6

A framework of four two-inch by four-inch studdings was erected around the silo. A 42 inch high woven wire netting was attached to this framework so that a space of at least two feet was left between the wire netting and the silo wall. This space was filled with well-packed flax straw as it was delivered from a spike-toothed combine cylinder.

The same method of insulating was used during the second season of the test. The method of installing the thermocouples was changed. Special copper-constantan wire was used which had a covering that was resistant to silage acids. This thermocouple wire was installed without the use of the pipe. A series of thermocouple wires was located at levels six feet, 10 feet, 22 feet, and 26 feet from the ground. At each of these levels, thermocouple junctions were located on a diameter from 20 degrees west of south to 20 degrees east of north. The thermocouple junctions were located on the southwest end of the diameter at the silo wall, six inches, 10 inches, 14 inches, and 18 inches from the silo wall and in the center of the silo. A record of the temperature at each of these points was taken the second year. Sample temperatures that existed in the silo at four different times during each year are recorded in Figures 1 and 2. The diagrams also illustrate the location of the insulation.

Findings

The practical results of these tests were unsatisfactory, if measured from the standpoint of the ability of the insulation to eliminate freezing in the silo. The silage froze to a thickness of approximately 14 inches around the perimeter of the silo. The insulation seemed to slow up the freezing action to a very small degree, but it was so small it was difficult to measure. About the same amount of silage froze to about the same degree in both the insulated and uninsulated sections of the silo. It was observed that little or no thawing occurred in the insulated part of the silo on warm days. On the same days, considerable thawing could be observed in neighboring silos that were uninsulated. These facts seem to indicate that it would be undesirable to use insulation on upright silos. A statistical analysis of the data indicated that there was not a significant difference in the temperatures in the silage in the part that was insulated, as against that which was uninsulated.

Other methods of managing frozen silage were tested in the project. These results will be reported in the Bimonthly Bulletin at a later date.

Steady prices for farm land in the last half of 1955 are expected by most real estate men. So reports the National Association of Real Estate Boards on the basis of a recent survey. Real estate boards in 217 areas participated. Sixty-four per cent of the boards expected present prices to continue; 23 per cent were set for a price drop on farm acreage; 13 per cent looked for higher prices. The survey also found that desirable residential and industrial land near cities is increasingly scarce, with prices steady to rising.