended to prevent further outbreaks, these measures are causing substantial disruptions in the marketing of hogs. Covering nearly half of all production areas, transport limitations are preventing processors from securing hog supplies and hog producers from finding buyers. According to MARA, nearly 15 percent of hogs are transported across provincial borders. Northeast provinces affected by ASF are net suppliers of live hogs to provinces with greater processing capacity and closer to population centers. In contrast, provinces in the south increasingly pull hogs from Northern and Southwestern China to meet local demand. The impacts of restrictions are becoming apparent in regional differences in hog prices.

ASF Overview

ASF is a viral infection producing fever and near-100 percent fatality in infected herds. Incidence of the disease requires total culling of the herd and disinfection of the production site. While highly infectious among swine, the disease does not impact human health. ASF was discovered in Africa in the early 20th century, but beyond sporadic outbreaks in Europe and South America in the 1960s through 1980s, ASF had largely been confined to parts of Africa. In 2007, an outbreak was discovered in Georgia and from there spread through the Caucasus to Russia, Ukraine, and Belarus. ASF was found in the European Union in 2014, with initial outbreaks in Poland and now in 10 EU Member States. The September discovery of ASF in a wild boar in Belgium is the first outbreak in Western Europe, bringing ASF in close proximity to major commercial hog operations in Germany, France, and the Netherlands.

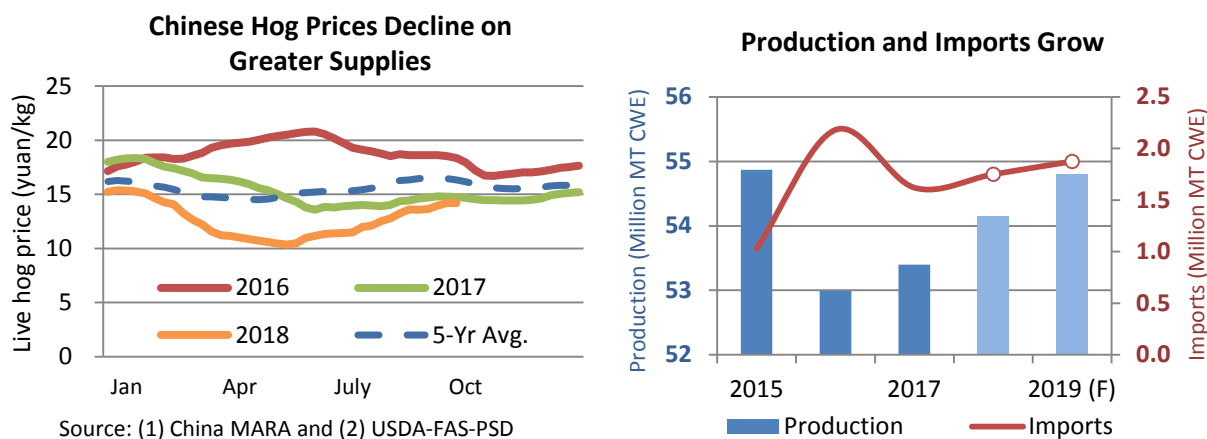
ASF is typically spread through a herd's exposure to infected animals or contaminated feed. In Eastern Europe, wild boars and ticks have spread the disease to backyard farms. Garbage feeding can be another source of transmission as hogs contract ASF by consuming meat or products of an infected animal. While banned in the EU out of disease concerns, garbage feeding still occurs in other parts of the world in backyard farms. The virus can survive for several years in frozen hog products and therefore pork and product trade is prohibited from areas with an outbreak. Without a vaccine available, strong biosecurity practices are the best protection swine producers have against outbreaks.

Chinese Pork Production Remains Up on Expanding Hog Supplies

Gains in hog and sow inventories will boost China's pork production by about 1.2 percent in 2019, following 1.4 percent growth in 2018. Herd expansion that began in 2017 accelerated in 2018, as positive returns fueled growth in the sow herd especially among large-scale producers. Hog supplies increased during the first half of 2018, boosting slaughter by 1.4 percent and production is expected to hold firm during the second half. However, the rate of expansion will slow in 2019 as producers in disease-affected areas reduce sows on lower hog prices. Transit restrictions could also limit transfer of piglets to grow-out farms, reducing available hog supplies.

In the long-run, continued outbreaks of ASF are likely to drive further industry consolidation through exit of small producers least able to adopt biosecurity measures and cope with the disease. At the other end of the market, large integrators have announced recently that they would scale back aggressive investment plans. Many of these companies focused on expanding production in Northeast China, areas that the government prioritized for economic and environmental reasons. Many of the areas targeted for expansion are most affected by ASF outbreaks.

Outbreaks of ASF have drawn comparisons to the 2006 outbreak of porcine reproductive and respiratory syndrome (PRRS). The PRRS outbreak spread to most provinces within months, driving a 3-percent decline in hog inventory and 6-percent drop in the sow herd. Lower hog numbers led to an 8-percent decline in pork production in 2007. Chinese officials have been more prompt and transparent in reporting outbreaks of ASF, culling herds, monitoring farms, and banning movement of animals. Several outbreaks of ASF were detected via herd inspections by officials. ASF has not yet spread as widely as PRRS, but previous disease outbreaks demonstrate the possible production impact of new diseases.



Regional Hog Prices Diverge after Outbreaks

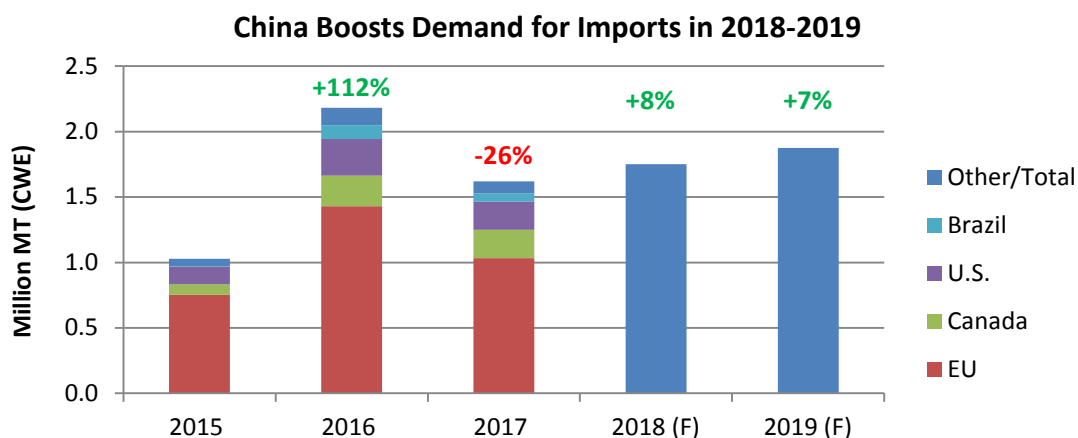
Live hog prices dipped to multi-year lows during 2018 as supplies increased – with national prices averaging 19 percent lower year-over-year through September. China’s hog price typically bottoms out in May and increases during the summer. Prices peak during the fall and winter months as pork demand mounts during holidays including mid-Autumn festival and Chinese New Year. This year, prices rebounded seasonally after May, but have fallen in many regions since initial outbreaks of ASF. The general trend has been lower prices in the East, Northeast, and Central China – reflecting the difficulty of marketing hogs from an ASF-affected region. Lower prices could also be caused by accelerated slaughter of hogs after initial disease reports and could lead to shorter supplies in the coming months. In contrast, prices have increased in hog and pork-deficient regions and those unaffected by outbreaks, especially in South China. Strong hog prices could spur production growth in these regions. However, expansion is largely constrained in these regions due to environmental restrictions.

Will Consumers Shy Away from Pork?

Pork consumption is expected to be relatively stable in 2019 in line with production growth. However, the effect of ASF on consumer pork demand is unknown. Although Chinese officials have issued public announcements assuring the public that ASF has no negative impacts on human health, there are reports that some consumers have reduced purchases of pork out of food safety concerns, a phenomenon that could boost demand for chicken and other competing proteins. Anecdotally, some food service operators are increasing purchases of chicken, although this is more likely in regions impacted by lower supplies due to transit restrictions. Apart from regional disruptions in pork supplies, a reduction in overall consumer pork demand would contribute to lower hog prices in 2019 and further limit production growth.

Global Markets Expected to Fill Supply Shortages in China

Demand for imported pork in China is expected to increase in 2019 as end-users react to lower global pork prices and market disruptions and spot shortages caused by ASF. Imports are forecast up 7 percent, following 8-percent growth in 2018. With retaliatory tariffs in place on U.S. pork, China is likely to boost imports from the European Union, Brazil, and Canada. Imports play a rising, but still minor, role in China's consumption. The 2019 import forecast represents just 3 percent of total consumption. Imports are typically used in the processing industry and to a lesser extent food service and retail. Consumers and food service operators continue to prefer fresh pork, limiting the use of imported frozen pork. Domestic prices will dictate the level of imports, rising if outbreaks have significant production or supply impacts that lift domestic prices. However, imports could decline if prices plunge due to diminished domestic pork demand.



Source: USDA-FAS-PSD and IHS Markit

Bottom Line: Production, Imports, and Uncertainty on the Rise

While ASF outbreaks have a devastating impact on affected herds, the immense size of China's hog herd means that outbreaks have thus far had a limited impact on national production.

Notwithstanding a major escalation in disease incidence, pork production is forecast to expand

marginally in 2019. Hog prices will dictate the rate of expansion in most areas, although rising feed costs and environmental restrictions will be constraints on growth. Pork will remain the top consumed meat in China, but if consumers shift to competing proteins, pork demand will fall and put further pressure on hog prices. Government efforts to control the spread of ASF will lessen the impact, but disrupt supply chains and reduce access to pork in the process. As a result, these efforts will reduce incentives to expand while providing support for higher imports in 2019.

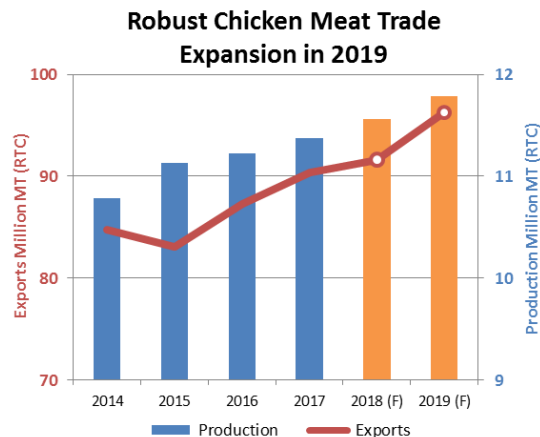
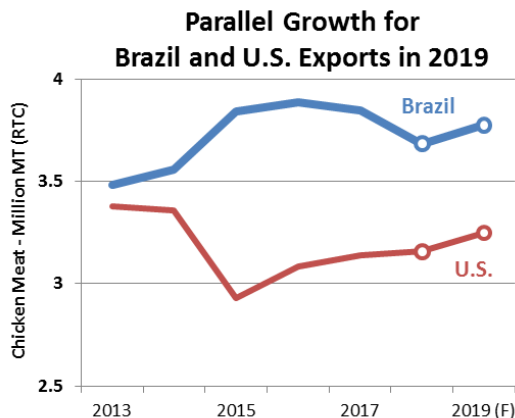
For more information, contact: Lindsay Kuberka | USDA-FAS, Office of Global Analysis, Global Commodity Analysis Division | Lindsay.Kuberka@usda.gov, (202) 644-4650

Chicken Meat

Global production is forecast to grow 2 percent in 2019 to a record 97.8 million tons. All major producers gain on the continuation of generally positive conditions: ample feed supplies at relatively low prices, the absence of widespread highly pathogenic avian influenza (HPAI) outbreaks and modest global demand. Brazil is expected to rebound to attain a new record fueled by export recovery and rising domestic demand supported by stronger economic growth. The European Union (EU) is also forecast to reach a new record due to growing domestic and export demand. The EU economic downturn has not negatively impacted consumption but rather has boosted demand as chicken meat is competitively priced and easy to prepare. China continues to be challenged by HPAI-related bans which limit the supply of imported genetic stock. Despite this constraint, China is forecast to rise 3 percent although production will still remain well below historical highs.

Global exports are forecast a vigorous 4 percent higher in 2019 to a record 11.6 million tons. Leading exporters Brazil and the United States will make the largest gains, although increases by the EU, Thailand and Ukraine will also be significant. The ability to adapt to new Saudi Arabian market conditions (non-stun slaughter) will enable Brazil to benefit from strong demand in its key Middle East market. Robust Asian demand, particularly from Hong Kong, Japan and the Philippines will benefit numerous shippers. Consumption in developing markets such as Angola, Cuba and Ghana continues to be resilient, also fueling trade.

U.S. production and exports: Production is expected to rise 2 percent to a record 19.7 million tons in 2019, supported by growth in domestic and foreign demand. Exports will rise 3 percent to over 3.2 million tons. U.S. shipments will remain below 2014 levels due to HPAI-related restrictions by China.



Source: USDA-FAS-PSD

Chicken Meat Production - Selected Countries Summary
1,000 Metric Tons (Ready to Cook Equivalent)

	2014	2015	2016	2017	2018	2019 Oct
Production						
Brazil	12,946	13,547	13,523	13,612	13,550	13,800
European Union	10,450	10,890	11,560	12,060	12,315	12,470
China	13,156	13,561	12,448	11,600	11,700	12,000
India	3,930	4,115	4,427	4,640	4,855	5,100
Russia	3,958	4,222	4,328	4,658	4,725	4,780
Mexico	3,025	3,175	3,275	3,400	3,500	3,600
Thailand	2,499	2,692	2,813	2,990	3,120	3,250
Turkey	1,942	1,961	1,925	2,188	2,250	2,275
Argentina	2,110	2,085	2,119	2,150	2,175	2,180
Colombia	1,413	1,481	1,538	1,627	1,685	1,730
Others	14,880	15,400	15,810	15,916	16,369	16,908
Total Foreign	70,309	73,129	73,766	74,841	76,244	78,093
United States	17,542	18,208	18,510	18,938	19,350	19,709
Total	87,851	91,337	92,276	93,779	95,594	97,802
Total Dom. Consumption						
China	12,986	13,428	12,492	11,475	11,590	11,900
European Union	10,029	10,441	11,047	11,418	11,540	11,650
Brazil	9,391	9,710	9,637	9,768	9,866	10,026
India	3,921	4,107	4,423	4,636	4,850	5,095
Russia	4,358	4,427	4,451	4,759	4,800	4,800
Mexico	3,738	3,960	4,061	4,198	4,339	4,454
Japan	2,461	2,510	2,587	2,688	2,826	2,908
Thailand	1,979	2,072	2,129	2,226	2,279	2,355
Argentina	1,833	1,899	1,969	1,978	2,060	2,045
South Africa	1,685	1,775	1,804	1,794	1,845	1,895
Others	19,323	19,993	20,630	21,271	21,551	22,315
Total Foreign	71,704	74,322	75,230	76,211	77,546	79,443
United States	14,233	15,265	15,510	15,823	16,241	16,531
Total	85,937	89,587	90,740	92,034	93,787	95,974

Notes: Chicken paws are excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Chicken Meat Trade - Selected Countries Summary
1,000 Metric Tons (Ready to Cook Equivalent)

	2014	2015	2016	2017	2018	2019 Oct
Total Imports						
Japan	888	936	973	1,056	1,140	1,175
Mexico	722	790	791	804	845	860
European Union	712	730	763	693	650	680
Saudi Arabia	762	863	886	790	575	675
Iraq	698	625	661	656	620	640
South Africa	369	457	528	524	535	545
United Arab Emirates	225	277	296	417	408	415
China	260	268	430	311	350	375
Angola	365	221	205	267	310	340
Philippines	199	205	244	267	310	340
Others	3,336	3,209	3,335	3,507	3,557	3,666
Total Foreign	8,536	8,581	9,112	9,292	9,300	9,711
United States	54	60	61	59	63	64
Total	8,590	8,641	9,173	9,351	9,363	9,775
Total Exports						
Brazil	3,558	3,841	3,889	3,847	3,685	3,775
European Union	1,133	1,179	1,276	1,335	1,425	1,500
Thailand	546	622	690	757	850	900
China	430	401	386	436	460	475
Turkey	348	292	263	357	380	400
Ukraine	168	158	236	262	300	350
Belarus	113	135	145	150	175	185
Russia	50	71	104	124	150	180
Argentina	278	187	158	178	125	145
Canada	137	133	134	134	125	130
Others	352	357	358	319	320	331
Total Foreign	7,113	7,376	7,639	7,899	7,995	8,371
United States	3,359	2,932	3,086	3,140	3,158	3,248
Total	10,472	10,308	10,725	11,039	11,153	11,619

Notes: Chicken paws are excluded. The notation of a month beneath a year conveys the month in which the forecast for that year was released.

Technical Notes Regarding New Chicken Meat PSD Series

Claire Mezoughem, Agricultural Economist

HIGHLIGHT:

USDA-FAS is implementing new chicken meat PSDs and will discontinue broiler meat PSDs.

How Will Data Be Impacted?

This circular will now provide chicken meat estimates and forecasts. Historical data for the new series will be provided back to 1999 via the PSD database (<http://www.fas.usda.gov/psdonline>). With minor exceptions, countries included in the broiler meat PSDs will be included in the chicken meat PSDs. The prior broiler meat PSD series has been discontinued and will not be revised or updated in the future. It will terminate with 2016 data. Historical data will remain available via the PSD database.

What is Chicken Meat?

Chicken Meat: Meat of domestic fowl (*Gallus gallus/Gallus domesticus*) including all chickens: broiler, layer, hybrid, domestic breeds, spent hens, ex-breeding stock, etc.

What is Ready-to-Cook (RTC)?

RTC means any slaughtered poultry free from protruding pinfeathers and vestigial feathers (hair or down), from which the head, feet, crop, oil gland, trachea, esophagus, entrails, and lungs have been removed, and from which the mature reproductive organs and kidneys may have been removed, and with or without the giblets, and which is suitable for cooking without need of further processing. Ready-to-cook poultry also means any cut-up or disjointed portion of poultry or other parts of poultry, such as reproductive organs, head, or feet that are suitable for cooking without need of further processing.

How Are Stocks Estimated?

Only those stocks reported through official sources are included. This may include government-held or private stocks, or both.

What is Consumption?

“Human Domestic Consumption” is defined as product consumed by humans. “Other Uses, Loss” captures non-human use such as animal feed, chemicals, pharmaceuticals, etc. plus loss. “Total Domestic Consumption” is the sum of these two attributes.

What HS Codes Comprise Imports and Exports?

The HS Codes Included: 0207.11, 0207.12, 0207.13, 0207.14, and 1602.32. For major traders, chicken paws are excluded.

Which FAS Overseas Offices Currently Submit Poultry Reports?

FAS Offices which currently submit poultry reports are Argentina, Brazil, Canada, China, EU, Japan, South Korea, Mexico, Russia, Saudi Arabia, South Africa, Thailand, Turkey, Ukraine and UAE. These reports are available at <https://gain.fas.usda.gov/Pages/Default.aspx>.

For more information, contact: Claire Mezoughem | USDA-FAS, Office of Global Analysis, Global Commodity Analysis Division | Claire.Mezoughem@usda.gov, (202) 720-7715

Notes to Readers

The *Livestock and Poultry: World Markets and Trade* circular is designed to give a snapshot of the current situation among the major players in world beef, pork, and broiler meat trade.

Data Revisions in PSDs for Years Prior to 2017:

Revisions are made based on new and/or additional information.

Commodity/Attribute	Years	Countries
Cattle		
<i>Slaughter</i>	2009-2016	Canada
Beef		
<i>Production</i>	2011-2016	Canada, Japan, Ukraine
<i>Trade</i>	2009-2016	Angola, Canada, Iran, Russia, UAE
Swine		
<i>Stocks</i>	2014-2016	Canada, Mexico, South Korea
Pork		
<i>Production</i>	2013-2016	Panama, Serbia
<i>Trade</i>	2008-2016	European Union, Macedonia, Montenegro, Singapore, South Africa

Assumptions

- **Diseases:** Forecast reflects disease (African swine fever, avian influenza, bovine spongiform encephalopathy, etc.) policies and restrictions in place as of October 11, 2018 and assumes their continuation.

Conversion Rates and HS Codes

	Beef & Veal	Pork	Chicken Meat
Conversion Rate	1.4	1.3	None
HS Codes	Fresh/Chilled: 0201 Frozen: 0202 Processed: 021020 & 160250	Fresh/Chilled: 020311, 020312, 020319 Frozen: 020321, 020322, 020329 Processed: 021011, 021012, 021019, 160241, 160242, 160249	Fresh/Chilled: 020711, 020713 Frozen: 020712, 020714 Processed: 160232

Note: There are several exceptions by country/product. In general, chicken paws are excluded. Also, beef and veal estimates include meat of other bovines for certain countries. In particular, Indian estimates include carabeef (water buffalo).

Technical Notes

CWE/PWE: All quantities (beef and pork) noted are in Carcass Weight Equivalent (CWE) unless otherwise noted as Product Weight Equivalent (PWE). CWE is the weight of an animal after slaughter and removal of most internal organs, head, and skin. PWE is the actual weight of the meat product exported.

RTC (Ready-to-Cook): RTC means any slaughtered poultry free from protruding pinfeathers and vestigial feathers (hair or down), from which the head, feet, crop, oil gland, trachea, esophagus, entrails, and lungs have been removed, and from which the mature reproductive organs and kidneys may have been removed, and with or without the giblets, and which is suitable for cooking without need of further processing. Ready-to-cook poultry also means any cut-up or disjointed portion of poultry or other parts of poultry, such as reproductive organs, head, or feet that are suitable for cooking without need of further processing.

FAS Reports from Overseas Offices

The *Livestock and Poultry: World Markets and Trade* circular is based on post reports submitted since July 2018 and on available secondary information. The individual country reports can be obtained on FAS Online at: <http://gain.fas.usda.gov/Pages/Default.aspx>.

PSD Online

The entire USDA PSD database is available online at: <http://www.fas.usda.gov/psdonline>.

Additional Resources

Please refer to the USDA-FAS Dairy, Livestock and Poultry website at: <http://www.fas.usda.gov/commodities/livestock-and-meats> for additional data and analysis.

Situation and outlook information on U.S. livestock and poultry can be obtained from the USDA-Economic Research Service at: <https://www.ers.usda.gov/topics/animal-products/>.

Future Releases and Contact Information

Please visit <http://www.fas.usda.gov/data/livestock-and-poultry-world-markets-and-trade> to view archived and future releases. The next release of this circular will be in April 2019.

Questions may be directed to the following staff:

Lindsay Kuberka	(202) 644-4650	Lindsay.Kuberka@usda.gov	Swine and Pork
Tyler Cozzens	(202) 690-2993	Tyler.Cozzens@usda.gov	Cattle and Beef
Claire Mezoughem	(202) 720-7715	Claire.Mezoughem@usda.gov	Poultry