



Fats and Oils: Oilseed Crashings, Production, Consumption and Stocks

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Highlights

November 2023 contained 30 days.

December 2023 contained 31 days.

Soybeans crushed for crude oil was 6.13 million tons (204 million bushels) in December 2023, compared with 6.00 million tons (200 million bushels) in November 2023 and 5.62 million tons (187 million bushels) in December 2022. Crude oil produced was 2.38 billion pounds, up 2 percent from November 2023 and up 8 percent from December 2022. Soybean once refined oil production at 1.71 billion pounds during December 2023 increased 1 percent from November 2023 and increased 8 percent from December 2022.

Canola seeds crushed for crude oil was 192,796 tons in December 2023, compared with 219,843 tons in November 2023 and 181,455 tons in December 2022. Canola crude oil produced was 155 million pounds, down 12 percent from November 2023 but up 6 percent from December 2022. Canola once refined oil production, at 156 million pounds during December 2023, was down 1 percent from November 2023 but up 16 percent from December 2022.

Cottonseed once refined oil production, at 32.0 million pounds during December 2023, was up 20 percent from November 2023 and up 18 percent from December 2022.

Edible tallow production was 85.4 million pounds during December 2023, down 14 percent from November 2023 but up 10 percent from December 2022. Inedible tallow production was 324 million pounds during December 2023, up 1 percent from November 2023 but down 9 percent from December 2022. Technical tallow production was 121 million pounds during December 2023, down 2 percent from November 2023 but up 22 percent from December 2022. Choice white grease production, at 113 million pounds during December 2023, decreased 5 percent from November 2023 but increased 2 percent from December 2022.

Soybean Crushing, Production, Consumption and Stocks – United States: December 2023 with Comparisons

Item	December 2022	November 2023	December 2023
Crush			
Soybeans crushed tons	5,622,561	6,002,708	6,128,558
Crude oil produced1,000 pounds	2,195,358	2,324,668	2,376,237
Cake and meal produced tons	4,154,614	4,399,878	4,503,856
For animal feed tons	4,124,285	4,349,599	4,447,916
For edible protein products tons	30,329	50,279	55,940
Millfeed produced tons	282,795	306,330	314,486
Refine			
Crude oil processed in refining1,000 pounds	1,615,612	1,737,002	1,755,288
Once refined oil produced1,000 pounds	1,582,664	1,692,886	1,711,129
Consumption			
Crude oil removed for inedible use in processing1,000 pounds	(D)	189,542	(D)
Once refined oil removed for use in processing1,000 pounds	1,611,482	1,682,018	1,670,436
Removed for edible use in processing1,000 pounds	1,083,254	1,181,952	1,144,324
Removed for inedible use in processing1,000 pounds	528,228	500,066	526,112
Stocks			
Cake and meal on hand end of month tons	415,593	260,052	451,979
Millfeed on hand end of month tons	40,284	44,385	48,781
Crude oil on hand end of month1,000 pounds	1,902,380	1,175,567	1,356,410
Crusher1,000 pounds	1,014,514	728,717	869,075
Refiner1,000 pounds	355,265	200,541	231,904
Offsite1,000 pounds	532,601	246,309	255,431
Once refined oil on hand end of month1,000 pounds	403,767	423,529	467,424

(D) Withheld to avoid disclosing data for individual operations.

Soybean Crushing – Regional: December 2023 with Comparisons

Region	Soybeans crushed		
	December 2022	November 2023	December 2023
	(tons)	(tons)	(tons)
Illinois	694,187	661,268	691,654
Iowa.....	1,134,458	1,285,317	1,342,612
North and East ¹	1,283,246	1,367,655	1,399,920
North Central ²	944,508	1,048,102	1,007,726
South, West and Pacific ³	616,438	705,200	722,034
West Central ⁴	949,724	935,166	964,612
Region	Crude oil produced		
	December 2022	November 2023	December 2023
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Illinois	280,113	256,700	273,411
Iowa.....	448,281	506,192	527,810
North and East ¹	492,431	522,832	536,517
North Central ²	360,964	404,079	391,263
South, West and Pacific ³	228,843	266,433	271,185
West Central ⁴	384,726	368,432	376,051
Region	Crude oil stocks at crusher		
	December 2022	November 2023	December 2023
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Illinois	(D)	95,608	150,350
Iowa.....	193,254	76,354	136,177
North and East ¹	196,326	224,524	253,602
North Central ²	300,268	140,383	161,586
South, West and Pacific ³	(D)	(D)	52,601
West Central ⁴	120,146	(D)	114,759
Region	Cake and meal produced		
	December 2022	November 2023	December 2023
	(tons)	(tons)	(tons)
Illinois	503,197	473,968	495,465
Iowa.....	839,509	943,554	985,473
North and East ¹	950,508	1,005,715	1,031,264
North Central ²	699,789	769,883	742,393
South, West and Pacific ³	453,644	515,702	532,512
West Central ⁴	707,967	691,056	716,749
Region	Cake and meal stocks		
	December 2022	November 2023	December 2023
	(tons)	(tons)	(tons)
Illinois	71,576	18,326	62,967
Iowa.....	50,682	47,600	86,408
North and East ¹	127,540	90,741	101,286
North Central ²	62,261	41,035	67,670
South, West and Pacific ³	45,452	22,223	57,750
West Central ⁴	58,082	40,127	75,898

(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.

³ South, West, and Pacific includes Alabama, Arkansas, California, Georgia, Louisiana, Mississippi, North Carolina and South Carolina.

⁴ West Central includes Kansas, Missouri and Nebraska.

Selected Oilseed Crushing, Production, Consumption and Stocks – United States: December 2023 with Comparisons

Item	December 2022	November 2023	December 2023
Canola			
Crush			
Seeds crushed..... tons	181,455	219,843	192,796
Crude oil produced 1,000 pounds	145,914	176,091	154,920
Cake and meal produced tons	104,207	125,765	114,827
Refine			
Crude oil processed in refining 1,000 pounds	139,234	162,687	163,646
Once refined oil produced 1,000 pounds	134,938	157,769	156,144
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing 1,000 pounds	140,154	164,181	154,373
Removed for edible use in processing..... 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Cake and meal on hand end of month tons	42,221	(D)	(D)
Crude oil on hand end of month 1,000 pounds	87,567	74,387	92,735
Once refined oil on hand end of month 1,000 pounds	103,076	92,318	96,989
Cottonseed			
Crush			
Seeds crushed..... tons	116,905	116,560	138,023
Crude oil produced 1,000 pounds	32,247	31,122	37,090
Cake and meal produced..... tons	48,103	50,801	59,585
Refine			
Crude oil processed in refining 1,000 pounds	27,617	27,198	32,754
Once refined oil produced 1,000 pounds	27,030	26,630	32,029
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing 1,000 pounds	30,730	27,223	28,198
Removed for edible use in processing..... 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Cake and meal on hand end of month tons	31,286	29,930	27,930
Crude oil on hand end of month 1,000 pounds	(D)	(D)	(D)
Once refined oil on hand end of month 1,000 pounds	31,793	27,843	33,364
Coconut			
Refine			
Crude oil processed in refining 1,000 pounds	40,036	25,041	26,072
Once refined oil produced 1,000 pounds	39,570	24,893	25,808
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing 1,000 pounds	46,645	40,667	29,062
Removed for edible use in processing..... 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Crude oil on hand end of month 1,000 pounds	98,919	58,700	59,162
Once refined oil on hand end of month 1,000 pounds	(D)	(D)	65,485
Corn			
Crush			
Crude oil produced 1,000 pounds	163,919	166,582	149,196
Refine			
Crude oil processed in refining 1,000 pounds	156,617	169,648	150,678
Once refined oil produced 1,000 pounds	153,120	165,387	146,590
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing 1,000 pounds	154,265	156,060	119,251
Removed for edible use in processing..... 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Crude oil on hand end of month 1,000 pounds	86,610	80,126	(D)
Once refined oil on hand end of month 1,000 pounds	85,652	61,316	65,564

See footnote(s) at end of table.

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**Selected Oilseed Crushing, Production, Consumption and Stocks – United States: December 2023
with Comparisons (continued)**

Item	December 2022	November 2023	December 2023
Palm kernel			
Consumption			
Once refined oil removed for use in processing..... 1,000 pounds	31,589	44,170	43,017
Removed for edible use in processing 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Once refined oil on hand end of month..... 1,000 pounds	62,653	85,836	92,256
Palm			
Consumption			
Once refined oil removed for use in processing..... 1,000 pounds	193,229	191,707	166,646
Removed for edible use in processing 1,000 pounds	182,989	189,158	(D)
Removed for inedible use in processing..... 1,000 pounds	10,240	2,549	(D)
Stocks			
Once refined oil on hand end of month..... 1,000 pounds	377,887	339,532	358,223
Peanut			
Refine			
Crude oil processed in refining..... 1,000 pounds	28,168	22,832	(D)
Once refined oil produced..... 1,000 pounds	26,670	21,525	(D)
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing..... 1,000 pounds	23,513	27,037	18,619
Removed for edible use in processing 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Crude oil on hand end of month..... 1,000 pounds	25,313	21,871	21,862
Once refined oil on hand end of month..... 1,000 pounds	(D)	(D)	(D)
Safflower			
Refine			
Crude oil processed in refining..... 1,000 pounds	(D)	(D)	(D)
Once refined oil produced..... 1,000 pounds	(D)	(D)	(D)
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing..... 1,000 pounds	4,020	3,943	3,560
Removed for edible use in processing 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Crude oil on hand end of month..... 1,000 pounds	7,108	5,329	3,393
Once refined oil on hand end of month..... 1,000 pounds	(D)	(D)	(D)
Sunflower			
Refine			
Crude oil processed in refining..... 1,000 pounds	30,984	26,474	33,148
Once refined oil produced..... 1,000 pounds	29,869	25,268	31,868
Consumption			
Crude oil removed for inedible use in processing 1,000 pounds	(D)	(D)	(D)
Once refined oil removed for use in processing..... 1,000 pounds	29,082	31,878	31,776
Removed for edible use in processing 1,000 pounds	(D)	(D)	(D)
Removed for inedible use in processing..... 1,000 pounds	(D)	(D)	(D)
Stocks			
Crude oil on hand end of month..... 1,000 pounds	46,632	45,997	41,044
Once refined oil on hand end of month..... 1,000 pounds	48,473	39,389	37,572

(D) Withheld to avoid disclosing data for individual operations.

Animal Fats and Oils Production, Consumption and Stocks – United States: December 2023 with Comparisons

Item	December 2022	November 2023	December 2023
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Choice white grease			
Production.....	110,981	118,975	112,909
Removed for inedible use	111,094	117,475	112,503
Stocks on hand end of month	6,654	6,870	7,276
Feather meal			
Production.....	90,640	89,588	78,396
Stocks on hand end of month	18,350	13,067	10,824
Lard			
Production.....	23,116	31,321	25,732
Removed for use in processing	22,625	34,185	25,179
Removed for edible use in processing.....	(D)	(D)	(D)
Removed for inedible use in processing.....	(D)	(D)	(D)
Stocks on hand end of month	5,546	8,071	8,624
Meat meal, meat and bone meal, and dry rendered tannage			
Production.....	490,739	524,539	497,802
Stocks on hand end of month	63,339	71,761	72,396
Other grease			
Production.....	35,372	28,496	21,243
Removed for inedible use in processing	31,121	27,795	18,667
Stocks on hand end of month	(D)	(D)	(D)
Poultry fats			
Production.....	173,886	222,197	185,715
Removed for inedible use in processing	168,077	222,031	191,331
Stocks on hand end of month	31,900	41,186	35,570
Poultry by-product meals			
Production.....	351,019	400,983	343,512
Stocks on hand end of month	85,524	94,491	101,358
Tallow, edible			
Production.....	77,324	98,797	85,396
Removed for use in processing	81,357	99,768	84,795
Removed for edible use in processing.....	(D)	(D)	(D)
Removed for inedible use in processing.....	(D)	(D)	(D)
Stocks on hand end of month	(D)	10,817	11,332
Tallow, inedible			
Production.....	356,800	320,372	323,825
Removed for inedible use in processing	356,072	316,371	328,080
Stocks on hand end of month	119,997	(D)	(D)
Tallow, technical			
Production.....	99,627	123,585	121,288
Removed for inedible use in processing	97,983	124,908	121,153
Stocks on hand end of month	(D)	(D)	(D)
Yellow grease			
Production.....	176,986	144,949	(D)
Removed for inedible use in processing	181,668	126,096	(D)
Stocks on hand end of month	98,977	116,513	(D)

(D) Withheld to avoid disclosing data for individual operations.

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 Crops Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to nass@usda.gov

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Irwin Anolik – Crop Progress and Condition.....	(202) 720-7621
Joshua Bates – Hemp, Oats, Soybeans.....	(202) 690-3234
Natasha Bruton – Barley, Cotton System Consumption, and Stocks, Grain Crushings	(202) 690-1042
David Colwell – Fats and Oils, Flour Milling Products	(202) 720-8800
Michelle Harder –County Estimates, Hay.....	(202) 690-8533
James Johanson – Rye, Wheat.....	(202) 720-8068
Greg Lemmons – Corn, Flaxseed, Proso Millet	(202) 720-9526
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