

PRODUCER'S OPTIONS FOR PREVENT PLANT ACRES

Due to the ongoing saturated soil conditions, there will be considerable number of acres, which will be prevented planting in 2020. Overall, 2020 projection for North Dakota is about one million acres. If producers are not able to plant their regular crops by the final planting dates, they will have the following four options.

Planting Insured Crops after the Final Planting Date

Producers can still plant regular insured crops during the late planting period, which is generally 25 days after the final planting date. However, after the final planting date, crop insurance yield or revenue protection guarantees will be reduced one percent for each day. If we use spring wheat as an example and our "Proven Yield History" is 50 bushels per acre, at 70% crop insurance coverage, there will be a yield guarantee of 35 bushels per acre. That will mean losing one-percent of 35 bushels per day, if wheat is planted after the final planting date and during the late planting period. In addition, planting after the final planting dates may result in reduced actual yield and quality and higher expenses for controlling disease or weed pressure. There will be no coverage if regular crops are planted after the late planting period.

Leave the Prevent Plant Acres Bare and Get Full Prevent Plant Payments

Producers can leave their prevent plant acres bare in 2020 and get full prevent plant payments. Generally, prevent plant guarantee is 50-60% of the crop insurance yield or revenue guarantees with an option of increasing it 5% more by paying higher premiums. That will mean that if crop insurance guaranteed yield for spring wheat is 35 bushels per acre if planted before the "Final Planting Date", full prevent plant yield guarantee at 60% coverage will be 21 bushels per acre. Prevent plant coverage is reduced compared to regular crop insurance coverage as there will be savings for not buying seed, fertilizer and fuel etc. Overall, prevent plant payments do provide producers some revenue during hard times, however, in most years, planting and harvesting regular crops is more profitable. So the strategy should be to take advantage of the prevent plant program and adopt practices, which reduce the chances of prevent plant acres in 2021. If left bare, chances of 2020 prevent plant acres going into prevent planting again in 2021 are much greater compared to planting an affordable cover crop mix that not only uses the excess moisture in 2020 and improve soil health but can also generate some much needed revenue.

Plant a Cover Crop and Get Full Prevent Plant Payments

If the idea is to reduce chances of 2020 prevent plant acres going into prevented planting again in 2021, improve soil health and generate some income by harvesting the cover crop mix on or after November 1st, producers can spend up to \$15-20 (or less) for a cover crop mix along with getting the full prevent plant payments. Yes, they do not have to spend money for planting a cover crops, however, planting an affordable and simple cover crop mix can prove essential for improving long-term soil health and farm profitability. Sometimes it may not even cost anything as some producers may have some spare barley/oats and field pea seed in their bins. Planting 30 pounds each of barley and peas per acre will provide a nice mix of a high carbon crop with a legume. Below are some general mixes for reducing erosion and improving soil health on non-saline-sodic and saline-sodic areas.

Crop	Full Seeding Rate on Its own per acre	Percent of Crop in the mix	Seeding Rate per acre in the Mix
General Three-way Mix for using Excess Moisture, Reducing Erosion and Building Soil Health (non-saline-sodic areas):			
Oats/Barley	60 pounds	34%	20.4 pounds
Chickling Vetch	18 pounds	33%	5.94 pounds
Radish	3 pounds	33%	0.99 pounds
Note: Radishes are a better option for a root crop than turnips if grazing is not an option. However, if planted before July 15 th , radish can go to seed. Wild Buck Wheat also have a chance of going to seed if planted before July 15 th . Also, if Clubroot of canola is a consideration, sugarbeet should be planted instead of radish or any other brassica.			
General Four-way Mix for using Excess Moisture, Reducing Erosion and Building Soil Health (non-saline-sodic areas):			
Barley	60 pounds	25%	15 pounds
Sorghum Sudangrass	30 pounds	7%	2.1 pounds
Field Peas	60 pounds	25%	15 pounds

Sugarbeet	8 pounds	43%	3.44 pounds
Marisol Berti uses 10 pounds of Peas per acre.			
General Two-way Mix for using Excess Moisture, Reducing Erosion and Building Soil Health (saline-sodic areas):			
Barley/Oat	60 pounds	40%	24 pounds
Sugarbeet	8 pounds	60%	4.8 pounds
General Three-way Mix for using Excess Moisture, Reducing Erosion and Building Soil Health (saline-sodic areas):			
Barley/Oat	60 pounds	40%	24 pounds
Sweet Clover	12 pounds	20%	2.4 pounds
Sugarbeet	8 pounds	40%	3.2 pounds
Note: please consult a livestock specialist regarding livestock bleeding issues related to Sweet Clover.			
Four-way Mix for using Excess Moisture, Reducing Erosion and Building Soil Health (saline-sodic areas):			
Barley	60 pounds	20%	12 pounds
Oats	60 pounds	20%	12 pounds
Sweet Clover	12 pounds	20%	2.4 pounds
Sugarbeet	8 pounds	40%	3.2 pounds
Note: please consult a livestock specialist regarding livestock bleeding issues related to Sweet Clover.			

Plant a Cover Crop to Hay or Graze and Get reduced Prevent Plant Payments

If there is an opportunity to generate decent revenue by haying and/or grazing the cover crop, producers can legally harvest the cover crops before November 1st and still get 35% of the “Guaranteed Prevent Plant Coverage”. That will mean that if full prevent plant coverage was 21 bushels per acre and cover crop was harvested before November 1st, producers are still guaranteed 7.35 bushels of spring wheat per acre. So it is a matter of deciding how much revenue could be generated by harvesting the cover crop to make up for losing 13.65 bushels of wheat per acre. However, in order to harvest cover crops before November 1st and still get the 35% prevent plant payment, cover crops need to be planted after the late planting period. In northeast, the final planting date for planting wheat is June 5th. If we add 25 days of late planting period, producers can plant cover crops on the acres where they could not plant wheat on July 1st and claim 35% of the prevent plant payment. If planted this early during the growing-season, one can hay/graze that cover crop in mid-August and can hay/graze the regrowth again in late-September or early-October. If producers can make up for losing 65% of the prevent plant coverage and make some additional profits along with still getting 35% of the prevent plant payments, haying/grazing twice in one-season can do wonders for soil health. Below are some of the general cover crop mixes for haying and grazing.

Crop	Full Seeding Rate on Its own per acre	Percent of Crop in the mix	Seeding Rate per acre in the Mix
General Four-way Mix for Grazing and Haying:			
Forage Barley	60 pounds	25%	15 pounds
Forage Oats	60 pounds	25%	15 pounds
Chickpeas	40 pounds	30%	12 pounds
Turnip	3 pounds	20%	0.6 pounds
Note: If Clubroot of canola is a consideration, mixing brassicas in the mix like turnips should be avoided and could be replaced with sugarbeets.			
General Five-way Mix for Grazing and Haying:			
Forage Barley	60 pounds	15%	9 pounds
Forage Oats	60 pounds	15%	9 pounds
Forage Peas	60 pounds	20%	12 pounds
Millet	30 pounds	30%	9 pounds
Chickpeas	40 pounds	20%	8 pounds
Note: last year, foxtail millet seed was found contaminated with palmer amaranth. Sorghum Sudan can not only replace millet as a warm season crop but it will use more water. However, sorghum can suppress the growth of other crops.			
General Five-way Mix for Grazing and Haying:			
Forage Barley	60 pounds	25%	15 pounds

Forage Oats	60 pounds	25%	15 pounds
Forage Peas	60 pounds	23%	13.8 pounds
Turnip	3 pounds	20%	0.6 pounds
Sorghum Sudangrass	30 pounds	7%	2.1 pounds

Other important points to consider while selecting a cover crop mix:

- Harvesting cover crops here means harvesting for hay, grazing, silage, haylage and baleage and not for grain.
- In order to balance the C:N ratios for faster decomposition of the crop residue, each mix includes either a legume or a green broadleaf.
- Try to add cereals and legumes with broadleaf species for mycorrhizal engagement as broadleaf do not form a relationship with mycorrhizal fungi.
- Flax has very good mycorrhizal relationship, however, if grazed, too much flax seed can create problem for livestock.
- For best results, inoculate legumes before planting. Legumes will use soil N before they start forming nodules so initially they are heavy soil N users. If N has been already applied on PP acres, legumes can use up that N.
- Sorghum Sudangrass is not frost tolerant so should be avoided in early frost areas. Also, Sudangrass suppresses growth of other plants so irrespective of the percent in the mix, do not add more than 2 pounds per acre in the mix.
- If tilled, turnips and radish do not breakdown well.
- If sunflower is added to the mix, do not add more than 1-2 pounds per acre as it suppress the growth of other plants.
- If vetches go to seed then it will be difficult to get rid of them and they can become a problematic weed.
- For specific questions, please contact your County Extension agent.
- Out of the Sorghum Sudangrass and Sudangrass (for example Piper variety), Sorghum Sudangrass uses more soil moisture and produce more biomass. In addition, Sorghum Sudangrass will be taller than Sudangrass.
- At 2 pounds of Sorghum Sudangrass seeding rate per acre, producers do not need to chop the residue and it will breakdown on its own.
- At 3 pounds of Sugarbeet seeding rate per acre, producers do not need to chop the tops off and beets will breakdown on their own.
- Best time to plant camelina is during September 1 to first week of October. If planted before September 1st, it will lose its winter-hardiness.
- Planting corn into a cover crop, which overwinter will create nutrient competition resulting in yield losses. However, if cover crops are planted in strips instead of entire fields, corn can be planted in-between the strips.
- Legume or broadleaf cover crops inter-seeded in 30 inch corn rows generally do not do well. However, if inter-seeded in-between 60 inch corn rows have a higher chance of flourishing.