



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

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Highlights

September 2023 contained 30 days.

October 2023 contained 31 days.

Soybeans crushed for crude oil was 6.04 million tons (201 million bushels) in October 2023, compared with 5.24 million tons (175 million bushels) in September 2023 and 5.90 million tons (197 million bushels) in October 2022. Crude oil produced was 2.38 billion pounds up 14 percent from September 2023 and up 2 percent from October 2022. Soybean once refined oil production at 1.89 billion pounds during October 2023 increased 9 percent from September 2023 and increased 5 percent from October 2022.

Canola seeds crushed for crude oil was 208,071 tons in October 2023, compared with 217,153 tons in September 2023 and 208,459 tons in October 2022. Canola crude oil produced was 165 million pounds, down 3 percent from September 2023 and down 3 percent from October 2022. Canola once refined oil production, at 174 million pounds during October 2023, was up 18 percent from September 2023 and up 8 percent from October 2022.

Cottonseed once refined oil production, at 35.0 million pounds during October 2023, was down 4 percent from September 2023 and down 12 percent from October 2022.

Edible tallow production was 76.0 million pounds during October 2023, down 19 percent from September 2023 and down 6 percent from October 2022. Inedible tallow production was 318 million pounds during October 2023, up 9 percent from September 2023 but down 15 percent from October 2022. Technical tallow production was 109 million pounds during October 2023, up 10 percent from September 2023 but down 4 percent from October 2022. Choice white grease production, at 105 million pounds during October 2023, increased 4 percent from September 2023 but decreased 3 percent from October 2022.

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

Item	October 2022	September 2023	October 2023
Crush			
Soybeans crushed tons	5,899,694	5,242,931	6,041,685
Crude oil produced1,000 pounds	2,338,085	2,077,074	2,375,654
Cake and meal produced tons	4,325,878	3,843,681	4,442,466
For animal feed tons	4,287,358	3,799,238	4,393,671
For edible protein products tons	38,520	44,443	48,795
Millfeed produced tons	277,518	261,939	296,017
Refine			
Crude oil processed in refining1,000 pounds	1,829,750	1,765,874	1,922,221
Once refined oil produced1,000 pounds	1,787,583	1,729,481	1,885,105
Consumption			
Crude oil removed for inedible use in processing1,000 pounds	176,792	207,193	(D)
Once refined oil removed for use in processing1,000 pounds	1,736,162	1,714,076	1,857,752
Removed for edible use in processing1,000 pounds	1,243,687	1,211,428	1,295,769
Removed for inedible use in processing1,000 pounds	492,475	502,648	561,983
Stocks			
Cake and meal on hand end of month tons	352,206	327,574	291,071
Millfeed on hand end of month tons	26,008	43,317	43,568
Crude oil on hand end of month1,000 pounds	1,640,358	1,184,515	1,081,714
Crusher1,000 pounds	825,227	716,347	660,533
Refiner1,000 pounds	245,947	189,113	177,101
Offsite1,000 pounds	569,184	279,055	244,080
Once refined oil on hand end of month1,000 pounds	453,265	417,721	424,895

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

Soybean Crushing – Regional: October 2023 with Comparisons

Region	Soybeans crushed		
	October 2022	September 2023	October 2023
	(tons)	(tons)	(tons)
Illinois	684,071	500,038	652,816
Iowa.....	1,213,824	1,150,596	1,319,303
North and East ¹	1,344,275	1,170,105	1,378,347
North Central ²	996,060	935,683	1,001,749
South, West and Pacific ³	681,372	618,491	710,948
West Central ⁴	980,092	868,018	978,522
Region	Crude oil produced		
	October 2022	September 2023	October 2023
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Illinois	275,511	203,793	262,865
Iowa.....	482,562	458,282	525,971
North and East ¹	520,536	462,445	536,926
North Central ²	386,494	360,547	386,163
South, West and Pacific ³	264,720	241,627	277,776
West Central ⁴	408,262	350,380	385,953
Region	Crude oil stocks at crusher		
	October 2022	September 2023	October 2023
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Illinois	(D)	89,170	76,208
Iowa.....	154,044	78,734	70,759
North and East ¹	134,813	194,304	188,327
North Central ²	207,068	153,435	142,513
South, West and Pacific ³	(D)	69,669	48,731
West Central ⁴	149,295	131,035	133,995
Region	Cake and meal produced		
	October 2022	September 2023	October 2023
	(tons)	(tons)	(tons)
Illinois	490,974	365,865	474,313
Iowa.....	901,752	844,963	977,399
North and East ¹	981,993	847,236	1,007,371
North Central ²	734,825	694,395	741,309
South, West and Pacific ³	495,268	451,730	517,400
West Central ⁴	721,066	639,492	724,674
Region	Cake and meal stocks		
	October 2022	September 2023	October 2023
	(tons)	(tons)	(tons)
Illinois	50,909	66,428	32,292
Iowa.....	52,795	64,796	61,372
North and East ¹	99,026	62,504	69,448
North Central ²	53,628	40,263	60,419
South, West and Pacific ³	45,918	56,154	27,207
West Central ⁴	49,930	37,429	40,333

(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: October 2023 with Comparisons

Item	October 2022	September 2023	October 2023
Canola			
Crush			
Seeds crushed..... tons	208,459	217,153	208,071
Crude oil produced..... 1,000 pounds	171,282	170,450	165,337
Cake and meal produced..... tons	120,679	124,247	120,299
Refine			
Crude oil processed in refining..... 1,000 pounds	165,410	152,413	178,851
Once refined oil produced..... 1,000 pounds	160,290	147,903	173,893
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	163,786	135,704	179,143
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	51,079	(D)	(D)
Crude oil on hand end of month..... 1,000 pounds	59,848	59,127	63,405
Once refined oil on hand end of month..... 1,000 pounds	114,767	103,948	103,639
Cottonseed			
Crush			
Seeds crushed..... tons	113,241	116,030	140,441
Crude oil produced..... 1,000 pounds	29,255	28,397	38,286
Cake and meal produced..... tons	51,726	52,968	58,103
Refine			
Crude oil processed in refining..... 1,000 pounds	40,965	37,556	35,925
Once refined oil produced..... 1,000 pounds	39,833	36,499	34,958
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	32,272	39,879	28,795
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	36,122	32,561	31,781
Crude oil on hand end of month..... 1,000 pounds	(D)	(D)	(D)
Once refined oil on hand end of month..... 1,000 pounds	31,660	22,137	29,184
Coconut			
Refine			
Crude oil processed in refining..... 1,000 pounds	38,585	(D)	29,783
Once refined oil produced..... 1,000 pounds	37,756	(D)	29,512
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	57,450	44,208	42,142
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	78,240	77,085	61,736
Once refined oil on hand end of month..... 1,000 pounds	(D)	(D)	(D)
Corn			
Crush			
Crude oil produced..... 1,000 pounds	146,592	121,868	133,008
Refine			
Crude oil processed in refining..... 1,000 pounds	146,101	155,872	151,756
Once refined oil produced..... 1,000 pounds	140,980	149,662	147,612
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	118,267	124,848	120,324
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	90,279	71,026	80,126
Once refined oil on hand end of month..... 1,000 pounds	76,966	51,575	68,502

See footnote(s) at end of table.

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

Item	October 2022	September 2023	October 2023
Palm kernel			
Consumption			
Once refined oil removed for use in processing..... 1,000 pounds	42,072	24,982	45,342
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	50,989	71,122	60,917
Palm			
Consumption			
Once refined oil removed for use in processing..... 1,000 pounds	240,967	199,137	231,358
Removed for edible use in processing 1,000 pounds	234,437	186,680	227,486
Removed for inedible use in processing..... 1,000 pounds	6,530	12,457	3,872
Stocks			
Once refined oil on hand end of month..... 1,000 pounds	385,132	355,518	328,151
Peanut			
Refine			
Crude oil processed in refining..... 1,000 pounds	25,731	32,232	34,322
Once refined oil produced..... 1,000 pounds	24,523	30,773	32,248
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	23,981	28,587	31,075
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	32,799	27,597	19,530
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	4,653	4,688	5,599
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	4,245	9,770	8,386
Once refined oil on hand end of month..... 1,000 pounds	(D)	(D)	(D)
Sunflower			
Refine			
Crude oil processed in refining..... 1,000 pounds	40,863	36,039	45,180
Once refined oil produced..... 1,000 pounds	39,865	34,891	43,267
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	34,208	24,553	30,316
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	48,293	48,964	42,003
Once refined oil on hand end of month..... 1,000 pounds	40,702	37,792	48,671

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

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

Item	October 2022	September 2023	October 2023
	(1,000 pounds)	(1,000 pounds)	(1,000 pounds)
Choice white grease			
Production.....	108,287	100,468	104,509
Removed for inedible use	106,961	102,865	103,928
Stocks on hand end of month	7,153	9,048	5,700
Feather meal			
Production.....	95,769	98,011	77,966
Stocks on hand end of month	18,376	11,941	17,083
Lard			
Production.....	25,225	25,012	27,205
Removed for use in processing	23,882	25,156	25,109
Removed for edible use in processing.....	(D)	(D)	(D)
Removed for inedible use in processing.....	(D)	(D)	(D)
Stocks on hand end of month	7,110	7,756	9,837
Meat meal, meat and bone meal, and dry rendered tannage			
Production.....	491,779	489,565	474,851
Stocks on hand end of month	61,259	56,667	61,947
Other grease			
Production.....	29,361	22,510	23,040
Removed for inedible use in processing	29,570	19,750	27,348
Stocks on hand end of month	(D)	(D)	(D)
Poultry fats			
Production.....	181,944	210,430	194,647
Removed for inedible use in processing	176,606	210,501	183,191
Stocks on hand end of month	30,295	29,566	41,020
Poultry by-product meals			
Production.....	356,010	346,596	319,993
Stocks on hand end of month	70,326	86,793	111,022
Tallow, edible			
Production.....	81,113	94,343	75,970
Removed for use in processing	81,596	98,751	77,803
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)	10,283	11,658
Tallow, inedible			
Production.....	375,095	291,186	317,739
Removed for inedible use in processing	391,965	302,544	310,370
Stocks on hand end of month	98,152	(D)	(D)
Tallow, technical			
Production.....	113,204	98,451	108,656
Removed for inedible use in processing	114,555	100,510	95,427
Stocks on hand end of month	(D)	(D)	(D)
Yellow grease			
Production.....	187,894	171,543	156,655
Removed for inedible use in processing	184,149	172,343	158,785
Stocks on hand end of month	100,680	99,771	97,639

(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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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
Becky Sommer – Cotton, Cotton Ginnings, Sorghum.....	(202) 720-5944
Travis Thorson – Sunflower, Other Oilseeds	(202) 720-7369
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For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: nass@usda.gov.

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