

# Fats and Oils: Oilseed Crushings, Production, Consumption and Stocks

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#### **Highlights**

**November 2016** contained 30 days. **December 2016** contained 31 days.

**Soybeans crushed** for crude oil was 5.08 million tons (169 million bushels) in December 2016, compared to 5.12 million tons (171 million bushels) in November 2016 and 5.01 million tons (167 million bushels) in December 2015. Crude oil produced was 1.95 billion pounds down slightly from November 2016 but up 1 percent from December 2015. Soybean once refined oil production at 1.41 billion pounds during December 2016 decreased 2 percent from November 2016 but increased slightly from December 2015.

Canola seeds crushed for crude oil was 179 thousand tons in December 2016, compared to 209 thousand tons in November 2016 and 166 thousand tons in December 2015. Canola crude oil produced was 150 million pounds down 16 percent from November 2016 but up 10 percent from December 2015. Canola once refined oil production at 117 million pounds during December 2016 was down 28 percent from November 2016 but up 22 percent from December 2015. Cottonseed once refined oil production at 51.5 million pounds during December 2016 was up 6 percent from November 2016 but down 5 percent from December 2015.

**Edible tallow** production was 75.6 million pounds during December 2016, down 8 percent from November 2016 and down 4 percent from December 2015. Inedible tallow production was 313 million pounds during December 2016, down 1 percent from November 2016 but up 9 percent from December 2015. Technical tallow production was 100 million pounds during December 2016, down 21 percent from November 2016 but up 6 percent from December 2015. Choice white grease production at 122 million pounds during December 2016 decreased 5 percent from November 2016 but increased 3 percent from December 2015.

# Soybean Crushing, Production, Consumption and Stocks – United States: December 2016 with Comparisons

Item	December 2015	November 2016	December 2016
Crush			
Soybeans crushedtons	5,011,324	5,122,038	5,076,973
Crude oil produced	1,929,027	1,961,256	1,951,863
Cake and meal producedtons	3,669,213	3,739,093	3,694,866
For animal feedtons	3,610,090	3,671,317	3,632,521
For edible protein productstons	59,123	67,776	62,345
Millfeed producedtons	262,266	273,414	273,479
Refine			
Crude oil processed in refining	1,445,949	1,471,587	1,441,929
Once refined oil produced		1,438,840	1,407,821
Consumption			
Crude oil removed for inedible use in processing1,000 pounds	112,270	114,490	120,463
Once refined oil removed for use in processing1,000 pounds		1,463,620	1,377,926
Removed for edible use in processing1,000 pounds	1,053,797	1,147,517	1,084,988
Removed for inedible use in processing1,000 pounds	283,908	316,103	292,938
Stocks			
Cake and meal on hand end of monthtons	270,421	361,959	404,074
Millfeed on hand end of monthtons	31,927	46,074	42,509
Crude oil on hand end of month	1,576,849	1,473,201	1,505,647
Crusher	778,789	618,320	632,250
Refiner	304,192	325,894	303,790
Offsite	493,868	528,987	569,607
Once refined oil on hand end of month	395,661	307,510	367,082

## Soybean Crushing - Regional: December 2016 with Comparisons

Region	Soybeans crushed			
Region	December 2015	November 2016	December 2016	
	(tons)	(tons)	(tons)	
Illinois	587,325	653,259	641,988	
owa	1,118,485	1,097,446	1,095,665	
North and East <sup>1</sup>	1,105,040	1,177,106	1,102,200	
North Central <sup>2</sup>	709,052	647,631	690,151	
South, West and Pacific <sup>3</sup>	665,297	666,907	660,057	
	,	,	•	
Nest Central <sup>4</sup>	826,125	879,689	886,912	
Region	Danambar 2045	Crude oil produced		
	December 2015	November 2016	December 2016	
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	
Illinois	232,176	255,081	252,510	
owa	427,106	415,128	416,566	
North and East 1	425,422	453,481	428,512	
North Central <sup>2</sup>	275,314	247,553	260,797	
South, West and Pacific <sup>3</sup>	252,254	256,795	255,052	
West Central 4	316,755	333,218	338,426	
D :	Crude oil stocks at crusher			
Region	December 2015	November 2016	December 2016	
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)	
llinois	91.653	126,853	118,626	
owa	147,848	99,653	122,817	
North and East <sup>1</sup>	198,288	136,874	117,929	
North Central <sup>2</sup>	227,072	159,576	147,289	
South, West and Pacific <sup>3</sup>	•	•	•	
	64,403	59,390	82,320	
West Central 4	49,525	35,974	43,269	
Region		Cake and meal produced		
-	December 2015	November 2016	December 2016	
	(tons)	(tons)	(tons)	
Illinois	423,765	475,789	462,693	
owa	827,142	800,539	799,474	
North and East <sup>1</sup>	816,299	854,893	803,907	
North Central <sup>2</sup>	516,838	480.770	500.821	
South, West and Pacific <sup>3</sup>	475,881	484,419	478,293	
West Central <sup>4</sup>	609,288	642,683	649,678	
	·	Cake and meal stocks	·	
Region	December 2015	November 2016	December 2016	
	(tons)	(tons)	(tons)	
Illinois	49,628	(D)	94,385	
owa	45,944	59.388	69.753	
North and East <sup>1</sup>	77,279	96,250	79,529	
North Central <sup>2</sup>	23,431	26,602	·	
South, West and Pacific <sup>3</sup>	•	•	(D)	
	35,663	50,394	65,333	
West Central 4	38,476	42,431	57,014	

<sup>(</sup>D) Withheld to avoid disclosing data for individual operations.

1 North and East includes Indiana, Kentucky, Maryland, Ohio, Pennsylvania and Virginia.
2 North Central includes Michigan, Minnesota, North Dakota and South Dakota.

South, West, and Pacific includes Alabama, Arkansas, California, Georgia, Louisiana, North Carolina and South Carolina.
 West Central includes Kansas, Missouri and Nebraska.

# Selected Oilseed Crushing, Production, Consumption and Stocks – United States: December 2016 with Comparisons

Item	December 2015	November 2016	December 2016
Canola			
Crush			
Seeds crushedtons	165,762	209,432	178,637
Crude oil produced	135,689	178,189	149,916
Cake and meal producedtons	91,746	117,056	103,139
Refine			•
Crude oil processed in refining	102,980	167,222	120,438
Once refined oil produced	96,540	161,950	117,307
Consumption	,	,	,
Crude oil removed for inedible use in processing	(D)	(D)	(D)
Once refined oil removed for use in processing	98,205	160,326	138,866
Removed for edible use in processing		(D)	(D)
Removed for inedible use in processing	(D)	(D)	(D)
Stocks		(5)	(5)
Cake and meal on hand end of monthtons	(D)	(D)	(D)
Crude oil on hand end of month	(D)	239,673	237,622
Once refined oil on hand end of month	72,843	66,466	68,912
Office formed on off finance cha of monath	12,040	00,400	00,312
Cottonseed			
Crush			
Seeds crushedtons	149,644	163,909	167,631
Crude oil produced	46,826	51,141	50,386
Cake and meal producedtons	70,040	75,937	76,853
Refine		,	,
Crude oil processed in refining	54,603	50.007	53,081
Once refined oil produced	54,020	48,776	51,498
Consumption	01,020	10,110	01,100
Crude oil removed for inedible use in processing	_	(D)	_
Once refined oil removed for use in processing	44,042	48,018	53,464
Removed for edible use in processing	(D)	40,010 (D)	(D)
Removed for inedible use in processing	(D)	(D)	(D)
Stocks	(D)	(D)	(D)
Cake and meal on hand end of monthtons	47,977	34,469	33,198
Crude oil on hand end of month	·		·
Once refined oil on hand end of month	(D) 49,144	(D) 48,432	(D) 48,385
Office refilled oil off flatid end of filofiliti	49,144	40,432	40,303
Coconut			
Refine			
Crude oil processed in refining	35,724	35,731	(D)
Once refined oil produced	35,270	35,490	(D)
Consumption			
Crude oil removed for inedible use in processing	(D)	(D)	(D)
Once refined oil removed for use in processing		72,686	73,352
Removed for edible use in processing		33,875	33,019
Removed for inedible use in processing	(D)	38,811	40,333
Stocks		/ -	-,
Crude oil on hand end of month	99,332	(D)	(D)
Once refined oil on hand end of month	31,137	63,029	61,063
Corn			
Refine	. = :	,=:	
Crude oil processed in refining	(S)	(S)	(S)
Once refined oil produced	(S)	(S)	(S)
Consumption			
Crude oil removed for inedible use in processing		(S)	(S)
Once refined oil removed for use in processing		(S)	(S)
Removed for edible use in processing1,000 pounds		(S)	(S)
Removed for inedible use in processing	(S)	(S)	(S)
Stocks	, ,	` ′	,
Crude oil on hand end of month	(S)	(S)	(S)
Once refined oil on hand end of month	(S)	(S)	(S)
See footnote(s) at end of table.		` '	continue

See footnote(s) at end of table.

## Selected Oilseed Crushing, Production, Consumption and Stocks - United States: December 2016 with Comparisons (continued)

Item	December 2015	November 2016	December 2016
Olives			
Crush			
Crushed for oiltons	(D)	(D)	(D)
Virgin oil produced	(D)	(D)	(D)
Refine	(5)	(5)	(5)
Refined oil produced	(D)	(D)	(D)
Consumption 1 000 nounds	(D)	(D)	(D)
Refined oil removed for use in processing	(D)	(D)	(D)
Removed for edible use in processing	(D)	(D)	(D)
Stocks	_	(D)	(D)
Virgin oil on hand end of month	(D)	(D)	(D)
Refined oil on hand end of month	(D)	(D)	(D)
1,000 00 00 00 00 00 00 00 00 00 00 00 00	(-)	(-)	(=)
Palm kernel			
Consumption			
Once refined oil removed for use in processing1,000 pounds	37,003	38,668	34,970
Removed for edible use in processing1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing1,000 pounds	(D)	(D)	(D)
Stocks			
Once refined oil on hand end of month1,000 pounds	124,857	81,162	76,215
Palm			
Consumption			
Once refined oil removed for use in processing1,000 pounds	171,269	193,618	165,297
Removed for edible use in processing1,000 pounds	163,525	186,688	159,763
Removed for inedible use in processing1,000 pounds	7,744	6,930	5,534
Stocks			
Once refined oil on hand end of month1,000 pounds	473,268	429,757	437,231
Peanut			
Refine			
Crude oil processed in refining	(D)	33,804	(D)
Once refined oil produced1,000 pounds	(D)	30,642	(D)
Consumption			
Crude oil removed for inedible use in processing1,000 pounds	(D)	(D)	=
Once refined oil removed for use in processing1,000 pounds	(D)	30,190	(D)
Removed for edible use in processing	(D)	(D)	(D)
Removed for inedible use in processing	(D)	(D)	=
Stocks 4 000 nounder	(D)	(D)	4.4.440
Crude oil on hand end of month	(D) (D)	(D) (D)	14,416
Once refined on on hand end of month	(D)	(D)	(D)
Sunflower			
Refine			
Crude oil processed in refining	41,254	35,737	25,765
Once refined oil produced	39,688	33,834	24,245
Consumption  Crude ail removed for inadials use in pressesing.	(D)	2.240	(D)
Crude oil removed for inedible use in processing	(D) 36,787	2,210 40,705	(D)
Removed for edible use in processing	(D)	40,705 (D)	32,316 (D)
Removed for inedible use in processing	(D)	(D) (D)	(D)
Stocks	(D)	(D)	(D)
Crude oil on hand end of month	53,659	48,929	56,588
Once refined oil on hand end of month	33,464	48,215	41,312
Vogetable foots, raw and acidulated			
Vegetable foots, raw and acidulated Refine			
Oil produced	25,912	(D)	(D)
Consumption		(2)	(5)
Oil removed for inedible use in processing	25,722	(D)	(D)
Stocks	·	` '	. ,
Oil on hand end of month	21,987	(D)	(D)
- Represents zero			

<sup>-</sup> Represents zero.
(D) Withheld to avoid disclosing data for individual operations.

<sup>(</sup>S) Insufficient number of reports to establish an estimate.

# Animal Fats and Oils Production, Consumption and Stocks - United States: December 2016 with Comparisons

Item	December 2015	November 2016	December 2016
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Choice white grease			
Production	117,902	127,696	121,596
Removed for inedible use	119,056	128,052	124,640
Stocks on hand end of month	9,253	13,656	10,442
Fatty acids	-,	-,	-,
Production	(S)	(S)	(S)
Stocks on hand end of month	(S)	(S)	(S)
Feather meal	,	( )	( )
Production	90,908	103,760	96,336
Stocks on hand end of month	19,785	22,997	17,026
Glycerin, crude			
Production	(S)	(S)	(S)
Processed in refining	(S)	(S)	(S)
Stocks on hand end of month	(S)	(S)	(S)
Glycerin, refined	,	( )	( )
Production	(S)	(S)	(S)
Stocks on hand end of month	(S)	(S)	(S)
Lard	` ,	` ,	
Production	29,998	35,670	41,586
Removed for use in processing	29,534	37,204	42,776
Removed for edible use in processing	(D)	(D)	(D)
Removed for inedible use in processing	(D)	(D)	(D)
Stocks on hand end of month	8,619	7,661	(D)
Meat meal, meat and bone meal, and dry rendered tankage			` '
Production	511,225	548,073	551,607
Stocks on hand end of month	57,972	62,871	61,353
Other grease			
Production	56,127	85,048	70,213
Removed for inedible use in processing	57,101	77,543	72,635
Stocks on hand end of month	(D)	(D)	(D)
Poultry fats			
Production	198,753	207,194	198,804
Removed for inedible use in processing	192,601	204,038	204,641
Stocks on hand end of month	22,056	26,540	20,571
Poultry by-product meals			
Production	236,453	254,462	256,943
Stocks on hand end of month	53,622	64,465	49,725
Tallow, edible			
Production	78,930	81,756	75,621
Removed for use in processing	86,352	85,476	75,240
Removed for edible use in processing	(D)	(D)	(D)
Removed for inedible use in processing	(D)	(D)	(D)
Stocks on hand end of month	16,667	15,792	23,394
Tallow, inedible			
Production	287,203	316,296	313,039
Removed for inedible use in processing	288,841	316,000	309,771
Stocks on hand end of month	90,866	85,897	88,639
Tallow, technical	·		
Production	94,100	125,974	99,891
Removed for inedible use in processing	102,820	130,307	108,418
Stocks on hand end of month	13,100	14,608	17,540
Yellow grease			
Production	170,566	161,550	171,877
Removed for inedible use in processing	166,779	156,209	188,426
	90,019	87,201	76,558

<sup>(</sup>D) Withheld to avoid disclosing data for individual operations. (S) Insufficient number of reports to establish an estimate.

### Statistical Methodology

**Survey Procedures:** Fats and Oils: Oilseed Crushings, Production, Consumption and Stocks is part of the Current Agricultural Industrial Reports (CAIR) program. CAIR reports are administered under NASS's Census of Agriculture program. Response to CAIR surveys are required by law (Title 7, U.S. Code). Animal and vegetable fats and oils data are collected from all known facilities that crush, refine or render. Crushing facilities include processors that use either solvent extraction or continuous screw press.

The census universe was determined during operation profile interviews which were completed for each potential facility to identify the presence of rendering, oilseeds crushing, and crude oil refining in 2014.

In the Animal and Vegetable Fats and Oils survey questionnaire, facilities are asked for previous calendar month data on oilseed crushing, crude oil production, once refined oil production, rendering production, and end of month stocks. Facilities are mailed questionnaires with the options of completing the survey by mail or by Electronic Data Reporting (EDR). For surveys not received in a reasonable amount of time, telephone follow-up is conducted.

**Estimating Procedures:** Imputation is done for operations with non-response by using historical data and current data relationships. Data for reporting firms are added to estimates for non-reporting firms to obtain National totals.

**Revision Policy:** Data are revised the following month based on late reports or corrected data. Final figures are published in the annual summary of the following year.

**Reliability:** Survey data are based on a census of all known facilities and therefore, have no sampling variability. Monthly data can vary due to different firms reporting month to month. Survey data are also subject to non-sampling errors such as omissions and mistakes in reporting and in processing the data. While these errors cannot be measured directly, they are minimized by carefully reviewing all reported data for consistency and reasonableness.

#### **Information Contacts**

Listed below are the commodity statisticians in the Environmental, Economics, and Demographics Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@nass.usda.gov.

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