

Yields on Continuously Cropped Land Compared With Yields From Alternate Crop and Fallow

The continuously cropped series of plots set up in 1908 have been continued without interruption for fifty-four years. Yields from this year's trial and average yields for the fifty-four year period, 1908-1960, are summarized in Table 14.

This experiment has shown spring plowing to be a better tillage method for this area than fall plowing. When spring plowing is practiced, the grain stubble is left standing during the winter months to catch and hold snow which helps provide moisture for germination and early growth of the crop in the spring. This is perhaps one of the biggest reasons for differences in production from these two tillage methods.

Local spots of gumbo or heavy clay soil and small areas of river bottom land that dry out slowly in the spring are the exceptions that may require fall plowing in western North Dakota.

At the present time, continuous cropping of small grain is neither recommended or practiced to any extent in this area. Alternate cropping and fallow is a common practice over much of the region, but in the past few years this practice has been replaced by many farmers with a corn-grain rotation which is a more productive cropping sequence if the corn crop is utilized as silage.

Table 14. Small Grain Yields on Continuous Cropping - 1960						
Crop	Yield in Bushels Per Acre					
	Spring Plowed		Fall Plowed		Alternate Fallow	
	1960	53 Yr. Av.	1960	53 Yr. Av.	1960	53 Yr. Av.
Wheat	8.0	11.4	8.2	10.5	18.2	18.8

Oats	33.0	26.2	31.0	23.7	18.5	44.1
Barley	5.0	17.2	7.1	15.8	13.9	24.2

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