

Table II

Boron Content of Various Crops Compared With Literature Values		
Crop	North Dakota ppm Boron	Literature ppm Boron
Potato leaves N. W., N. Dak.	38 32	22-50 (Wisconsin)
Sugar Beet Root	13	10-16 (U. S., Russia)
Alfalfa	44	29-50 (Canada, Russia)

The Boron content of these three crops was comparable to that reported from various sources in the literature, therefore, there appears to be no boron deficiency in the areas surveyed.

NORTH DAKOTA CO-OPERATIVES CO-ORDINATE TRANSPORTATION

A Review

North Dakota Co-operatives Co-Ordinate Transportation for Economy and Service is the title of Miscellaneous Report 132 recently published by the Co-operative Research and Service Division of the Farm Credit Administration under the authorship of Leonard N. Conyers and Robert J. Byrne. This is a report of the operations of the Farmers Union Federated Co-operative Shipping Association of Minot, North Dakota, in their co-ordinated two-way haul transportation program. This federation now has 44 member co-operative associations of which 36 are listed as local oil associations, 4 as local elevator associations, 2 as local livestock shipping associations, 1 as a local grain association, and 1 as a central exchange. The Summary and Conclusions list as achieved results: development of an adequate, efficient, and dependable transportation service for its farmer patrons; pick-up and assembly service for livestock; elimination of discrimination between large and small shippers; reduction of transportation costs; prompt payment for livestock killed or injured in transit; reduction of time in transit for livestock; and personalized service to patrons.

The publication contains a consolidated statement of hauling operations for the years of 1942 to 1948 inclusive, expressed in terms of dollars. The statement indicates that the total receipts have increased from \$37,915 in 1942 to \$108,223 in 1948. Some of this increase undoubtedly is due to the increase of the value of the commodities hauled. The report does not give a clear-cut indication of the volume of farm supplies handled on the back haul as compared to the volume of livestock hauled to the South St. Paul livestock market. All of the livestock hauled is marketed through the Farmers Union Livestock Association of South St. Paul. The West Fargo livestock market is not mentioned in the report so apparently none of the livestock is hauled to the Farmers Union Livestock Association at West Fargo, North Dakota. The report would indicate that the Farmers Union Federated Co-operative Shipping Association is set up to co-ordinate the movement of livestock and farm supplies in and out of St. Paul and that no such co-ordination is attempted for nearer livestock markets. (Perry V. Hemphill, Associate Agricultural Economist)