

INREC 2017, 2018, 2019 Crop Year Surveys Data Extrapolation

Corn & Soybean Acreages	2017 (Official)	2018 (Official)	2019 (Official)	Average
Corn Acreage (CDL)	13,212,913	13,012,207	13,648,497	13,291,205
Soybean Acreage (CDL)	9,782,215	9,956,734	9,275,193	9,671,381
Corn & Soy Acreage Total (CDL)	22,995,128	22,968,941	22,923,690	22,962,586

Commercial Only Nitrogen Rates	2017 (Official)	2018 (Official)	2019 (Official)	Average
Average Commercial N Rate on Corn in Rotation (lb/ac)	170.0	172.3	177.5	173.3
Average Commercial N Rate on Continuous Corn (lb/ac)	200.4	201.9	200.4	200.9

	Percentage				Acreage				Extrapolated Using
Cover Crop Practices:	2017 (Official)	2018 (Official)	2019 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	Average	Extrapolated Using
Cover Crop Planted	6.9%	8.8%	9.5%	8.4%	1,597,614	2,015,688	2,180,043	1,931,115	All corn & soy acres
Rye Cover Crop	69.4%	82.8%	81.3%	77.8%	1,108,954	1,669,641	1,771,503	1,516,699	Cover crop acres
Oat Cover Crop	9.1%	9.8%	2.8%	7.2%	144,610	197,070	61,041	134,240	Cover crop acres
Species Mix	NA	NA	11.2%	11.2%	NA	NA	243,293	243,293	Cover crop acres
Other Cover Crop	21.5%	7.4%	4.8%	11.2%	344,051	148,977	104,206	199,078	Cover crop acres
Commercial N Application Practices:	2017 (Official)	2018 (Official)	2019 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	Average	Extrapolated Using
Fall Anhydrous Applied	38.9%	24.1%	23.5%	28.8%	5,136,775	3,135,808	3,210,126	3,827,570	Corn acres
Nitrapyrin Inhibitor w/ Anhydrous	72.6%	73.9%	84.8%	77.1%	3,731,524	2,318,399	2,722,508	2,924,144	Anhydrous acres
Fall Only	NA	NA	14.0%	14.0%	NA	NA	1,916,249	1,916,249	Corn acres
Spring Pre-Plant Only	42.1%	56.3%	50.9%	49.8%	5,563,671	7,331,631	6,949,814	6,615,039	Corn acres
Spring Pre-Plant & In-Season Only	9.9%	15.4%	16.9%	14.0%	1,307,086	2,004,263	2,299,772	1,870,374	Corn acres
In-Season Only	2.1%	1.1%	1.1%	1.4%	281,723	137,166	147,404	188,764	Corn acres
Fall & Spring-Pre-Plant Only	NA	NA	11.6%	11.6%	NA	NA	1,581,861	1,581,861	Corn acres
Fall & In-Season Only	NA	NA	3.2%	3.2%	NA	NA	434,022	434,022	Corn acres
Fall & Spring & In-Season	NA	NA	2.3%	2.3%	NA	NA	319,375	319,375	Corn acres
Other Timing	7.0%	2.5%	0.0%	3.2%	923,658	321,107	0	414,922	Corn acres
Commercial N VRT Applied	NA	NA	8.7%	8.7%	NA	NA	1,180,595	1,180,595	Corn acres
Manure Practices:	2017 (Official)	2018 (Official)	2019 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	Average	Extrapolated Using
No Manure Used	81.5%	81.4%	80.8%	81.2%	10,765,242	10,590,004	11,030,715	10,795,320	Corn acres
Beef Manure Used	6.8%	10.3%	8.8%	8.6%	900,069	1,343,993	1,194,243	1,146,102	Corn acres
Beef & Liquid Swine Manure Used	0.0%	0.0%	0.3%	0.1%	0	0	38,216	12,739	Corn acres
Liquid Swine Manure Used	7.6%	5.4%	7.4%	6.8%	998,307	700,854	1,011,354	903,505	Corn acres
Poultry Manure Used	1.6%	1.7%	1.9%	1.7%	207,798	215,760	262,051	228,536	Corn acres
Dairy Manure Used	2.5%	1.1%	0.8%	1.5%	324,858	141,833	111,918	192,870	Corn acres
Dairy & Beef Manure Used	0.1%	0.2%	0.0%	0.1%	16,638	19,763	0	12,134	Corn acres
Liquid Swine Manure Fall Applied	94.7%	84.2%	78.5%	85.8%	945,796	590,008	823,597	786,467	Swine manure acres
Liquid Swine Manure Spring Applied	1.8%	2.5%	11.7%	5.3%	17,504	17,446	122,590	52,513	Swine manure acres
Liquid Swine Manure Fall & Spring Applied	3.5%	13.3%	9.9%	8.9%	35,007	93,400	103,488	77,298	Swine manure acres
P Incorporation & Application Practices:	2017 (Official)	2018 (Official)	2019 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	Average	Extrapolated Using
Commercial P Incorporated w/Planter	11.0%	3.8%	1.2%	5.3%	2,523,799	862,841	270,500	1,219,046	All corn & soy acres
Commercial P Applied in Knifed Bands	2.9%	2.7%	2.7%	2.8%	656,919	627,900	618,940	634,586	All corn & soy acres
Commercial P Broadcast & Incorporated w/n 1 week	47.0%	70.3%	69.1%	62.1%	10,807,030	16,143,905	15,847,147	14,266,027	All corn & soy acres
Liquid P (commercial/manure) injected	1.8%	3.8%	8.9%	4.8%	416,049	865,364	2,049,378	1,110,263	All corn & soy acres
Other P Application Type (Unincorporated)	37.4%	19.5%	18.1%	25.0%	8,591,331	4,468,931	4,137,726	5,732,663	All corn & soy acres
Commercial P VRT Applied	NA	NA	49.6%	49.6%	NA	NA	11,358,688	11,358,688	All corn & soy acres
Soil Testing for P	81.2%	72.1%	85.5%	79.6%	18,682,577	16,563,845	19,602,047	18,282,823	All corn & soy acres
P Application Only When At/Below Optimum Levels	74.3%	94.4%	94.3%	87.7%	13,875,230	15,636,269	18,482,770	15,998,090	Soil Test P Acres
Tillage Practices:	2017 (Official)	2018 (Official)	2019 (Official)	Average	2017 (Official)	2018 (Official)	2019 (Official)	Average	Extrapolated Using
Conservation Tillage Before Corn	56.3%	52.3%	46.5%	51.7%	7,441,970	6,805,748	6,341,092	6,862,937	Corn acres
No-Till Before Corn	26.4%	22.2%	29.4%	26.0%	3,486,345	2,890,908	4,018,117	3,465,124	Corn acres
Conventional Tillage Before Corn	NA	25.4%	24.1%	24.7%	NA	3,299,680	3,289,288	3,294,484	Corn acres
Other Tillage Before Corn	17.3%	0.1%	0.0%	5.8%	2,284,597	15,871	0	766,823	Corn acres
Conservation Tillage Before Soy	42.6%	34.6%	33.8%	37.0%	4,169,316	3,441,481	3,134,088	3,581,628	Soy acres
No-Till Before Soy	43.2%	41.0%	44.6%	42.9%	4,221,350	4,081,526	4,134,881	4,145,919	Soy acres
Conventional Tillage Before Soy	NA	24.4%	21.6%	23.0%	NA	2,433,727	2,006,224	2,219,976	Soy acres
Other Tillage Before Soy	14.2%	0.0%	0.0%	4.7%	1,391,549	0	0	463,850	Soy acres
Combined Corn/Soy Conservation Tillage Acreage	50.5%	44.6%	44.7%	46.6%	11,611,287	10,247,229	9,475,179	10,444,565	Sum of corn & soy conservation tillage acres
Combined Corn/Soy No-Till Acreage	33.5%	30.4%	30.4%	31.4%	7,707,695	6,972,434	8,152,999	7,611,042	Sum of corn & soy no-till acres
Combined Corn/Soy Conventional Tillage Acreage	NA	25.0%	25.0%	25.0%	NA	5,733,407	5,295,512	5,514,459	Sum of corn & soy conventional tillage acres
Combined Corn/Soy Other Tillage Acreage	16.0%	0.1%	0.1%	5.4%	3,676,146	15,871	0	1,230,673	Sum of corn & soy other tillage acres