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**A LITTLE BIT COUNTRY
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Why Winter Wheat

In the mid 80's winter wheat production in Williams County was quite popular. According to the North Dakota Agriculture Statistics Service, crop producers in the county harvested about 25,000 acres in 1986. That was over three times the amount harvested the previous year. I do not remember exactly what influenced producers to plant more winter wheat back then. I do remember that 1987 and 1988 were very dry years and crop yields were at disastrous levels. Anyway, winter wheat acres dropped considerably in 1987 and interest in the crop has never recovered to the 1986 level.

One of my early career mentors told me that almost everything in life has both pluses and minuses. I think that certainly holds true for winter wheat which is typically higher yielding than spring wheat. But this area has made a drastic change from spring wheat to durum wheat production simply because the profit/loss statement has favored durum.

Outside of the profit argument, winter wheat, which is planted in the fall, is more efficient in utilizing spring moisture and early season precipitation. It also spreads out labor requirements of the farm. Then there is the issue of added habitat for wildlife.

Outside of the profitability arguments, the need for sufficient soil moisture to promote good germination has been a limiting factor over the years. Such moisture does not appear to be a problem this year.

Winter wheat survives our cold winters best when planted no-till in crop residue. The residues catch snow which insulates the winter wheat from the extremes in temperature. Planting wheat into wheat stubble is not ideal for disease reasons. Our

drier conditions usually puts our wheat on wheat crops at less risk but growers should be prepared to take action should favorable disease conditions prevail.

The wheat streak mosaic virus received much attention this year, especially in the north central counties of North Dakota. This leaf disease is transmitted by a very small mite who survives on green plant tissues of grassy weed hosts, volunteer wheat and corn. Destroying these sources of food, about two weeks before planting significantly reduces the risk of the disease.

Use a winter hardy variety, especially if you are not planting into residue. Jerry, CDC Bueto and CDC Falcon are varieties for which seed is available in the state and that consistently have shown good winter survival. Accipiter and Peregrine are new varieties from Canada that also have good winter hardiness, although there is probably limited seed available in the state.

Apply phosphorus at or prior to planting. About 10-15 lbs of P with the seed can improve winter hardiness. Excessive Nitrogen prior to winter freeze-up, however, can reduce winter survival.

The optimum planting date for the northern half of the state is September 1-15. The last date that winter wheat can be planted will depend on the weather. The seed must germinate so that the crop will be vernalized by the spring. A larger plant will over winter better than a small seedling. Target the earlier portion of the recommended planting date.

Adequate moisture for establishing winter wheat is often a concern as the soil profile is usually depleted of moisture in the fall. If there is little to no moisture in the soil's surface, planting shallow (1 to 1.5 inches deep) and waiting for rain is recommended.

Generally a seeding rate of 900,000 to 1 million viable seed per acre is adequate. Higher seeding rates may be appropriate if planting late or when planting into poor

seedbeds. Since winter wheat tends to tiller more profusely than spring wheat, 1.2 million seeds per acre is the upper end of the seeding rate I recommend.

Winter wheat can be successfully grown in this area. Yes, there are trade-offs but as farm operations become larger and labor more scarce winter wheat becomes a strong option.