

2022 CENSUS OF AGRICULTURE

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Nutrient Loss Reduction Strategy Survey

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United States Department of Agriculture
National Agricultural Statistics Service

Just a little about me

I've been with NASS since 1984

- I've worked in NE, MS, WI, DC, STL, and IL
- Springfield IL since December 2002
- State Statistician since 2014



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Acknowledgements

NREC is the main player, but others helped

- Farm Bureau staff
 - Jeff Kirwan, Lauren Lurkins, others
- All the farmers that responded
- NASDA enumerators



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Nutrient Loss survey basics

Funding from NREC

- A few changes from last survey
- Biggest change:
 - Method of asking about MRTN rate
 - Assistance from Emerson Nafziger

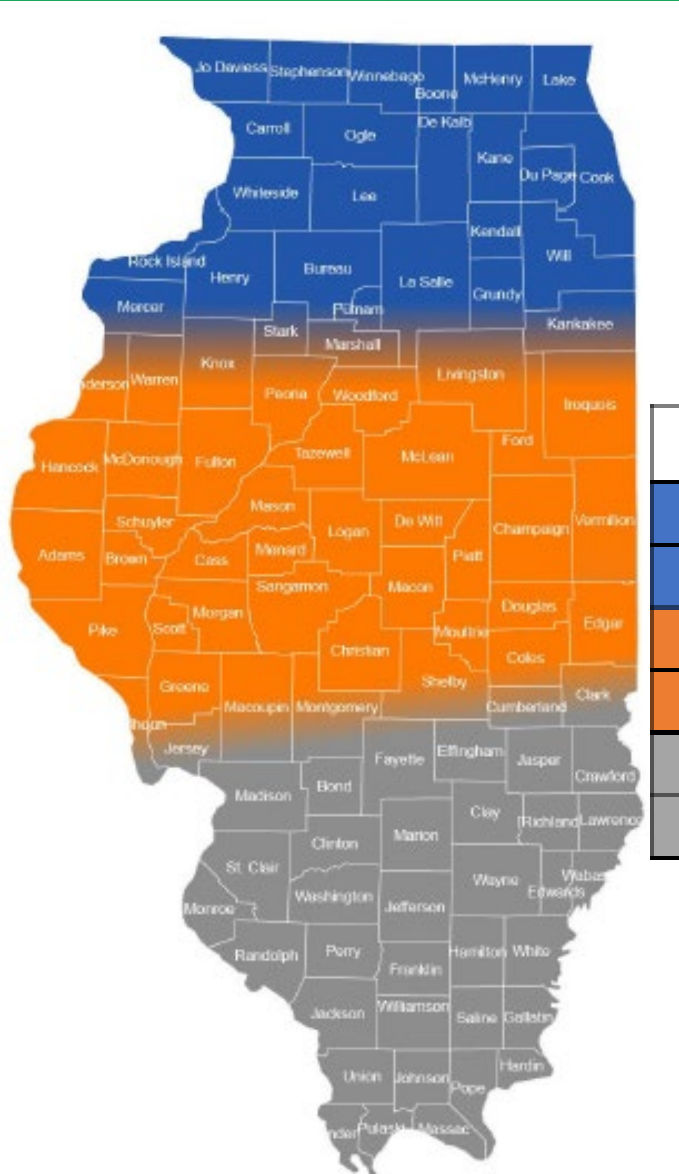


Survey process

- Sample size was 1,095
 - 100 to 5,000 acres of cropland, excluding fruit and vegetable acres
- Data collection
 - Two mailings in February and March of 2022
 - Calling from our field staff in April
- Reference year was 2021



New method for MRTN



Illinois Corn N-Rate Calculator Output for 2021

IL REGION	ROTATION	MRTN
NORTH	Soy/Corn	187
	Corn/Corn	222
CENTRAL	Soy/Corn	195
	Corn/Corn	214
SOUTH	Soy/Corn	215
	Corn/Corn	215

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MRTN results

Nitrogen Management Strategy	Acres in 2017	Acres in 2019	Acres in 2021
Corn acres planted	11,200,000	10,500,000	11,000,000
Corn acres fertilized at MRTN or lower rate	3,730,000	4,240,000	8,360,000
Other industry-approved techniques	7,750,000	8,470,000	N/A



Nitrification Inhibitors (fall and/or winter)

	2017	2019	2021
Corn acres planted	11,200,000	10,500,000	11,000,000
Corn acres fertilized in the fall and winter with dry fertilizer blends	N/A	N/A	4,560,000
Corn acres fertilized in the fall and winter with fall and winter NH3 acres	N/A	N/A	4,020,000
Corn acres fertilized in the fall and winter with nitrification inhibitors	3,550,000	1,460,000	3,410,000



Nitrification Inhibitors (spring)

	2017	2019	2021
Corn acres planted	11,200,000	10,500,000	11,000,000
Corn acres fertilized in the spring with any fertilizer. This includes split applications and spring only acres	N/A	N/A	8,250,000
Corn acres fertilized only in the spring with any fertilizer	N/A	N/A	4,440,000
Corn acres fertilized in the spring with nitrification inhibitors	2,790,000	2,790,000	3,690,000



Timing of Fertilizer Applications

NASS Corn Planted Acres	11,000,000
Acres fertilized only in the fall	2,740,000
Acres fertilized in the spring and fall (split applications)	3,820,000
Acres fertilized only in the spring	4,440,000



Reductions in phosphorus

		2017 Acres	2019 acres	2021 acres
Tile-drained acres	Acres where phosphorus application rates were reduced since 2011	4,440,000	7,410,000	6,210,000
Non tile-drained acres	Acres where phosphorus application rates were reduced since 2011	2,150,000	3,800,000	
Tile-drained acres	Acres where placement of phosphorus applications were moved from broadcast to subsurface or banding	1,530,000	1,440,000	1,080,000
Non tile-drained acres	Acres where placement of phosphorus applications were moved from broadcast to subsurface or banding	280,000	870,000	



Reasons for reducing phosphorus

	2017 Acres	2019 Acres	2021 Acres
The Illinois Agronomy Handbook removal rates for phosphorus were updated	2,390,000	4,460,000	1,940,000
Soil test information	4,520,000	9,470,000	4,570,000
Other reasons, including cost	2,420,000	5,030,000	2,010,000



Cover Crops

	Acres
2021 corn acres planted after cover crops	450,000
2021 soybean acres planted after cover crops	890,000
2021 total cover crops	1,390,000
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



General Knowledge Questions

Percent of Farms reporting in 2022	Not at all knowledgeable	Slightly knowledgeable	Somewhat knowledgeable	Knowledgeable	Very knowledgeable
Nutrient Loss Reduction Strategy	20.3	24.8	36.7	15.7	2.5
MRTN strategy	16.2	14.9	37.9	25.0	6.0
Wood chip bioreactors	68.6	14.7	11.1	4.8	0.8
Constructed Wetlands	35.5	32.3	21.7	8.2	2.3
Cover crop management	15.9	20.6	35.3	22.2	6.0
Saturated Buffers	33.8	23.5	25.4	14.3	3.0



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BECAUSE IT SHOWS THE VALUE

OF THE WORK I DO.

COMING THIS NOVEMBER
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Questions?

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