



NORTH DAKOTA
Farm Research

Bimonthly
Bulletin

Vol. 28, No. 1

September - October, 1970



Creep Feeding Calves . . . page 22

From the DIRECTOR



A. G. HAZEN

Before recorded time, the family of man paused each autumn for rites of joy and gratitude for the bounty of Nature. Spontaneous ceremonies marked the completion of his harvest from field, farm, forest . . . from lakes, streams and seas.

This compelling impulse became part of tribal or religious custom beyond the reach of human memory. Harvest Festivals—whether for grapes that make wine, grain for bread, or fish or meat for the larder—are celebrated by most people of the world.

Following the Egyptians and those before them, the Greeks incarnated the concept in a goddess, Demeter, and paid her homage. The Romans called her Ceres, for whom cereals were named. Bread came to symbolize all food and the dependence of man upon the soil, the rain, the sun, the seasons and the labor of agriculture.

Bread thus signifies the reaping of all crops, of meat, milk and food itself, a meaning expressed in prayer, "Give Us This Day, Our Daily Bread . . ." The thought gains greater import every day as governments around the world become increasingly concerned with problems of feeding the hungry and malnourished, at home and abroad.

In token of such values, the tradition was revived in West Germany almost 20 years ago . . . in a "Day of Bread." The observance spread to other countries of the Continent, to the Americas and the Far East. The "Day of Bread" is viewed as a contribution to human understanding, person-to-person, and international communication—to a degree that transcends all boundaries of country, creed or politics.

Sponsors of the "Day of Bread" in the United States plan simultaneous luncheons in Washington, the 50 state capitols, and possibly abroad, for leaders in agribusiness and government, with press coverage and the free exchange of information—on the national and world food supply, the economics of food, the importance of good nutrition, or the problem of food distribution, malnutrition and hunger.

The International "Day of Bread" . . . a reminder of Man's dependence on the bounty of Nature and his gratitude for the annual harvest of farm and field .

In This Issue

Organization of Farms and Land Tenure in the Red River Valley	3
Controlled Mating in Beef Cows	6
An Evaluation of Farmers' Attitudes Toward Farm Policy	8
Solute Movement in Soils: 1. Leaching of Nitrates in Irrigated Fallow Soil	15
Water Quality and its Effect on White Fabrics	18
Creep Feeding in Western North Dakota and Subsequent Feed Lot Performance	22
A Summary of Interviews With Owners of Radial Ply Tires	23
Author Index of Volume 27, FARM RESEARCH	25
Productivity of Selected Breeds and Crosses of Sheep: 1. Experimental Ewes	26

On The Cover: Creep feeding means heavier calves at weaning, according to creep feeding research at the Dickinson Experiment Station. One of the Angus calves in the University herd takes his turn at the creep feeder.



Vol. 28, No. 1

September - October, 1970

A BIMONTHLY progress report published

by the

**Agricultural Experiment Station,
North Dakota State University of
Agriculture and Applied Science**

Fargo, North Dakota 58102

Arlon G. Hazen

*Dean of Agriculture, and Director
of Agricultural Experiment Station*

EDITORIAL ADVISOR

H. Roald Lund

EDITORS

J. J. Feight

Dorothea McCullough

James A. Berg