

Creating Consistent Systems COWS



Ted Probert

University of Missouri Extension Dairy Specialist

Hartville, Missouri



Defining Dairy Production Systems

Conventional System (confinement)

- * High input
- * High per cow yield
- * Emphasis on ration management
 - * TMR
- * Free stall housing
- * Year round production
- * Emphasis on cow comfort

Pasture-based System

- * Low input
- * Low to moderate per cow yield
- * Emphasis on forage management
 - * Pasture
- * Minimal housing
- * Seasonal production
- * Cow must perform on pasture



Traits of Importance

Conventional Management

- * Yield
- * Udders
- * Feet and legs
- * Tendency toward large size
- * Health traits
- * Reproductive efficiency



Pasture-based Management

- * Reproductive efficiency
- * Mobility
- * Small to moderate size
- * Grazing efficiency
- * Heat tolerance
- * Yield
- * Health traits



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Creating Consistent Systems

Cows

Does the cow matter?



The cow needs to fit the environment (system) in which she is expected to perform.



Creating Consistent Systems

Cows

Does the cow matter?



Hybrid Systems

- **Periodic Grazing**
- **Partial TMR**
- **Housing**



The cow needs to fit the environment (system) in which she is expected to perform.



Common Characteristics of Successful Systems (Cows)

- * **The system is clearly defined**
 - * Maximize grazing or Hybrid (periodic grazing)?
 - * Partial TMR?
 - * Batch calving and seasonal production?
 - * Milk market considerations
 - * Housing?
- * **Desired phenotype is identified based upon system characteristics**



Common Characteristics of Successful Systems (Cows)

- * Plan is developed to achieve the desired phenotype
 - * Clearly defined breeding goals are in place

I. Breed selection

- * Climate
- * Milk pricing
- * Batch calving?
- * Personal preference



Common Characteristics of Successful Systems (Cows)

2. Crossbreeding

- * Utilize a systematic X-breeding program
- * Use two or three breeds complimentary to the system
 - * Two breed rotation
 - * Sustains 67% of heterosis of F_1
 - * Three breed rotation
 - * Sustains 86% of heterosis of F_1



Common Characteristics of Successful Systems (Cows)

3. Selection

- * Establish selection criteria and stick to them
- * Concentrate on traits that are of economic importance to the overall farm system
 - * Trait prioritization will vary based upon farm goals and breeding goals



Creating Consistent Systems

COWS

- * The cow needs to fit the environment (system) in which she is expected to perform.

- * **Conventional wisdom**

The system will dictate the type of cow needed in a dairy operation.



Dix-Lee Guernseys Keith & Katie Dixon Phillipsburg, MO



Dix-Lee Kojack Vanity is EX 91.
Grand Champion at MO State Fair 2013



Dix-Lee Kojack Design EX 90.
3-05 242D 17,957M 869F 664P.
#29 on the Aug 2013 AGA CPI list



Summary

* **Operators of successful dairy production systems:**

1. Develop goals pertaining to what they expect to accomplish with the dairy enterprise
2. Develop further goals pertaining to what they expect the cow to accomplish within the overall system
3. Take deliberate measures to program the cow genetically to accomplish these goals
4. Utilize pasture as an economical method of supplying some percentage of herd nutritional requirements



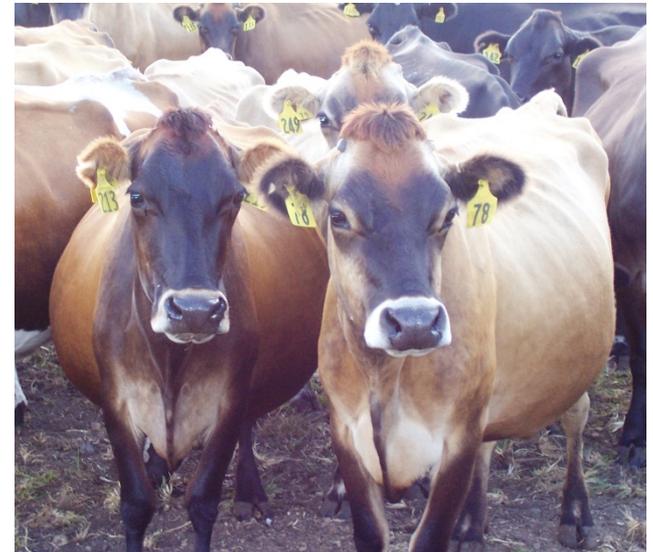
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The genetic makeup of a cow is determined at insemination and set in stone for the rest of the animal's life.

The decisions you make while developing your breeding program are decisions you'll live with for years to come.

Take the time to choose wisely.



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