



National Agricultural Statistics Service

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Illinois State Statistician

**NLRS Results
October 2020
AWQPF Meeting**





Mark Schleusener

- ▶ **Mark.schleusener@usda.gov**
- **30+ years with USDA – NASS**
- **29 years as analyst and supervisor of analysts**
- **State Statistician since November 2013**
 - **Communication and outreach**
 - **College recruiting**



Mission Statement

**NASS provides timely,
accurate, and useful
statistics in service to U.S.
agriculture.**

Basic Survey Details

- ² Reference year is 2019
- Sampling
 - Cropland > 100 acres but < 5,000 acres
 - 1,097 total farms in the sample
- Two mailings
 - January 2020
 - February 2020 (just the non-respondents)
- Calling non-respondents
 - Mid-April

More Survey Details

- Funding from NREC
- Margins of error
 - For common items like cropland or tilled acres, one standard error is less than 10%.
 - For less common items like cover crops, one standard error is 20% or more.
 - Some items, like bioreactors are very rare and the margins of error very large
- Response rate better than last two surveys



Results





Nitrogen Management Strategy

	Acres in 2017	Acres in 2019
NASS corn planted acres	11,200,000	10,500,000
Acres where an MRTN (Maximum Return To Nitrogen) strategy was used to determine application rates	3,730,000 or 33% of planted acres	3,700,000 or 35% or planted acres
Other Industry-approved technique acres	7,750,000 or 69% of planted acres	7,390,000 or 70% of planted acres

Fertilizer Application Strategies for corn on tilled acres	Acres in 2017	Acres in 2019
Acres of corn planted	11,200,000	10,500,000
Fall / Winter nitrogen was applied with a nitrification inhibitor	3,550,000 or 32%	1,460,000 or 14%
Spring nitrogen was applied with a nitrification inhibitor	2,790,000 or 25%	2,220,000 or 21%

Fertilizer Application Strategies for corn on non-tiled acres	Acres in 2017	Acres in 2019
Acres of corn planted	11,200,000	10,500,000
Fall / Winter nitrogen was applied with a nitrification inhibitor	1,040,000 or 9%	540,000 or 5%
Spring nitrogen was applied with a nitrification inhibitor	1,020,000 or 9%	2,070,000 or 20%



Fertilizer Application Strategies for corn on tilled acres

	Acres in 2017	Acres in 2019
Acres of corn planted	11,200,000	10,500,000
STRATEGY 1 - Fall / Winter N was 50% or less of total N	780,000 or 7%	330,000 or 3%
STRATEGY 2 - Fall / Winter N was 0% of total N (all Spring applications)	1,850,000 or 17%	1,720,000 or 16%
STRATEGY 3 - Less than 50% FALL / WINTER applications, with remaining nitrogen applications split between pre-plant and side-dress applications	1,790,000 or 16%	1,930,000 or 18%

Reductions in phosphorus applications		2017 Acres	2019 acres
Tiled acres	Acres where phosphorus application rates were reduced since 2011	4,440,000	7,410,000
Non-tiled acres	Acres where phosphorus application rates were reduced since 2011	2,150,000	3,800,000
Tiled acres	Acres where placement of phosphorus applications were moved from broadcast to subsurface or banding	1,530,000	1,440,000
Non-tiled acres	Acres where placement of phosphorus applications were moved from broadcast to subsurface or banding	280,000	870,000

Reasons for reducing phosphorus applications	2017 Acres	2019 Acres
The Illinois Agronomy Handbook removal rates for phosphorus were updated	2,390,000	4,460,000
Soil test information	4,520,000	9,470,000
Other reasons, including cost	2,420,000	5,030,000

Cover Crop questions (tiled and non-tiled acres)	Acres
Corn / Soybean acres planted to cover crops after the 2019 crop season on tiled ground.	930,000
Corn / Soybean acres planted to cover crops after the 2019 crop season on non-tiled ground.	480,000
Corn / Soybean acres planted to cover crops after the 2017 crop season on tiled ground.	290,000
Corn / Soybean acres planted to cover crops after the 2017 crop season on non-tiled ground.	420,000
Corn / Soybean acres planted to cover crops after the 2015 crop season on tiled ground.	490,000
Corn / Soybean acres planted to cover crops after the 2015 crop season on non-tiled ground.	630,000
Corn / Soybean acres planted to cover crops after the 2011 crop season on tiled ground.	220,000
Corn / Soybean acres planted to cover crops after the 2011 crop season on non-tiled ground.	380,000



General Knowledge Questions

Percent of Farms reporting in 2020	Not at all knowledgeable	Slightly knowledgeable	Somewhat knowledgeable	Knowledgeable	Very knowledgeable
Nutrient Loss Reduction Strategy	26.9	29.9	20.7	10.7	11.8
MRTN strategy	30.2	29.0	17.6	14.7	8.5
Wood chip bioreactors	54.7	17.2	14.4	11.5	2.2
Constructed Wetlands	42.1	20.5	16.5	17.9	3.0
Cover crop management	9.1	24.7	27.7	26.1	12.4



Questions?

Fertilizer Application Strategies for corn on non-tiled acres

Acres in 2017

Acres in 2019

Acres of corn planted

11,200,000

10,500,000

STRATEGY 1 - Fall / Winter nitrogen was 50% or less of total nitrogen

340,000 or 3%

110,000 or 1%

STRATEGY 2 - Fall / Winter nitrogen was 0% of total nitrogen (all Spring applications)

1,250,000 or 11%

990,000 or 9%

STRATEGY 3 - Less than 50% FALL / WINTER applications, with remaining nitrogen applications split between pre-plant and side-dress applications

930,000 or 8%

740,000 or 7%

Percent of Farms reporting in 2019	Not at all knowledgeable	Slightly knowledgeable	Somewhat knowledgeable	Knowledgeable	Very knowledgeable
Nutrient Loss Reduction Strategy	21.0	27.0	38.4	11.6	2.0
MRTN Strategy	20.3	33.5	25.5	14.1	6.6
Bioreactors	53.8	23.0	15.0	5.5	2.7
Constructed Wetlands	19.7	29.6	38.0	10.2	2.5
Cover Crops Management	15.2	16.7	35.5	28.4	4.2