





Introduction

About the 2022 State of the Farm Report

In Winter 2021-22, FarmLogs surveyed nearly 1,000 U.S. farmers to collect data on the current and future state of row crop farms in the U.S. We've been doing this for several years, so you'll find year-over-year trends on some topics, including farming practices, technology, payments, finances, and more.

A large percentage of survey respondents are users of FarmLogs.

About FarmLogs & Bushel

Founded in 2011 and acquired by Bushel in 2021, <u>FarmLogs</u> is a powerful, easy to use farm management software. It populates, stores, displays, tracks, and shares comprehensive row crop production, expense, and revenue data in a central location. And, it uses that data to automatically calculate cost of production and generate profit and loss statements by commodity, field, or the entire farm.

<u>Bushel</u> is an independently-owned software company and leading provider of software technology solutions for growers, grain buyers, ag retailers, protein producers, and food companies.

Although efforts have been made to provide complete and accurate information, Bushel does not guarantee, and accepts no legal liability, for the accuracy, reliability, currency or completeness of any material in this report. You should not rely on material in this report.

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Tillage Practices
Fertilizer Usage

No-Till

Cover Crops
Soil Sampling
Irrigation

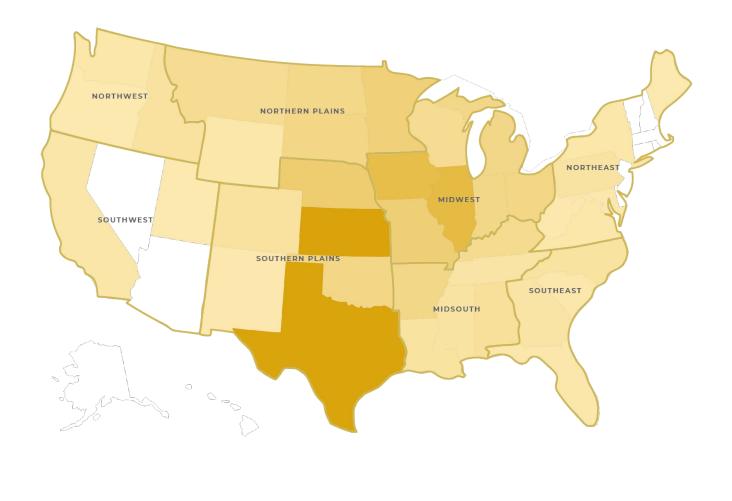
Regenerative Farming
Carbon Credit Programs

Demographics



Location

State	# of Respondents	State	# of Respondents
KS	91	LA	9
TX	90	NC	9
IL	60	MS	8
IA	56	PA	8
NE	36	GA	7
МО	33	TN	7
MN	31	CA	5
ОН	24	NY	4
OK	24	VA	4
SD	24	WA	4
AR	23	WY	4
IN	23	FL	3
MI	23	SC	3
ND	22	MD	2
KY	18	NM	2
MT	17	WV	2
WI	17	ME	1
AL	12	OR	1
CO	10	UT	1
ID	10		



Farm Role

81%

More than 81% of respondents are farm

owner/operators

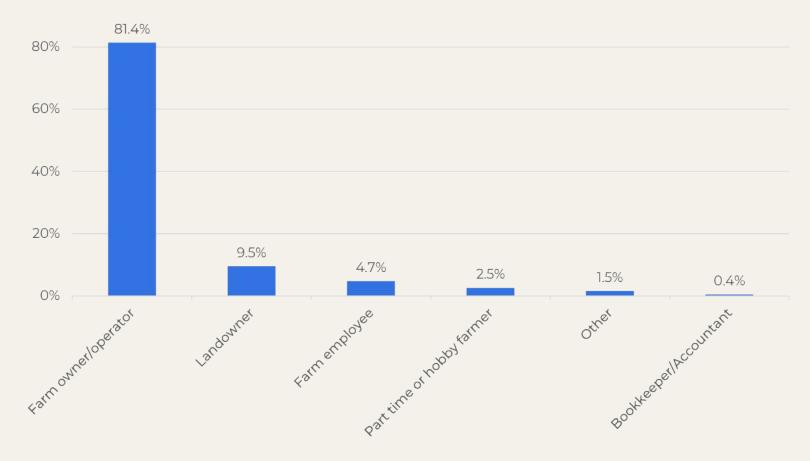
9.5%

of respondents

represent landowners

2.5%

Part time or hobby farmers represent 2.5% of those with >200 acres What is your primary relationship to farming? - 2021

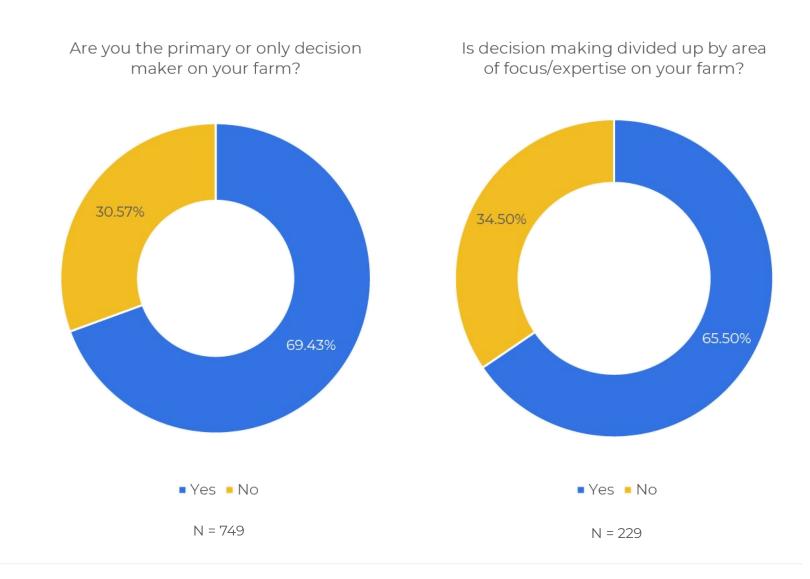


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Decision Making

520 respondents are the primary or only decision maker on their farm

Of the **229** respondents who are not the primary decision maker, **150** say they divide decision making up by area of focus/expertise



Outsourcing

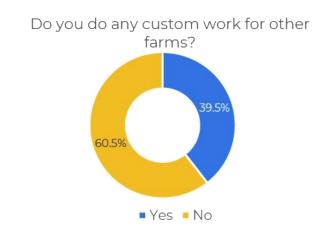
About half of growers outsource at least some work to third-party service providers

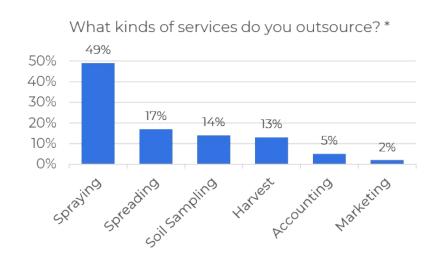
49%

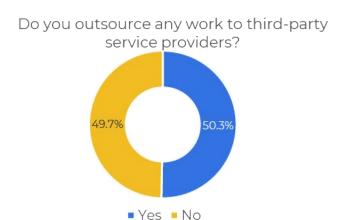
At least 49% of growers who outsource labor are using spraying services, making it by far the most popular service to outsource

15%

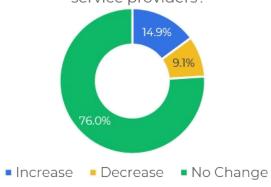
Looking at the future, about 15% of respondents are looking to increase how much work they outsource







Do you plan to increase, decrease, or do the same amount of outsourcing to service providers?



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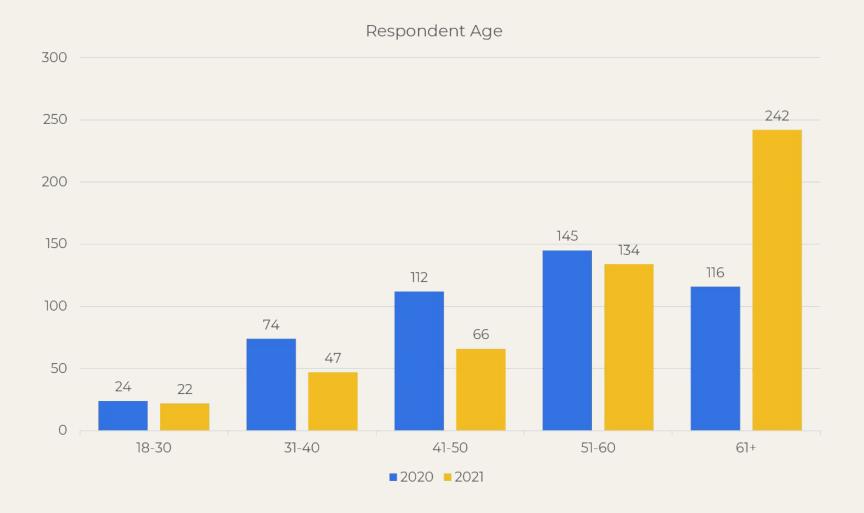
^{*} Single response question



Nearly 50% of respondents were 61 or older

16 points higher than in 2020

Each of the last 2 years saw less than 5% of respondents between 18 and 30 years old

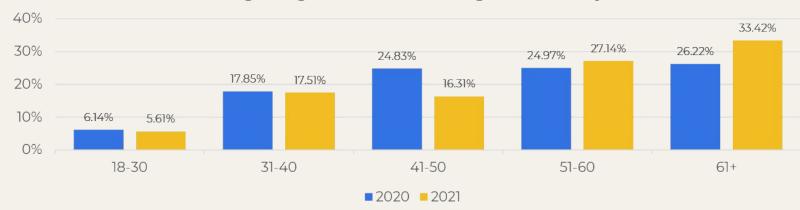


Age Details





What is the age range of the most active generation on your farm?

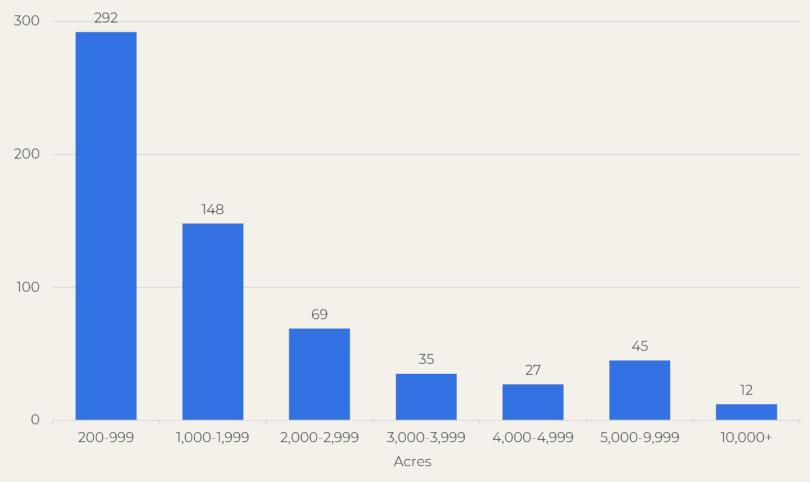


Acreage

30% of respondents farm 2,000 acres of land or more

9.1% of respondents farm more than 5,000 acres of land

How many acres do you farm?



* Active farmers only

N = 628*

Land Ownership

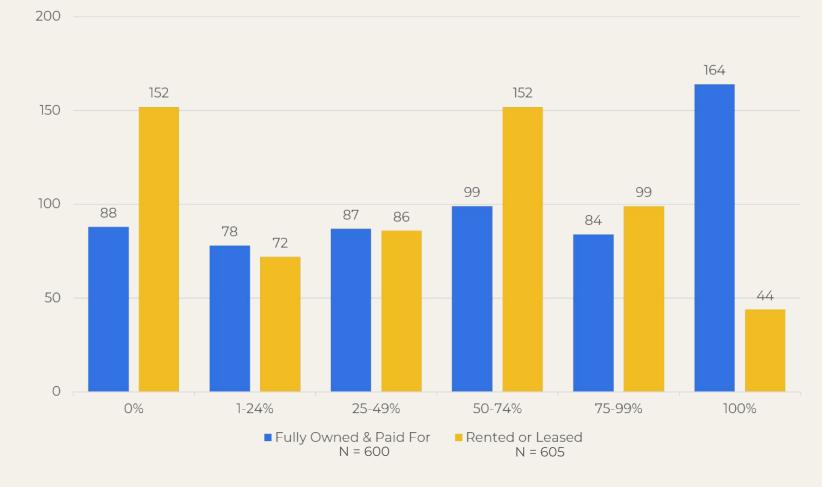
of growers reported owning at least half of the acres they farm

reported owning all their land

don't own any of the land they farm

Growers with more acres are more likely to own less of the land they farm





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Crops

% reported growing

75.4% Corn - up 1.9%

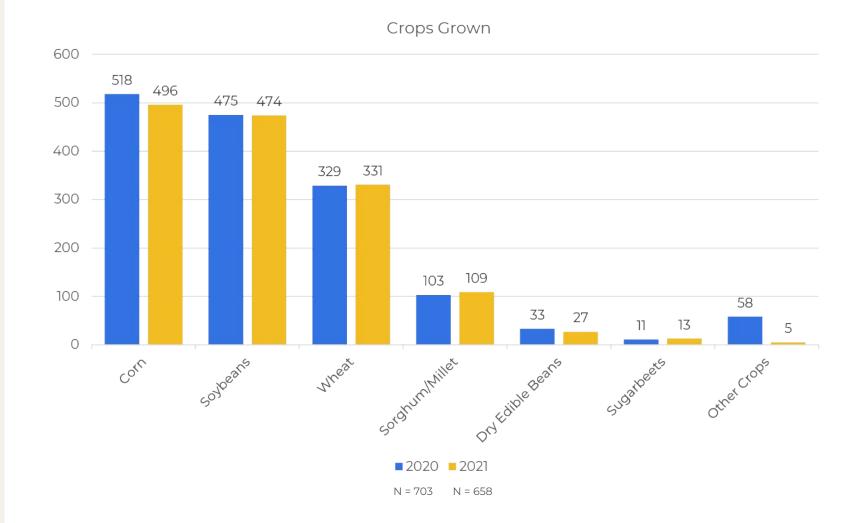
72.0% Soybeans – up 2.5%

50.3% Wheat – up 3.2%

16.5% Sorghum – up 1.9%

Dry edible beans -4.1% down 0.5%*

Sugar beets - about the 2.0% same as last year



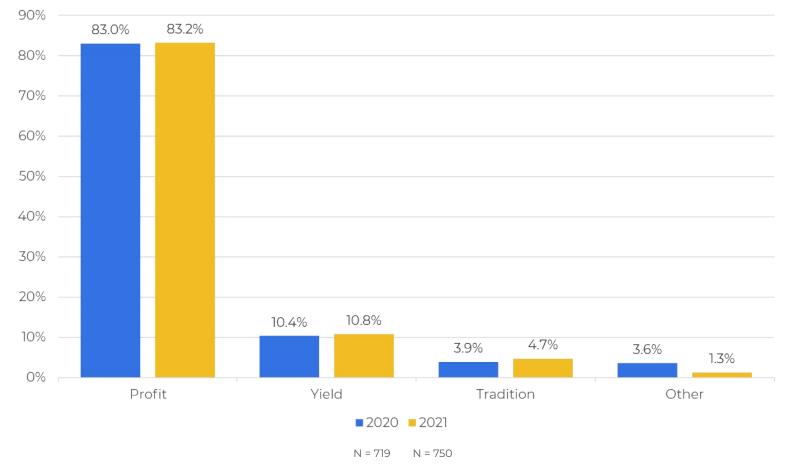
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What Matters Most

Profit continues to dominate as the most important thing for farmers, distantly followed by yield, tradition, and others

No significant changes among the categories in the past year among farmers with >200 acres





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Farm Practices



Reference: Geographic Regions

Midsouth	Midwest	Northeast	Northern Plains	Northwest	Southeast	Southern Plains	Southwest
Alabama	Illinois	Connecticut	Minnesota	Idaho	Florida	Colorado	Arizona
Arkansas	Indiana	Delaware	Montana	Oregon	Georgia	Kansas	California
Kentucky	Iowa	Maine	North Dakota	Washington	North Carolina	Nebraska	Nevada
Louisiana	Michigan	Maryland	South Dakota		South Carolina	New Mexico	Utah
Mississippi	Missouri	Massachusetts	Wyoming			Oklahoma	
Tennessee	Ohio	New Hampshire				Texas	
	Wisconsin	New Jersey					
		New York					
		Pennsylvania					
		Rhode Island					
		Vermont					
		Virginia					
		West Virginia					



Tillage Practices

No-till practices went up 2% from 2020 to 2021

Full tillage practices **decreased 4**% over the same period

What kind of tillage practices do you use?



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Tillage Practices by Region

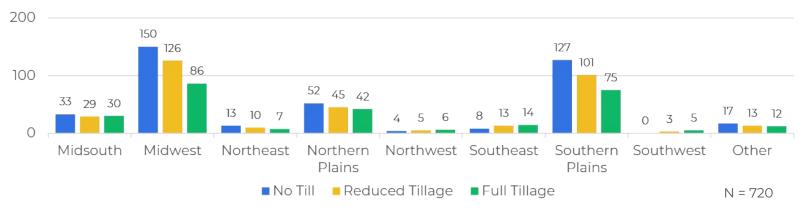
The **Southern Plains** saw the highest increase in those who practice no-till

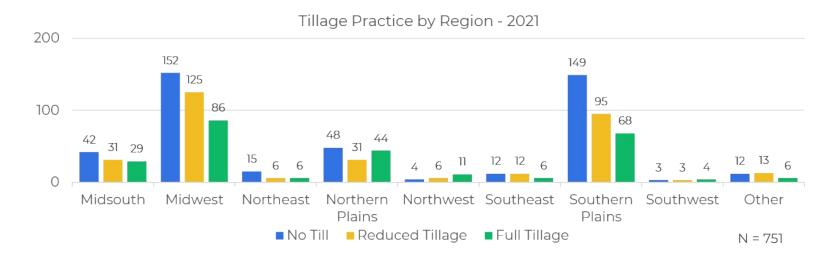
5.8 % increase in 2021

The **Northwest** had the largest increase in those who practice full tillage

12.4% increase in 2021

Tillage Practice by Region - 2020





*Regional composition information can be found on page 16

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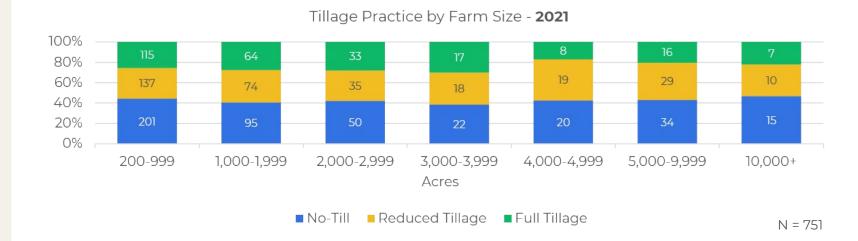
Tillage Practices by Farm Size

Farms with less than 1,000 acres had a 4.8% increase in no-till practices from 2020 to 2021



■ No-Till ■ Reduced Tillage ■ Full Tillage

N = 720



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Practice Across Acreage

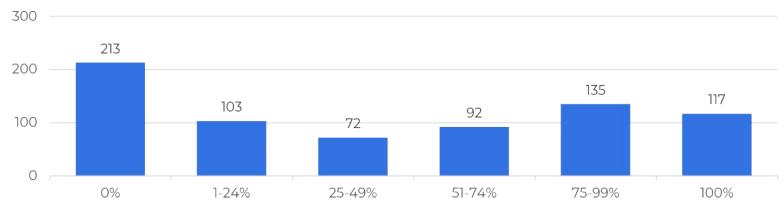
of respondents are no-till **47**% on at least half of their land

of respondents never 16% till their land

of respondents do not 41% plant any cover crops

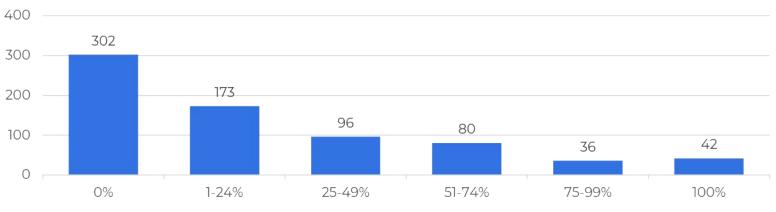
of respondents plant 22% cover crops on at least half of their land

What percent of your acres never get tilled?



N = 732

What percent of your acres get cover crops planted on them?



N = 729

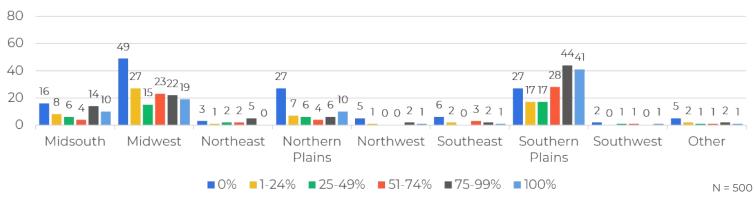
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Practice Across Acreage by Region

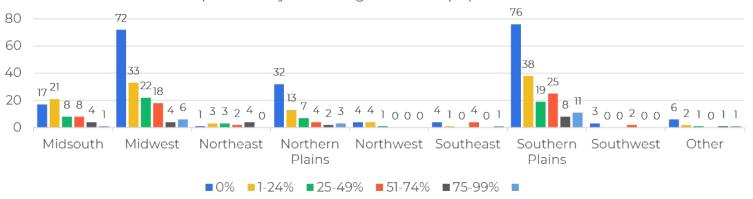
Reduced tillage practices are most prevalent in the Midwest and Southern Plains whereas the Northern Plains practice more tillage

The Midwest, Northern Plains, and
Southern Plains all have similar
distributions of cover crop acreage (a large
part seeing no cover crops) whereas the
Midsouth is seeing a rise in cover crop
programs for a quarter of respondent's
acres surveyed









N = 505

*Regional composition information can be found on page 16

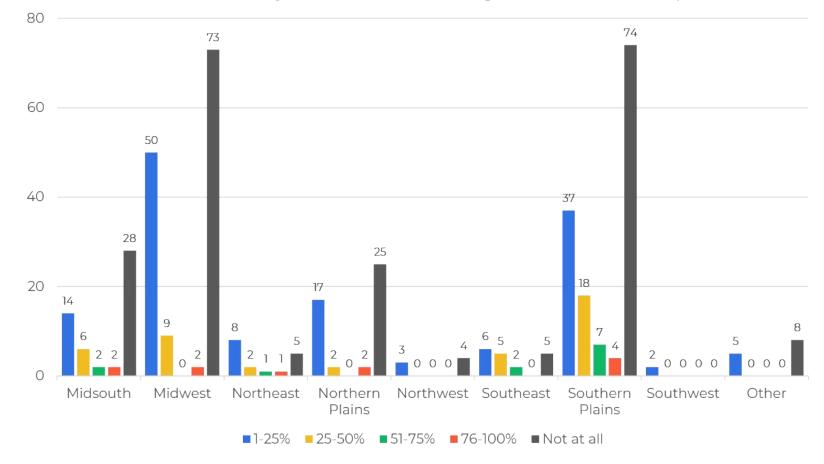
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Fertilizer Usage by Region

In most regions there is at least some utilization of cover crops to offset fertilizer usage

Around 50% of the Midsouth, Midwest, Northern Plains, and Southern Plains have used cover crops to reduce fertilizer usage

How much have you reduced fertilizer usage because of cover crops?



*Regional composition information can be found on page 16

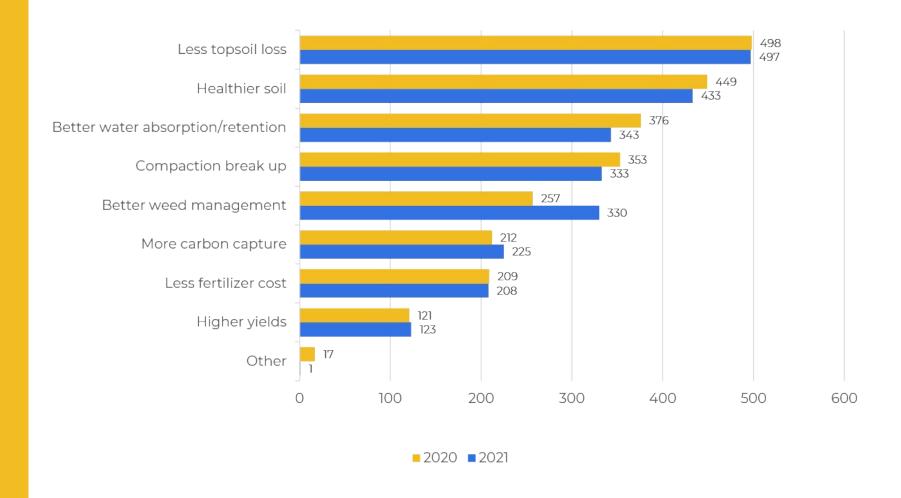
N = 429

No-Till: Benefits

"Less fuel cost", "less topsoil loss", and "less labor" are the most prominent benefits farmers see from using no-till

A higher proportion of respondents noted "better weed management" as a benefit in 2021

What do you think are some of the benefits farmers get from no-till?



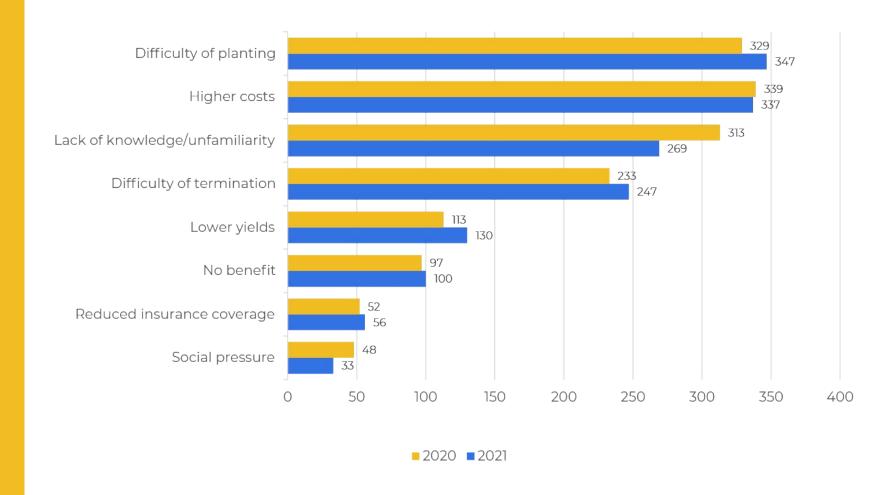


No-Till: Challenges

High cost, lack of knowledge, and the level of difficulty are the main roadblocks stopping farmers from using no-till

Social pressure remains the least important reason against no-till

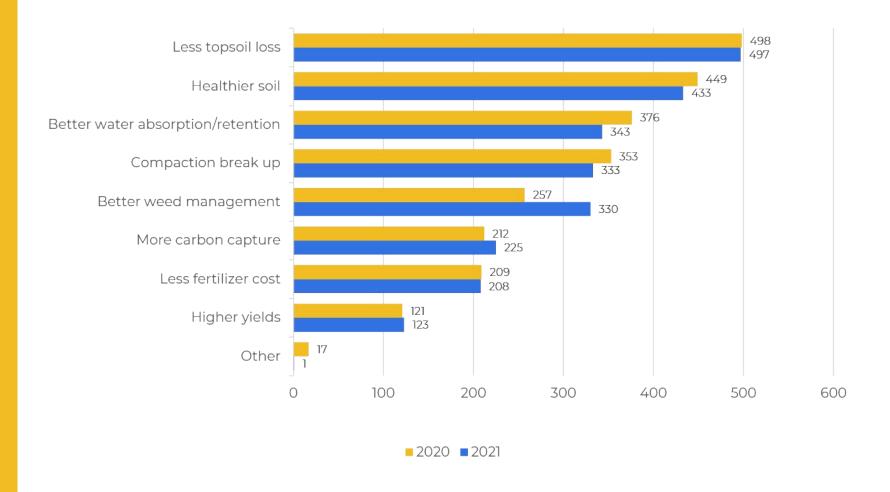
What are some of the top reasons not to use no-till?



Cover Crops: Benefits

"Less topsoil loss" and "healthier soil" are the most prominent benefits farmers see from using cover crops

Only a small portion of farmers expect higher yields when using cover crops What do you think are some of the benefits farmers get from cover crops?



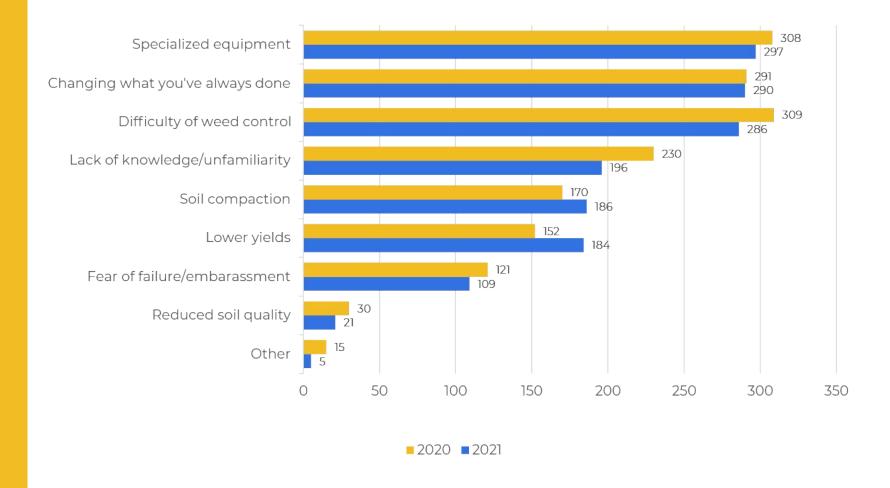
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Cover Crops: Challenges

The main challenges to adopting cover crops are the need for specialized equipment, having a hard time controlling weeds, and having to change the way they've always farmed

Few farmers expected reduced soil quality when adopting cover crops

What are some of the challenges to adopting cover crops?



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Cover Crops and No-Till

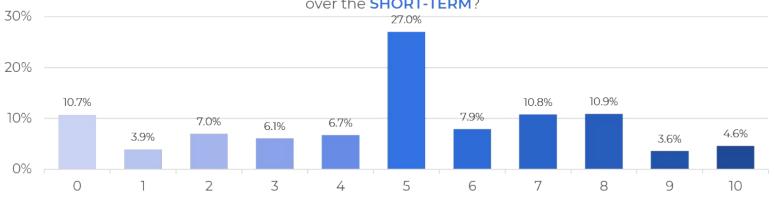
2/3 of growers think it is important to use both cover crops AND no-till in order to get the maximum benefits

Only 28% report using both

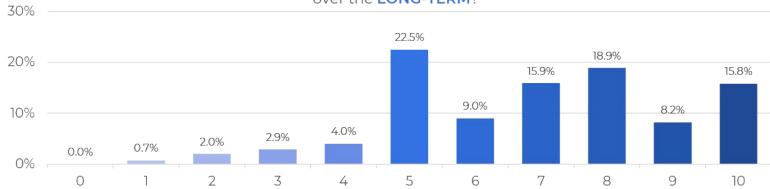
Growers are unsure if utilizing both strategies will decrease profitability in the short term (Average response of 4.2)

They are much more confident, however, that those strategies will increase profitability in the long term (Average response of 5.4)





How strongly do you feel that using cover crops with no-till **INCREASES** profitability over the **LONG-TERM**?



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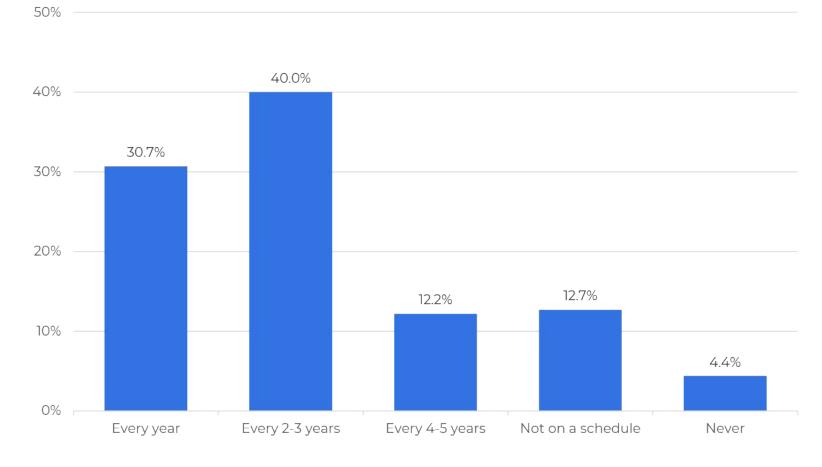
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Soil Sampling

82.9%

of respondents soil sample at least every 4-5 years

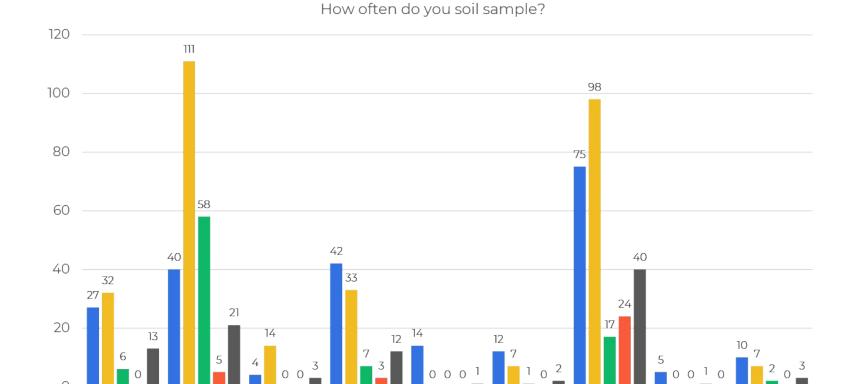
How often do you soil sample?



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Soil Sampling by Region

Most respondents in almost all regions soil sample at least every 2-3 years



Northwest Southeast

*Regional composition information can be found on page 16

Midwest

Northeast

Northern Plains

■ Every Year ■ Every 2-3 years ■ Every 4-5 years ■ Not on a schedule

N = 747

Southern

Plains

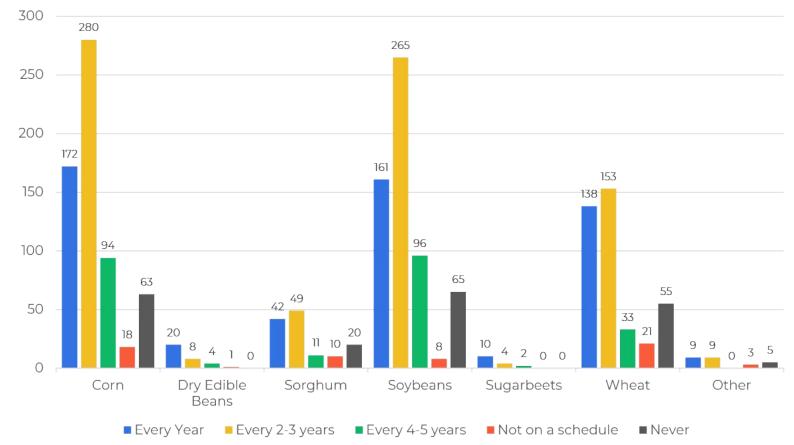
Southwest

Soil Sampling by Crop Type

Those who farm corn, sorghum, soybeans, and wheat are most likely so soil sample every 2-3 years

Many farmers soil sample every year

How often do you soil sample?



N = 429

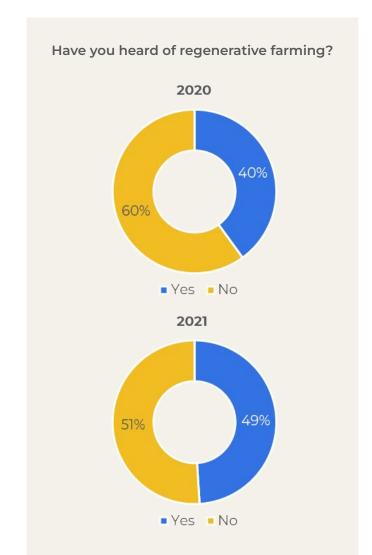
Regenerative Farming

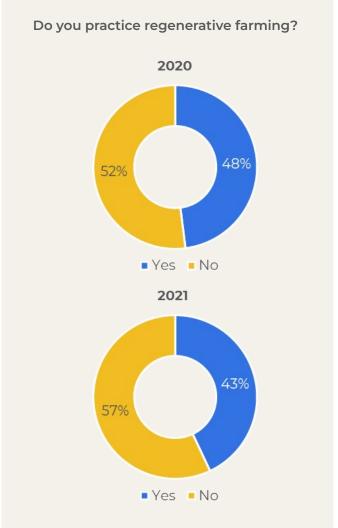
"Regenerative farming" refers to practices like no-till and cover crops

49% of growers have heard of regenerative farming

In 2021 more respondents had heard of regenerative farming than in 2020

Despite the increase in awareness in 2021, there was a lower rate of practice among those who knew about it





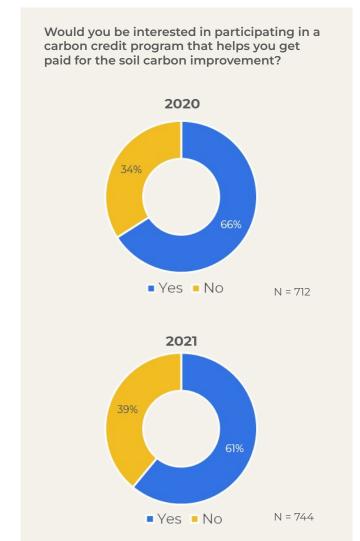
Carbon Credit Programs

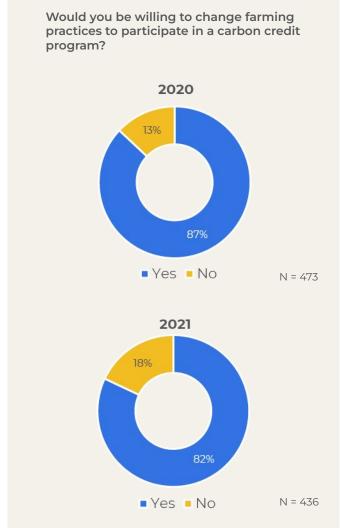
Aligned with last year, >60% of growers are interested in participating in a carbon credit program that helps them get paid for soil improvement.

Older growers were less interested than their younger counterparts

The overwhelming majority are willing to change farming practices in order to participate

Again, older growers are less likely to be willing to change





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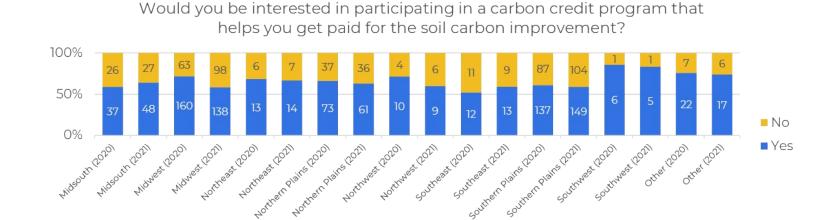
Carbon Credit Programs by Region

At least half of all participants in all regions would be interested in participating in a carbon credit program

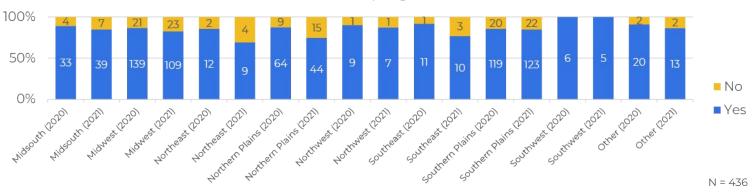
Willingness to participate in a carbon credit program decreased from 2020 to 2021 in 7 of the 9 regions

Nearly all regions saw a decreased willingness to change farming practices from 2020 to 2021

 Participants from the Southwest region remained 100% willing for both years







^{*}Regional composition information can be found on page 16

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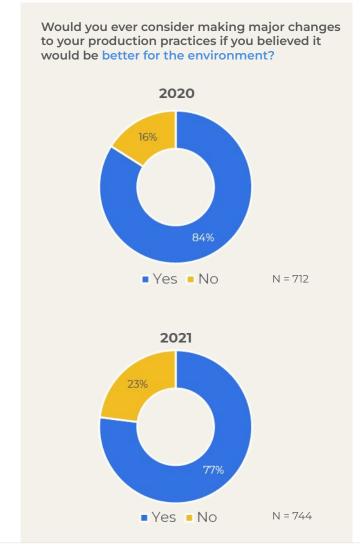
Willingness to Change Practices

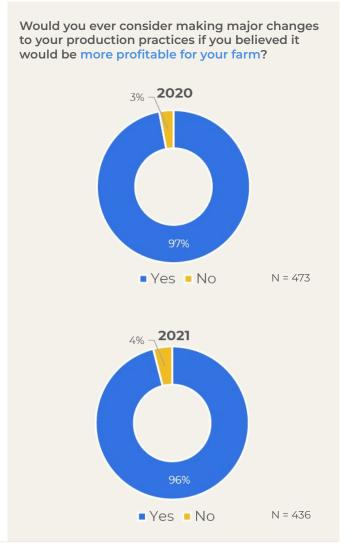
Of the **92**% of growers who are happy with the way they currently farm:

77% say they would be willing to change the way they farm if it would have a positive impact on the environment (7% less than last year)

of them say they would change if they believed it would be more profitable (1% less than 2020)

6% were not willing to change the way they farm in either case (2% more than last year)





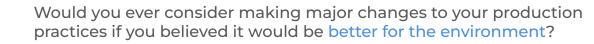
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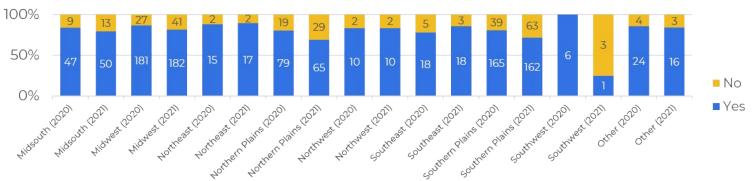
Willingness to Change Practices by Region

Nearly all respondents in all regions said they would change their production practices if it made their farm more profitable

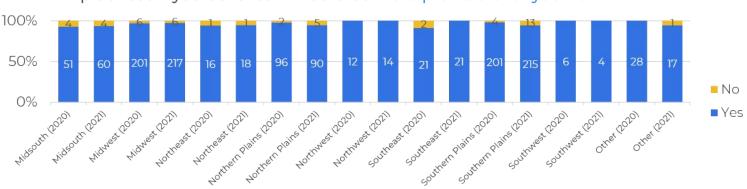
100%

of respondents in the Northwest said they would make changes to make their farm more profitable





Would you ever consider making major changes to your production practices if you believed it would be more profitable for your farm?



^{*}Regional composition information can be found on page 16

Payments and Finances



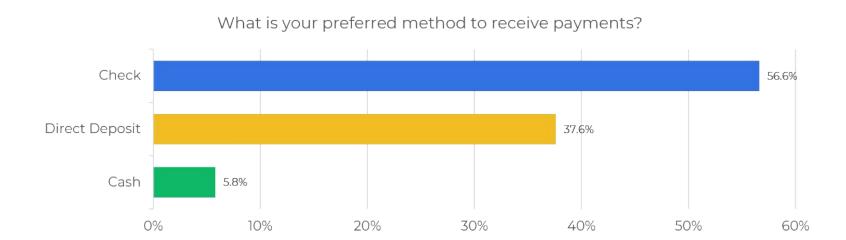
Payment Preferences

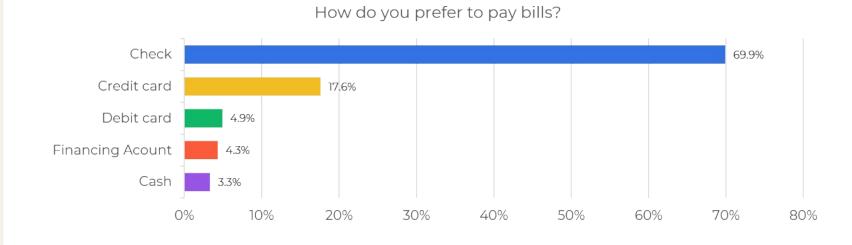
70% of growers prefer to pay bills by check

57% prefer to receive payment by check

26.8% Prefer paying farm-related bills with credit cards, debit cards or financing accounts

Respondents tend to prefer to both pay bills and receive payments using the same method





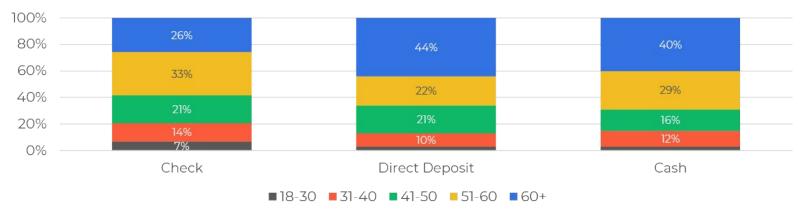
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Payment Preferences by Age

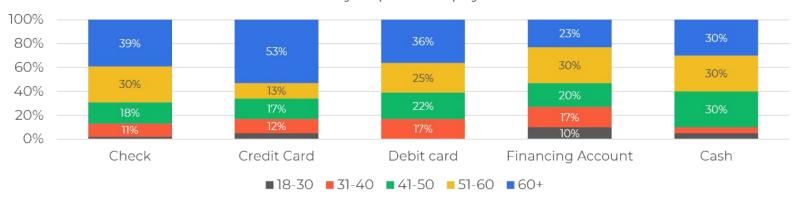
Being paid in cash is most preferred by younger farmers

Respondents < age 41 were more likely to prefer using a financing account to pay bills

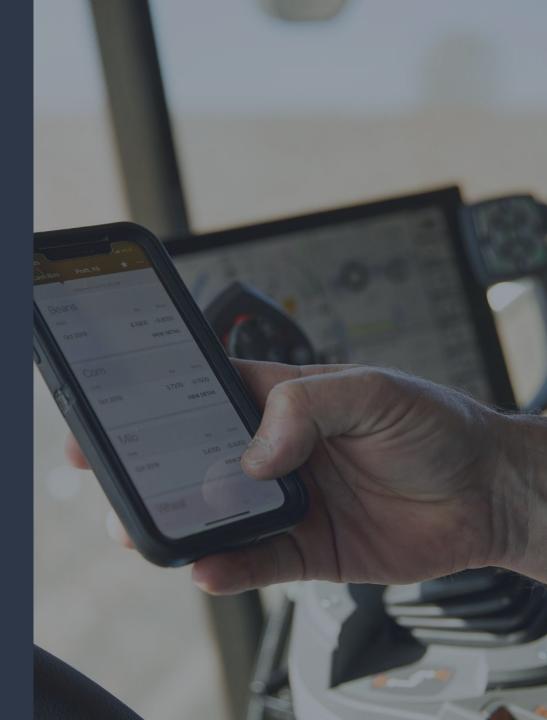
What is your preferred method to receive payments?



How do you prefer to pay bills?



Technology



Farm Management Technology

71%

of respondents use FarmLogs

Up 8% since 2020

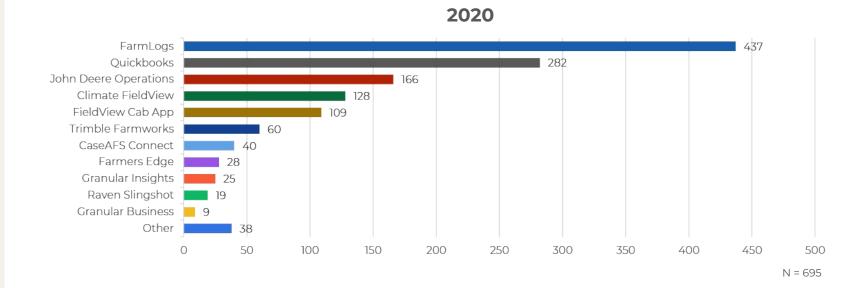
Other prominent technologies used:

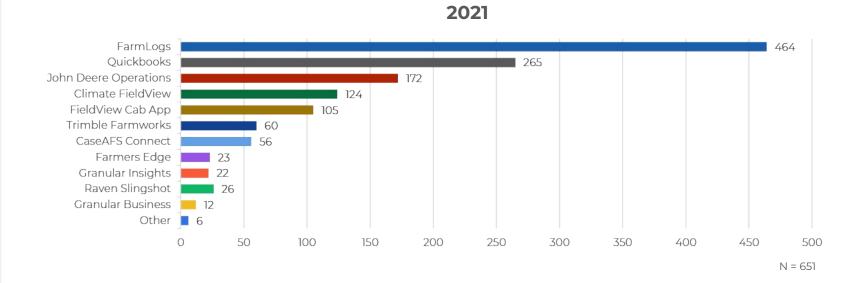
- Quickbooks at 41% (Same as 2020)
- John Deere Operations Center at 26% (+2% since 2020)

59%

of respondents use a combination of technologies as part of their farm's "tech stack"

5% more since 2020





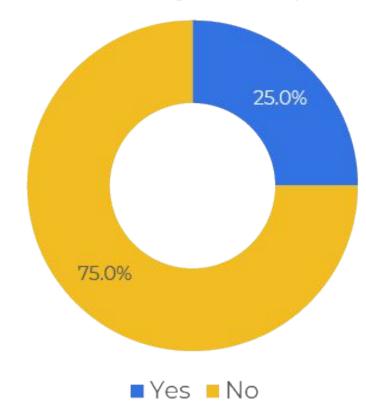
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Future Outlook

25%

of growers are ready to sell their crops through an app

Do you want to sell your crops in an app?*



^{*} Question not asked in 2020

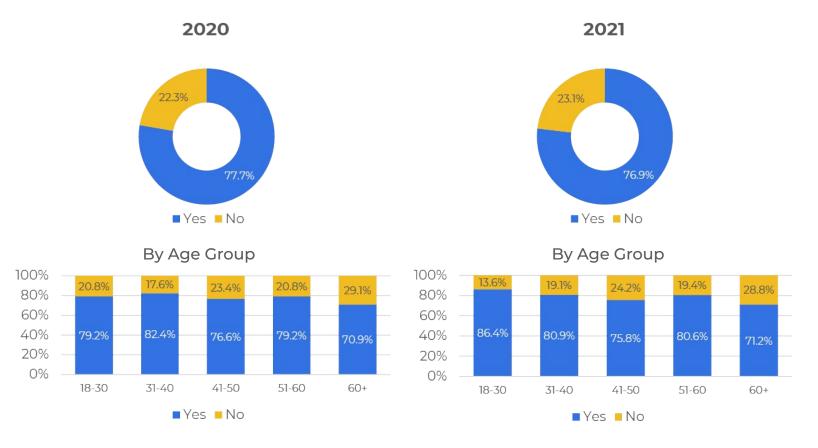
Farming as a Relationship-Driven Industry

77%

consider farming to be a "relationship driven industry"

More young farmers view farming as relationship driven, and that belief has grown even more prevalent since last year

Rather than acting as a barrier to developing relationships, technology seems to facilitate relationships, especially for younger generations Is farming a "relationship driven" industry for your generation?



Farm Changes

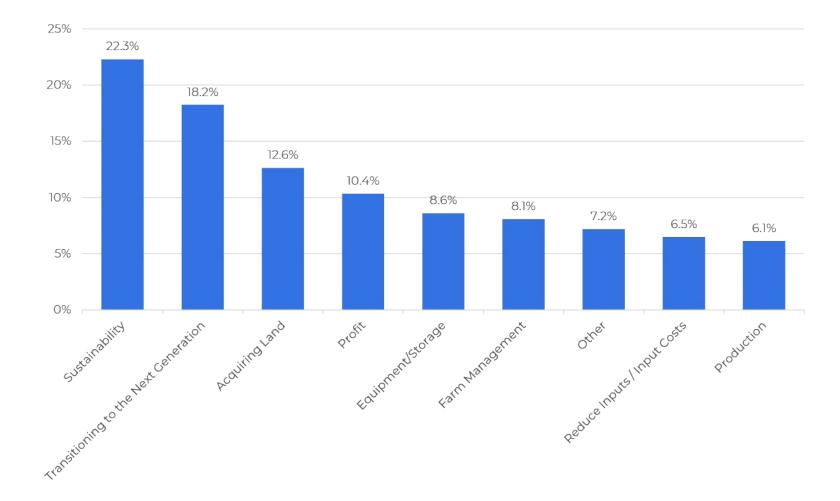


Changes to the Farm

22% of growers stated increasing sustainability as the biggest change they are looking to make on their farm

said they are looking to 18% retire and transition ownership of their land to the next generation

What is the biggest change you are looking to make on your farm?



N = 571, open ended

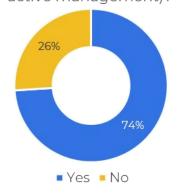
The Next Generation

Nearly 3/4 of farmers intend to transition their farm to the next generation upon retiring – same as last year

Nearly 1/3 of owners/operators plan to retire within 10 years

Among those who do not plan to transition to the next generation, more than 63% intend to rent out their land when they are done farming. Another 28% aim to sell their land, and 6% say they will put their land into conservation

Will your farm be transitioned to a younger generation in your family (for active management)?





What do you plan to do with the land you own when you stop farming?

