

## Summary

In the Souris River area, hay and pasture crops of bromegrass and alfalfa used water from the soil at a rather steady rate throughout the growing season. However, the grain and row crops had a period of peak consumption sometime during their growth.

From 1953 through 1955 the average consumptive use was 22.5, 18.2, and 18.7 inches for alfalfa, corn, and potatoes, respectively. Barley had an average consumptive use of 14.0 inches for 1954 and 1955, while bromegrass used 28.1 inches in 1955.

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## STUDY OF GRAIN STORING REGULATIONS AVAILABLE

The North Central Grain Marketing Technical Committee, representing all important grain producing states, has completed a study of state grain warehousing regulations. It is believed that important changes in grain storage conditions, not reflected in warehouse regulations, had occurred since the war. A series of large grain crops resulted in considerable quantities of grain put in storage. Prevailing high prices meant that the dollar value of the huge quantities of stored grain assumed a much greater economic importance than in pre-war years.

Demand for space brought into use new and sometimes untried types of storage facilities and conditioning equipment. The large scale federal price support program introduced new elements, such as lengthier storage periods, that were not present when state regulatory procedures were initiated. The question of the adequacy of present day state regulations in the light of these conditions prompted this inquiry.

This survey of present-day grain storage regulations in the North Central States indicated that, except in Ohio and Indiana where no regulation is attempted, control is accomplished by licensing systems, augmented by fidelity bonds, warehouse receipt control, periodic inventory reports and, less commonly, inspection of physical facilities and measurement of stocks.

The outstanding features of these regulatory measures are described in North Central Regional Publication No. 68, Bulletin 375. This bulletin may be obtained from the Bulletin Room, North Dakota Agricultural College, Fargo.

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## STARTLING NEW HERBICIDE

The chemical 3-amino-1, 2, 4-triazole, tested for the past two years by this and other Experiment Stations, is now on the market under such trade names as Weedazol and Amino Triazole. According to Dr. E. A. Helgeson, botanist at this station, "This is a translocated, non-selective herbicide which appears to be effective on perennial weeds, grasses, cat-tails and brush.

"Rates vary from eight pounds per acre on Canada thistles and leafy spurge to 12 pounds or more for buckbrush. Since there is no residual effect on soils, treated areas may be plowed two or three weeks after spraying and a crop may then be treated. Best control of quackgrass results when sprayed areas are plowed as soon as the grass shows a white color. Brush is slow to show this evidence of bleaching effect," says the botanist.

He warns that these new herbicides should not be used on food crops, nor on areas grazed by livestock.