

INREC 2017-2020 Crop Year Surveys Data Extrapolation

Corn & Soybean Acreages	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average
Corn Acreage (CDL)	13,212,913	13,012,207	13,648,497	13,793,805	13,416,855
Soybean Acreage (CDL)	9,782,215	9,956,734	9,275,193	9,553,928	9,642,018
Corn & Soy Acreage Total (CDL)	22,995,128	22,968,941	22,923,690	23,347,733	22,962,586

Commercial Only Nitrogen Rates	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average
Average Commercial N Rate on Corn in Rotation (lb/ac)	170.0	172.3	177.5	183.4	175.8
Average Commercial N Rate on Continuous Corn (lb/ac)	200.4	201.9	200.4	208.9	202.9

	Percentage					Acreage					Extrapolated Using
Cover Crop Practices:	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	Extrapolated Using
Cover Crop Planted	6.9%	8.8%	9.5%	13.3%	9.6%	1,597,614	2,015,688	2,180,043	3,107,063	2,225,102	All corn & soy acres
Rye Cover Crop	69.4%	82.8%	81.3%	90.9%	81.1%	1,108,954	1,669,641	1,771,503	2,823,418	1,843,379	Cover crop acres
Oat Cover Crop	9.1%	9.8%	2.8%	1.3%	5.7%	144,610	197,070	61,041	41,452	111,043	Cover crop acres
Species Mix	NA	NA	11.2%	6.7%	8.9%	NA	NA	243,293	207,104	225,198	Cover crop acres
Other Cover Crop	21.5%	7.4%	4.8%	1.1%	8.7%	344,051	148,977	104,206	35,089	158,081	Cover crop acres
Commercial N Application Practices:	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	Extrapolated Using
Fall Anhydrous Applied	38.9%	24.1%	23.5%	28.9%	28.8%	5,136,775	3,135,808	3,210,126	3,980,920	3,865,907	Corn acres
Nitrapyrin Inhibitor w/ Anhydrous	72.6%	73.9%	84.8%	83.8%	78.8%	3,731,524	2,318,399	2,722,508	3,337,435	3,027,467	Anhydrous acres
Fall Only	NA	NA	14.0%	17.4%	15.7%	NA	NA	1,916,249	2,396,375	2,156,312	Corn acres
Spring Pre-Plant Only	42.1%	56.3%	50.9%	46.7%	49.0%	5,563,671	7,331,631	6,949,814	6,443,443	6,572,140	Corn acres
Spring Pre-Plant & In-Season Only	9.9%	15.4%	16.9%	13.8%	14.0%	1,307,086	2,004,263	2,299,772	1,907,536	1,879,664	Corn acres
In-Season Only	2.1%	1.1%	1.1%	3.8%	2.0%	281,723	137,166	147,404	529,108	273,850	Corn acres
Fall & Spring-Pre-Plant Only	NA	NA	11.6%	9.7%	10.6%	NA	NA	1,581,861	1,335,708	1,458,784	Corn acres
Fall & In-Season Only	NA	NA	3.2%	5.4%	4.3%	NA	NA	434,022	738,667	586,345	Corn acres
Fall & Spring & In-Season	NA	NA	2.3%	3.2%	2.8%	NA	NA	319,375	442,967	381,171	Corn acres
Other Timing	7.0%	2.5%	0.0%	0.0%	2.4%	923,658	321,107	0	0	311,191	Corn acres
Commercial N VRT Applied	NA	NA	8.7%	10.1%	9.4%	NA	NA	1,180,595	1,386,830	1,283,713	Corn acres
Manure Practices:	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	Extrapolated Using
No Manure Used	81.5%	81.4%	80.8%	82.0%	81.4%	10,765,242	10,590,004	11,030,715	11,310,374	10,924,084	Corn acres
Beef Manure Used	6.8%	10.3%	8.8%	6.3%	8.0%	900,069	1,343,993	1,194,243	864,553	1,075,715	Corn acres
Beef & poultry manure used	0.0%	0.0%	0.0%	0.1%	0.0%	0	0	0	12,388	3,097	Corn acres
Beef & Liquid Swine Manure Used	0.0%	0.0%	0.3%	0.1%	0.1%	0	0	38,216	19,715	14,483	Corn acres
Liquid Swine Manure Used	7.6%	5.4%	7.4%	8.1%	7.1%	998,307	700,854	1,011,354	1,123,205	958,430	Corn acres
Liquid swine & dairy manure used	0.0%	0.0%	0.0%	0.1%	0.0%	0	0	0	8,585	2,146	Corn acres
Poultry Manure Used	1.6%	1.7%	1.9%	1.2%	1.6%	207,798	215,760	262,051	159,361	211,243	Corn acres
Dairy Manure Used	2.5%	1.1%	0.8%	2.1%	1.6%	324,858	141,833	111,918	295,623	218,558	Corn acres
Dairy & Beef Manure Used	0.1%	0.2%	0.0%	0.0%	0.1%	16,638	19,763	0	0	9,100	Corn acres
Liquid Swine Manure Fall Applied	94.7%	84.2%	78.5%	87.3%	86.2%	945,796	590,008	823,597	1,004,791	841,048	Swine manure acres
Liquid Swine Manure Spring Applied	1.8%	2.5%	11.7%	3.4%	4.8%	17,504	17,446	122,590	38,639	49,044	Swine manure acres
Liquid Swine Manure Fall & Spring Applied	3.5%	13.3%	9.9%	9.4%	9.0%	35,007	93,400	103,488	108,076	84,993	Swine manure acres
P Incorporation & Application Practices:	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	Extrapolated Using
Commercial P Incorporated w/Planter	11.0%	3.8%	1.2%	2.7%	4.7%	2,523,799	862,841	270,500	639,271	1,074,103	All corn & soy acres
Commercial P Applied in Knifed Bands	2.9%	2.7%	2.7%	3.0%	2.8%	656,919	627,900	618,940	692,078	648,959	All corn & soy acres
Commercial P Broadcast & Incorporated w/n 1 week	47.0%	70.3%	69.1%	40.4%	56.7%	10,807,030	16,143,905	15,847,147	9,440,934	13,059,754	All corn & soy acres
Liquid P (commercial/manure) injected	1.8%	3.8%	8.9%	7.8%	5.6%	416,049	865,364	2,049,378	1,825,232	1,289,005	All corn & soy acres
Other P Application Type (Unincorporated)	37.4%	19.5%	18.1%	46.0%	30.2%	8,591,331	4,468,931	4,137,726	10,750,218	6,987,051	All corn & soy acres
Commercial P VRT Applied	NA	NA	49.6%	45.7%	47.6%	NA	NA	11,358,688	10,677,472	11,018,080	All corn & soy acres
Soil Testing for P	81.2%	72.1%	85.5%	80.6%	79.9%	18,682,577	16,563,845	19,602,047	18,818,176	18,416,661	All corn & soy acres
P Application Only When At/Below Optimum Levels	74.3%	94.4%	94.3%	99.1%	90.5%	13,875,230	15,636,269	18,482,770	18,653,889	16,662,040	Soil Test P Acres
Tillage Practices:	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	2020 (Official)	Average	Extrapolated Using
Conservation Tillage Before Corn	56.3%	52.3%	46.5%	23.0%	44.5%	7,441,970	6,805,748	6,341,092	3,171,203	5,940,003	Corn acres
No-Till Before Corn	26.4%	22.2%	29.4%	29.5%	26.9%	3,486,345	2,890,908	4,018,117	4,071,389	3,616,690	Corn acres
Conventional Tillage Before Corn	NA	25.4%	24.1%	47.5%	32.3%	NA	3,299,680	3,289,288	6,551,214	4,380,060	Corn acres
Other Tillage Before Corn	17.3%	0.1%	0.0%	0.0%	4.4%	2,284,597	15,871	0	0	575,117	Corn acres
Conservation Tillage Before Soy	42.6%	34.6%	33.8%	18.5%	32.4%	4,169,316	3,441,481	3,134,088	1,764,290	3,127,294	Soy acres
No-Till Before Soy	43.2%	41.0%	44.6%	47.3%	44.0%	4,221,350	4,081,526	4,134,881	4,517,853	4,238,902	Soy acres
Conventional Tillage Before Soy	NA	24.4%	21.6%	34.2%	26.8%	NA	2,433,727	2,006,224	3,271,784	2,570,579	Soy acres
Other Tillage Before Soy	14.2%	0.0%	0.0%	0.0%	3.6%	1,391,549	0	0	0	347,887	Soy acres
Combined Corn/Soy Conservation Tillage Acreage	50.5%	44.6%	41.3%	21.1%	39.4%	11,611,287	10,247,229	9,475,179	4,935,493	9,067,297	Sum of corn & soy conservation tillage acres
Combined Corn/Soy No-Till Acreage	33.5%	30.4%	35.6%	36.8%	34.1%	7,707,695	6,972,434	8,152,999	8,589,242	7,855,592	Sum of corn & soy no-till acres
Combined Corn/Soy Conventional Tillage Acreage	NA	25.0%	23.1%	42.1%	30.0%	NA	5,733,407	5,295,512	9,822,998	6,950,639	Sum of corn & soy conventional tillage acres
Combined Corn/Soy Other Tillage Acreage	16.0%	0.1%	0.0%	0.0%	4.0%	3,676,146	15,871	0	0	923,004	Sum of corn & soy other tillage acres