

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Roman L. Hruska U.S. Meat Animal Research
Center

U.S. Department of Agriculture: Agricultural
Research Service, Lincoln, Nebraska

1982

Beef Research Program Progress Report No. 1 (1982): Table of Contents

Follow this and additional works at: <https://digitalcommons.unl.edu/hruskareports>



Part of the [Animal Sciences Commons](#)

"*Beef Research Program Progress Report No. 1 (1982): Table of Contents*" (1982). *Roman L. Hruska U.S. Meat Animal Research Center*. 29.

<https://digitalcommons.unl.edu/hruskareports/29>

This Article is brought to you for free and open access by the U.S. Department of Agriculture: Agricultural Research Service, Lincoln, Nebraska at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Roman L. Hruska U.S. Meat Animal Research Center by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Beef Research Program

Progress Report No. 1

**Roman L. Hruska
U.S. Meat Animal Research Center**

**In cooperation with
University of Nebraska College of Agriculture
The Agricultural Experiment Station**

**Agricultural Reviews and Manuals
Agricultural Research Service
U.S. Department of Agriculture**

**ARM-NC-21
April 1982**

Mention of a trade name, proprietary product, or specific equipment does not constitute a guarantee or warranty by the U.S. Department of Agriculture and does not imply its approval to the exclusion of other products that may be suitable.

Published by Agricultural Research Service
North Central Region
U.S. Department of Agriculture
2000 W. Pioneer Parkway
Peoria, IL 61615

CONTENTS

ROMAN L. HRUSKA U.S. MEAT ANIMAL RESEARCH CENTER, Robert R. Oltjen	iii
BREEDING AND GENETICS	
Sixteen years of selection for weaning weight, final weight, and muscling score in Hereford cattle: Robert M. Koch, Larry V. Cundiff, and Keith E. Gregory	1
Effects of heterosis in Hereford, Angus, and Shorthorn rotational crosses: Larry V. Cundiff, Keith E. Gregory, and Robert M. Koch.	3
Heterosis and breed maternal and transmitted effects in beef cattle: Keith E. Gregory, Larry V. Cundiff, and Robert M. Koch.	6
Characterization of breeds representing diverse biological types: preweaning traits: Keith E. Gregory, Larry V. Cundiff, and Robert M. Koch	7
Characterization of breeds representing diverse biological types: postweaning growth and puberty of females: Keith E. Gregory, Larry V. Cundiff, and Robert M. Koch	9
Characterization of breeds representing diverse biological types: postweaning growth and feed efficiency: Larry V. Cundiff, Robert M. Koch, and Keith E. Gregory	11
Characterization of breeds representing diverse biological types: carcass and meat traits of steers: Robert M. Koch, Larry V. Cundiff, and Keith E. Gregory.	13
Genetic variation among and within herds of Angus and Hereford cattle: Larry V. Cundiff and Keith E. Gregory	16
PHYSIOLOGY AND REPRODUCTION	
Conception and embryonic development in the beef female: Ralph R. Maurer, Sherrill E. Echternkamp, and William F. Pope	17
Blood flow to the uterus: Sherrill E. Echternkamp and Stephen P. Ford	19
Effect of pregnancy on disease resistance: Rita C. Manak	22
Preliminary observations on the immune status of newborn normal and weak calf syndrome calves: Rita C. Manak and William G. Kvasnicka	23
Decreasing the postcalving anestrous period in suckled beef heifers: Sherrill E. Echternkamp	24
Testicular development and onset of puberty in beef bulls: Donald D. Lunstra	26
Sexual aggressiveness in beef bulls: Donald D. Lunstra	28
Performance characteristics of feedlot bulls and steers implanted with Estradiol-17 β : Bruce D. Schanbacher and Ronald L. Prior	29
NUTRITION	
Blood flow and nutrient uptake of the bovine uterus and fetus: Calvin L. Ferrell, Ronald L. Prior, Ronald K. Christenson, and Stephen P. Ford	30
Effect of breed and postweaning rate of gain on onset of puberty and productive performance of heifers: Calvin L. Ferrell.	31
Elfazepam and Synovex-S influences on growth and carcass characteristics of steers fed two dietary energy levels: Ronald L. Prior, John D. Crouse, and Virden L. Harrison	33
Energy utilization by mature cows: Calvin L. Ferrell and Thomas G. Jenkins	34
Lipid synthesis in the beef animal: Ronald L. Prior and Stephen B. Smith	34
MEATS	
Chemical composition of carcasses from Hereford, Limousin, and Simmental crossbred cattle as related to growth and meat palatability: John D. Crouse and Michael E. Dikeman.	36
Evaluation of traits in the USDA yield grade equation for predicting beef carcass cutability in breed groups differing in growth and fattening characteristics: John D. Crouse	37
Estimation of retail product of carcass beef: John D. Crouse	39
Relationship of selected beef carcass traits with meat palatability: John D. Crouse	40
AGRICULTURAL ENGINEERING	
Methane and protein from beef cattle manure: Andrew G. Hashimoto, Yud-Ren Chen, Vincent H. Varel, and Ronald L. Prior.	42
ANIMAL HEALTH	
Cooperative project on the weak calf syndrome: William G. Kvasnicka	43