

An installation of an insulated pump enclosure installed out in the open has been made on the college farm. Records will be obtained on its operation during the next winter.

CHART I

Thermocouple Locations (See Figure 1)												
Date	A <sub>2</sub>	E <sub>2</sub>	C <sub>2</sub>	A <sub>4</sub>	B <sub>1</sub>	C <sub>4</sub>	A <sub>6</sub>	B <sub>1</sub>	C <sub>6</sub>	D	D <sub>1</sub>	D <sub>2</sub>
1/3	36.5	36.5	38.0	37.0	37.5	37.5	46.0	47.5	47.5	38.5	39.2	44.0
1/10	42.0	41.5	41.5	50.0	50.0	50.0	51.0	49.0	40.5	43.0	46.0	46.0
1/17	47.5	46.5	45.0	49.0	48.0	48.0	49.5	49.5	50.5	39.0	43.5	46.7
1/26	Readings not obtained because of failure of equipment											
1/31	43.5	46.0	46.0	47.5	47.5	47.0	50.0	50.0	50.0	36.7	42.0	45.0
2/6	38.5	42.0	44.0	44.0	45.0	45.0	46.0	48.5	48.5	36.5	38.5	38.5
2/13	44.0	44.0	44.0	45.0	45.0	46.0	52.0	52.0	52.0	37.0	40.5	45.0
2/21	43.0	43.0	43.0	46.5	46.5	45.5	46.0	46.0	46.0	36.5	39.0	42.0
2/28	48.0	48.0	48.0	49.0	49.0	48.5	53.0	52.0	50.0	39.0	39.5	41.0

Soil Temperatures in Degrees F At The Various Thermocouple Locations  
January 3--February 28, 1949

### REPRINTS AVAILABLE

Two reprints of considerable interest to North Dakotans, especially to farmers, county agents and agriculture teachers, can be had (single copies only) without charge, by writing the bulletin room, North Dakota Agricultural College, Fargo.

One of these is "Biology and Control of the Sweet Clover Weevil," by J. A. Munro, M. A. Leraas and W. D. Nostdahl, all of NDAC. The discussion of occurrence, degree of invasion and effect on the clover all revolve about North Dakota studies, making it especially interesting to persons living in this state.

A reprint from North Dakota History, July 1949, is also available in the bulletin room, for single copy requests. "Grasshopper Outbreaks in North Dakota," by J. A. Munro covers research over records of 140 years. Dr. Munro lists dates and places of occurrence, intensity and control methods used, in the period 1808 to 1948.

### ELECTRONIC LIVESTOCK SCALE

With a heavy volume of beef cattle and hog transactions and marketing, North Dakotans will find interest in a near-errorless and highly accurate electronic scale for weighing livestock at public markets. It was developed by an aircraft company working under contract with USDA. The livestock branch of PMA supervised the work, which was carried on under the Research and Marketing Act. The scale can register only the weight of the load actually on the platform, is accurate to within five pounds on loads up to 32,000 pounds, and shows weights on a dial readily readable 10 feet away. Read "Scale Magic Comes to Livestock Marketing," in NEWS FOR FARMER CO-OPERATIVES, August issue. You can get it from Farm Credit Administration.

### FOR HOG MANGE

Two new spray materials—benzene hexachloride and chlordane—have proved effective in control of mange on hogs, says Herbert M. Barnes, swine specialist at Ohio State University. Either of the compounds, now available commercially, may be used as a high pressure spray, as a knapsack sprayer or as a dip. He warns farmers, however, not to use more than the 25 per cent recommended spray concentration.