

## Raising Fiscally Responsible Replacements!

Winter Dairy Management '08



January 21 – Richfield Springs

January 22 – Saratoga Springs

January 23 - Randolph Ctr., VT

January 24 – Chazy

January 25 – Carthage

January 28 - Geneva

January 29 - Batavia

January 30 - Pike

January 31 – Randolph, NY

February 1 -- Cortland









To:







For the "loan" of: Jenny Mills Dr. Bill Stone & Dr. Doug Waterman

This project could not have been pulled off without their help and all of the folks below:

## Site Managers

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Special thanks to the folks at Midland BioProducts for upplying both the Colostrum and IgG (used on Case Farms, see back) Quick Test Kits!



## Whole Blood and Plasma Calf IgG Midland Quick Test Kits®

US Patents 6,245,577 and 6,660,534

A simple and fast method for assuring passive immunity in the blood of a newborn calf.

#### The Midland Quick Test Kit® cassette:

- Self contained with lateral flow pads
- Easy to use and read at any temperature
- In a moisture protective foil pouch that is stable at room temperature
- Needs no refrigeration
- 3 Year shelf life from date of manufacture

#### The kit is provided with:

- A pre-measured dilution buffer
- Disposable pipette tips 200 microliter pipetter sold separately (Catalog no. 0019)]
- A control line at "C" if the test is working
- Step by step instructions
- Packaged as 6 tests, 12 tests and 24 tests

#### Easy to read results: One line at "C" position: Control is working and IgG is above recommended amount One line at "C" and one line at "T" positions: IgG is less than recommended amount greater than less than 10 mg/mL of IgG 10 mg/mL of IgG IgG is Adequate IgG is Indequate C C = Control Line T = Test Line т T s ( s ( ) S = Sample Well

## Midland Quick Test Kits® and IgG test levels:

## Colostrum Bovine IgG Midland Quick Test Kit®

US Patent Nos. 6:245,577 and 6:660,534

#### Importance of High Quality Colostrum in the Newborn Calf

#### Provides Disease Protection

Ingestion of the first and second colostrum protects the calf from disease in its first 24 hours of life until its own immune system develops fully over several weeks. The first colostrum is the key source of maternal immunoglobulins (Ig) and nutrients to protect the newborn calf from disease. Giving 3 to 4 quarts of colostrum in the first few hours of life is recommended.

#### Nutritional

The first Colostrum is a rich source and a high concentration of minerals and vitamins, protein, fat, casein and the immunoglobulin content for passive immunity.

#### Management of Colostrum

This includes determination of colostral quality, timing and amount of colostrum administered, and the proper storage of quality colostrum for emergency needs.

#### A Simple and Fast Method for Identifying IgG Levels in Bovine Colostrum

You need only a small sample of colostrum drawn from the cow's first colostrum; this is mixed with the dilution liquid provided in the kit.

Next, with the second pipette provided, place several drops of the diluted sample in the sample well of the cassette. (Make sure the cassette is on a flat surface for even liquid flow.)

In less than 20 minutes, the appearance of a horizontal line in the Control (C) position on the strip tells you that the test is working. A line appearing in the Test (T) position will indicate if the IgG level is inadequate. If NO line appears in the Test (T) position, this indicates that the IgG level is adequate.

See illustration below.

# Bovine IgG Midland Quick Test Kit®

\* Muliturive measure of immunity levels in the cow's colostrum.

#### The Colostrum Bovine IgG Midland Quick Test Kit® cassette is:

- Self contained lateral flow device
- Easy to use and read at any temperature
- In a protective foil pouch that is stable at room temperature
- A control line at "C" if the test is working
- Shelf life is good for 3 years from date of manufacture
- Available packaged in your choice of

#### Easy to Read Test Results:

One line: Control Line only, control is working and Greater than 50 mg/mL of IgG in the colostrum - Adequate

Two lines: Control Line and Test Line Less than 50 mg/mL of IgG in the colostrum - Inadequate





C = Control Line

## **Winter Dairy Management '08 Agenda**

## **Agenda Topics: ★Welcome**, Introductions – Site Manager/Host 10:00 10:10 \*Navigating the DQA Best Management Practices Guide, Heifer Target Graphs/Charts. and Calf Manager CD. Your numbers — Heifer Management Snapshot (Conway) \*Replacement Program and its Importance to the Dairy (Karszes, Wickswat) 10:25 10:55 \*Case Farm "Photo Tour" of Replacement Heifer Facilities (Case Farm) (at end of each of these next presentations, finish with relevant Case Farm data and discussion) **★Managing Newborns Extremely Well, the Best Investment You'll Make!** 11:15 (Van Amburgh, Mills with Stone and Waterman as presenters) 11:45 \*Harnessing the Biology of Growth for Your Mutual Well-being. Targets Guarantee Momentum. (Van Amburgh, Mills with Stone and Waterman as presenters) 12:15 Lunch (towards end – live demo of Calf Manager CD) \*Housing Principles and Options that Work (Gooch, Vokey) 1:00 1:50 ★Heifer Health & Disease - tipping the scale in our favor (Bertoldo, Smith) \*Heifer Reproduction - a challenge with a payback (Bertoldo, Smith) 2:30 2:50 \*Improving Your Replacement Program, Where to Start, (Karszes, Wickswat)

# HEIFER GROWTH AND ECONOMICS: TARGET GROWTH



This guide is published by the Bovine Alliance on Management and Nutrition (BAMN), which is comprised of representatives from the American Association of Bovine Practitioners (AABP), American Dairy Science Association (ADSA), American Feed Industry Association (AFIA), and United States Department of Agriculture (USDA). The BAMN group is charged with developing timely information for cattle producers regarding management and nutritional practices.

Intrigued by the possibility of building a better heifer? Want to develop your herd's potential? If you answered yes, your next question probably is, "What will it cost?" Will you really get some bang for your buck, i.e. milk in the tank? Management interventions can make money in three ways — by putting more milk in the tank, by putting milk in the tank sooner, or by any other intervention that returns additional income on the dollars invested. Adjustments to the replacement heifer program on a dairy can potentially make money in all three ways. This is the first in a series of publications focusing on heifer development systems.

When evaluating the heifer-raising enterprise, remember that the return on investment begins as long as 20 or more months after each heifer is born. Many management steps or missteps between the birth of a heifer calf and the birth of her first calf affect the net value realized over her productive life. Looking at the big picture, the two most important factors that determine the economic value of the heifer are (1) at what age she conceived (and therefore at what age she will enter the milking herd) and (2) at what body weight she freshened. How "target growth" can affect age and body weight at calving will be discussed in this fact sheet.

What is target growth?