

Field Trip: U.S. Meat Animal Research Center

Roman L. Hruska U.S. Meat Animal Research Center
government-sponsored research center in Clay Center, Nebraska where scientific information and technology concerning meat processing, food sanitation and breeding genetics are developed and studied; focuses on problems related to cattle, sheep and swine

Agricultural Research Service (ARS)
U.S. Department of Agriculture's in-house research agency

Scientific Method
step-by-step structured procedure for answering questions and solving problems; steps include: 1) observe; 2) hypothesize; 3) predict; 4) verify; 5) publish

Confinement Production
method in which animals are kept in pens or barns and are fed and aided in giving birth

Pasture-based Management
method in which animals are kept in a pasture, live off grazing and are not aided in giving birth

Ruminant
hooved animal which digests food in two processes: eating and chewing cud; examples include sheep, cattle, goats, llama and deer

Cud
partly digested food returned from the first stomach of ruminants to the mouth for further chewing

Silage
fermented, high-moisture animal feed made of hays harvested while green

Genomics
process of mapping, analyzing and sequencing genomes

Genomes
genetic makeup of an organism shown through DNA

Batch Farrowing
breeding in groups so births occur at the same time

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Artificial Insemination

process of collecting semen from a male and inserting it into a female's uterus

Uterine Capacity

number of babies a mother can carry in her uterus to term successfully

Birthrate

ratio between births and individuals in a specified population and time

E. Coli

bacteria which lives in the large intestine of animals and can cause illness in humans after contact with contaminated animal hide or consumption of contaminated food or beverages, causing it to be a major health concern for food industries

Pre-harvest

time an animal spends at the production facility before being taken to the slaughter plant for processing

Post-harvest

time after an animal leaves the production facility to go to the slaughter plant to be processed

Yield Grade

amount of red meat available on a carcass considering the amount of fat and bone within the carcass

Marbling

fat within the muscle which increases tenderness

Ribbing

action of taking a rib eye directly from the whole carcass