

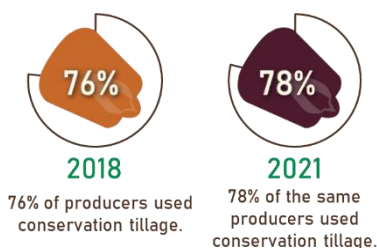
# South Dakota Farmers' Usage of Conservation Tillage

Researchers at South Dakota State University (SDSU) conducted producer surveys in the eastern part of South Dakota in both 2018 and 2021. Producers could take the survey online or via mail and were asked questions about their farm, farming practices including usage of soil and water conservation practices, and their values.

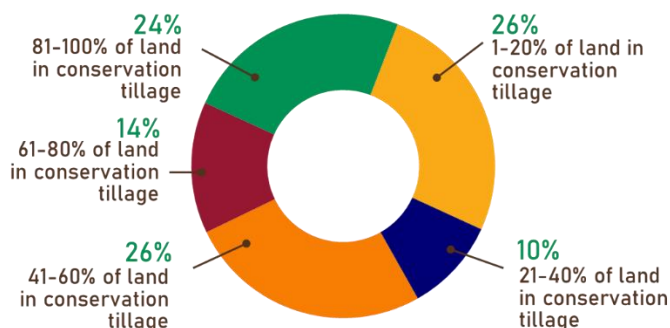
Using publicly available addresses from the Farm Service Agency, a random sample of 3,000 producers were sent the survey in 2018. 650 were ineligible, and 708 responded to the survey for a response rate of 30%. In 2021, the same producers who took the survey in 2018 were asked to take a follow up survey. 94 were ineligible, and 350 responded for a 59% response rate.

This factsheet shows results based on the responses of the same participants who answered conservation practice questions in both surveys. Our focus here is only on the conservation tillage questions.

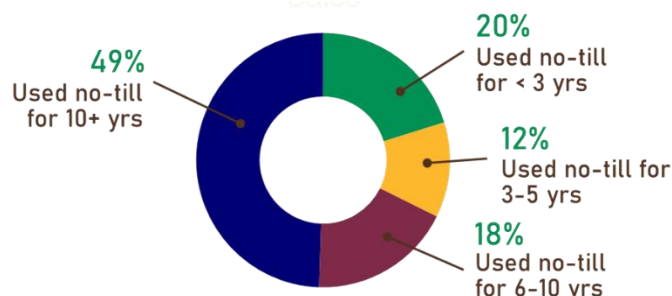
About three out of four South Dakota farmers used conservation tillage in both 2018 and 2021.



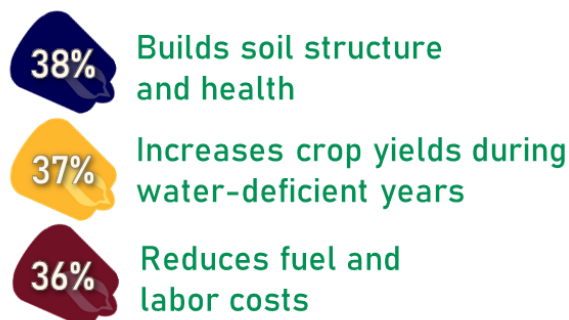
In 2021, most (63.3%) conservation tillage (no-till and reduced till) users used these practices on less than 60% of their farmland.



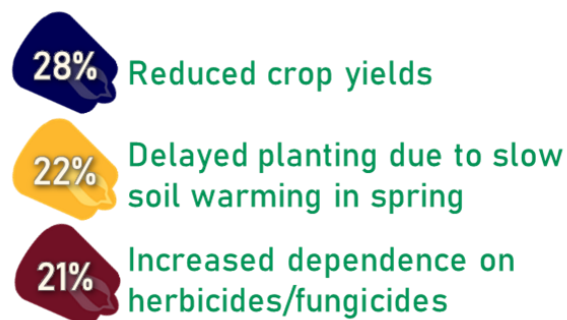
In 2021, most (49%) no-till users have used this practice for more than 10 years.



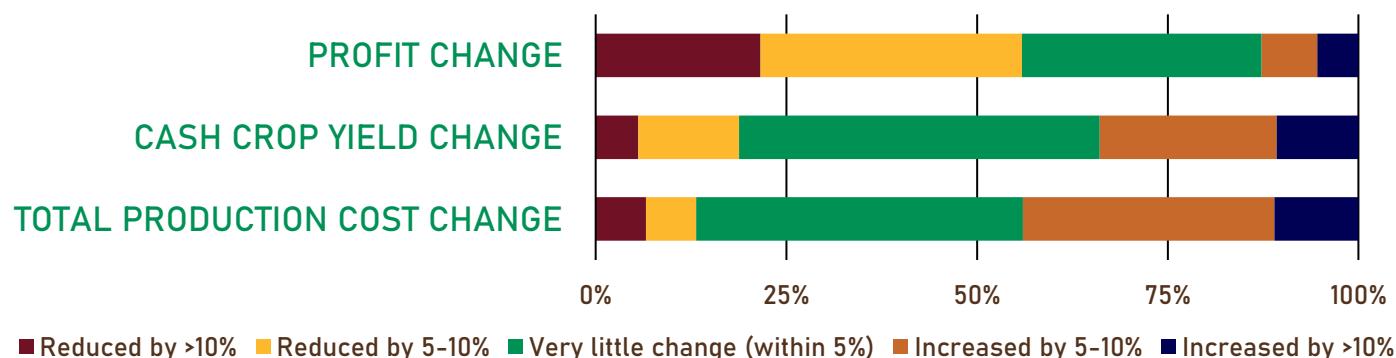
The top three *benefits* that South Dakota farmers associated with conservation tillage in 2018 (those who strongly agreed) were:



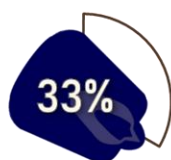
The top three *challenges* that South Dakota farmers had with conservation tillage in 2018 (those who said very important) were:



In 2021, producers were asked about *changes* to their total production costs, cash crop yields, and profitability of conservation tillage. While the majority saw very little change for each indicator (e.g., within 5%; see green in figure below), for those who did see a change, the results indicate that conservation tillage adopters saw increased (by 5-10%) costs and reduced (by 5-10%) profitability (see orange and yellow in figure below).

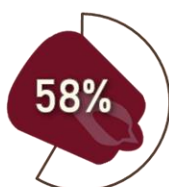


Many farmers mixed tillage practices (58%) or used no-till in some fields but not in others (33%). However, most farmers who use no-till and other conservation tillage practices (reduced or strip-till) have used these practices for many years (81%) and plan to continue doing so into the future (90%).



### NO-TILL FIELDS

Few (33%) farmers in 2021 used no-till on more than 60% of their farm acreage.



### VARYING PRACTICES

Many (58%) farmers in 2021 used no-till some years but used conventional tillage in other years.



### LONG-TERM USE

Most (81%) no-till users in 2021 have used no-till for 6 or more years.



### FUTURE USE

Most (90%) producers surveyed in 2018 will likely continue to use conservation tillage.



### NO COST SHARE

73% of producers using conservation tillage in 2021 did not receive cost share to adopt it.

About three out of four farmers (73%) who use conservation tillage, are *not* getting cost share to adopt this practice.

Nearly half (43%) of South Dakota farmers are planning to use conservation tillage to *protect* fields from droughts and/or floods.



### NATURAL DISASTER PROTECTION

In 2021, many (43%) producers indicated they were likely to use conservation tillage to protect fields from too much or too little rain.



For more information about this survey conducted with South Dakota farmers, please visit SDSU Open Prairie (<https://openprairie.sdstate.edu/sdfarmsurvey>).

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