ISU Dairy Farm Update 2013 (a Pictorial)

A.S. Leaflet R2886

Joe Detrick, ISU Dairy Farm Superintendent; Leo Timms, Morrill Professor of Animal Science

New ISU Dairy Farm: The Beginning (Nov. 25-27, 2007)

Lactating cow freestall barn

450 cows (390 milking); 400 youngstock
78% milk, 3X with no BST
25,400 # RHA milk; SCC 180-230,000
25 year milk quality award: Swiss Valley Farms
9 cows / 3 heifers as “elite” (top 1% NMS)
6 full time staff, 4 part time, 37 students

Calan gates: Diane Spurlock
Genetics of feed efficiency: USDA NRI grant
400 cows; $5 million; joint with Scotland
2nd Multistate study!!!
Don Beitz: By pass fat via yeast: healthy milk?
Lance Baumgard: Zinc metabolism / ract.
4 other industry projects
Probiotics & Johnes / peptides & feed efficiency
Effects of distillers grains: product quality/taste
“LEAKY GUT” Baumgard
2 USDA grants

Lactating Barn south side

NATIONAL DAIRY FARM PROGRAM

Lactating cow freestall barn

Research
- Genetic energy metabolism and feed efficiency
  Dr. Diane Spurlock
- Transition Cow Nutrition / Heat Stress / Zinc metabolism
  Dr. Lance Baumgard
- Heat stress and adipose metabolism (Spurlock, Baumgard)
- Feeding cows and healthy milk / By-pass fat delivered via yeast
  Dr. Don Beitz
- Strategies for foot health: pain mitigation/blockeets
  Dr. Suzanne Millman
- Separated manure solids for bedding Dr. Leo Timms

Double 12 parlor

Research
- Teat dip efficacy trials (Timms)
- Winter teat dip trials (Timms)
- Genetic tools and clinical mastitis (Gorden)
- Non-Antibiotic therapy for mastitis (Timms)
- New vaccines for mastitis (Gorden)
- Therapy response for coliform mastitis
- Vaccines and milk production losses

Classes
- An 335 Dairy Cattle Evaluation (Kilmer)
- An 344 Dairy Systems Mgmt. Dr. Howard Tyler
- AnSc 322 Repro Lab (Anderson)
- AnSc 334 Embryo Transfer (Young)
- VDPAM 418 Advanced Ruminant Nutrition (Gorden, Golf, Leuschel)
- VDPAM 416 Repro (Phillips)
- VDPAM 479 Food Animal Field Service (Gorden)
- AnSc 322 Repro Lab (Anderson)
- AnSc 334 Embryo Transfer (Young)
- AnSc 479 Food Animal Field Service (Gorden, Golf, Leuschel)
- AnSc 475 Farm Animal Production Systems
- VDPAM 340 Clinical Foundations
- VDPAM 416 Repro (Hopkins)
- VDPAM 479 Food Animal Field Service (Leuschel)
- VDPAM 491 Advanced Ruminant Nutrition (Gorden, Golf, Leuschel)
- VDPAM 494 Intro / Advanced Dairy Production Medicine