

SOUTH DAKOTA– Forage Projects

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2020 has been an interesting year to say the least! SDSU has several forage projects in the works this spring and Extension and research personnel intend to continue field research as permitted.

At the Southeast Research Farm near Beresford, a study focusing on the evaluation methods of winterkill in alfalfa is underway. This study runs through the fall of 2021 and is a combined effort between Minnesota and Wisconsin. In addition, a new alfalfa variety trial will be established containing more than 20 entries from commercial companies. This will be a three-year study. Other planned work includes the initiation of a two-year funded arbuscular mycorrhizal fungi (AMF) alfalfa project. It will focus on understanding how alfalfa management practices can influence arbuscular mycorrhizal communities and how they may lead to increased forage yield under reduced inputs. Annual cool- and warm-season forage trials are also planned for establishment this year. Several other grazing, cattle feeding, and rye projects are planned or are underway for the 2020 growing season.



Cattle graze cover crop swaths last winter in a study at the Dakota Lakes Research Farm near Pierre, SD.

At the Dakota Lakes Research Farm near Pierre, a long-term project focusing on swath grazing cover crops is ongoing. A 5-species cover crop mix primarily containing oats and barley was initially planted after winter wheat harvest in 2018 and 2019 and was swathed in October. Swaths were sampled throughout the winter for crude protein (CP) and total digestible nutrients (TDN). The study showed grass-dominated cover crops swathed in mid-October maintained CP concentrations for at least 3 months (11-14% in '18-'19; 12-15% in '19-'20). TDN of swathed cover crops declined at a rate of 1% per month (57-60% in '18-'19; 55-60% in '19-'20). Cool weather appeared to preserve swath quality.

Several other forage-related projects happen each year across South Dakota. We look forward to another productive year!