

Annual Cropping may be a possibility in Morrow County

Many farms in southern Morrow County may have the potential for annual cropping during years of favorable moisture. Generally, this portion of the county has shallow soils (about two feet deep), receive 12 inches or more annual precipitation, and is in a wheat-summer fallow rotation. During average or above average moisture years, farms meeting the above criteria should evaluate their recropping potential. The following soil series fall into the adapted recrop area: 1) Valby silt loam, 2) Morrow silt loam, 3) Waha silt loam. The Valby series is probably marginal for recropping, while the Morrow and Waha series have a higher potential.

Collectively, these three soils have unique management problems. The soil surface textures are heavy silt loams grading into silty clays in the subsoil. Because of this, crusting and sealing at the soil surface has to be dealt with. Farmers combat the problem by using tillage to keep the soil loose. Often, by seeding time, tillage has left inadequate residue cover for erosion protection. Another management problem is that these soils tend to stay wet in

the spring, making early seeding difficult. Finally, most of the Morrow and Waha soils are on slopes above 10 percent, so the water erosion hazard is particularly severe during summer fallow.

The decision to recrop should begin after harvest. The reason for this is to examine the soil for restrictive layers. If a field has been traditionally worked wet, it may be wise to evaluate the soil's condition. Tillage pans are established when the ground is worked above 75 percent of field capacity. For a silt loam, this soil moisture percentage leaves your hand moist when a sample is

squeezed. A severe tillage pan will direct the majority of roots to grow along the pan's face. This condition should be treated by ripping or chiseling to fracture the restriction. As effectively as a pan can stop roots, it also reduces soil moisture intake.

If the soil appears in good condition after harvest, the best way to store the maximum amount of soil water is to leave the stubble standing over winter.

Standing stubble deflects evaporating winds and traps snow. Research has shown that a 12 inch stubble height withstands a 13 mph wind without appreciable air movement at the ground surface. With bare ground, only a slight breeze removes soil moisture.

Moisture storage in the soil profile should be checked by the end of February or in March. Soil Conservation Service field officers have charts available which relate squeezing a soil sample in your hand to percent soil moisture. This simple method gives an immediate answer as to whether recropping is feasible or not. If each foot in the soil profile is at or near field capacity, then additional soil moisture will not be gained by fallowing.

The Soil Conservation Service is excited about the prospects of annual cropping in Morrow County. If previously summer fallowed ground can be annual cropped, then the impact on reduced soil erosion will be tremendous. The length of time land is vulnerable to erosion without fallow is greatly diminished. Furthermore, with recropping, there is potential for no-till farming. The technology of no-till is changing rapidly, and it will become progressively better adapted over a broader range of seeding conditions.

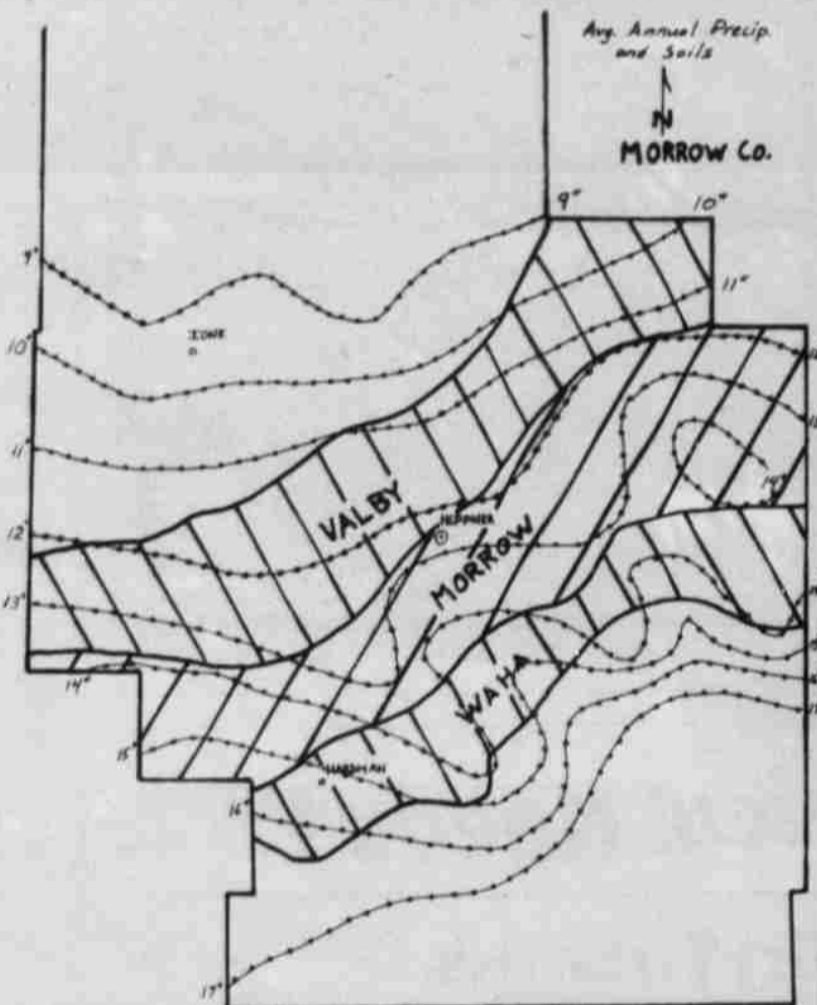
Miller & Sons announces completion of No-Till Drill

Miller and Sons Welding in Heppner announces the completion of their No-Till Drill. Research on the drill began last fall and the construction started in January. According to Joe Miller, owner, the drill will be ready for rental purposes in two weeks.

The Millers' No-Till Drill construction was based on the Pendleton Agricultural Experiment Station's experimental drill. The

specs include Three Ranks, 10 inch spacing with 30 inches between them for stubble clearance. It also has Split Packer wheels which packs dirt alongside the seed but won't seal over the plant.

"The main idea for all of this is it's cost effective by reducing the number of tillage operations," said Miller. "It also reduces soil erosion."

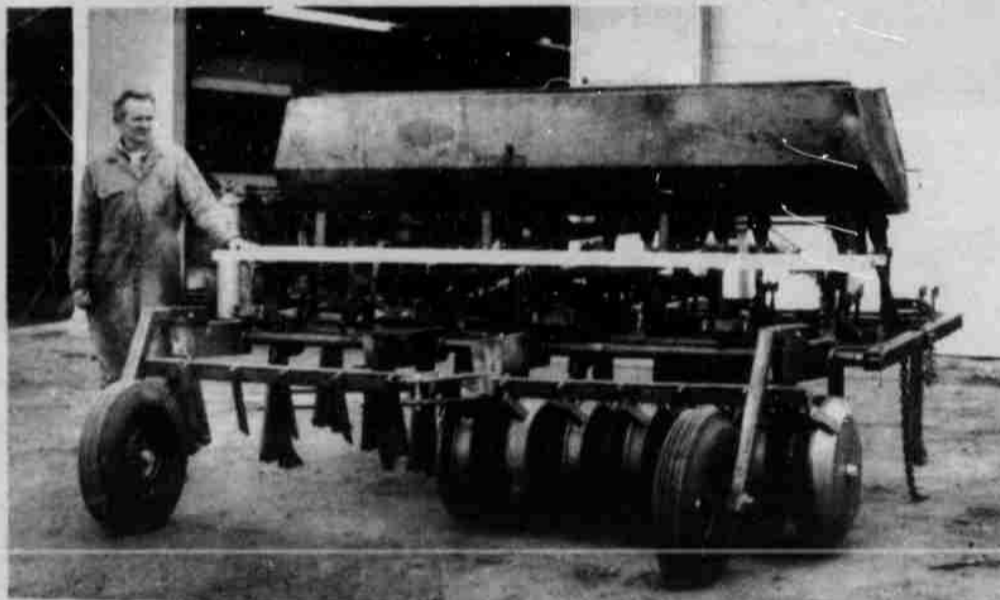


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