## AVA Newsletter



December 2014 Issue 12 Happy Holidays!

## **HOLIDAY HOURS**

THE OFFICE WILL BE CLOSED ON CHRISTMAS AND NEW YEARS DAY

ON CHRISTMAS EVE AND DECEMBER 31ST THE OFFICE WILL BE OPEN FROM 8AM TO NOON.

BIOPRYN HOURS:

CHRISTMAS – ALL SAMPLES WILL ONLY BE PLATED TUESDAY/REPORTED WEDNESDAY. SAMPLES WILL NEED TO BE HERE BY 2PM THAT DAY TO BE PLATED

NEW YEARS – ALL SAMPLES WILL ONLY BE PLATED TUESDAY/REPORTED WEDNESDAY. SAMPLES WILL NEED TO BE HERE BY 2PM THAT DAY TO BE PLATED.

The 100# Calf Sam Leadley

Many of our two-week-old calves have reached this size. The question at this time of year is "How much milk replacer does a 100 pound calf need for maintenance and to grow?"

Maintenance needs go up a lot when the temperature goes down below freezing. For example, let's compare the maintenance needs for a 100-pound calf at 50° to those at 30°. At 50 degrees it takes 3 ½ quarts daily of a 20-20-milk replacer mixed according to bag instructions (8 ounces to make 2 quarts of mix) to meet keep her alive. In contrast, at 30 degrees the amount needed is slightly more than 4 quarts daily. *These amounts are just for maintenance – no gain figured in at all.* 

If the weather gets really cold in January (teens during the day and single numbers at night) the amount to keep her alive is nearly 5 quarts daily.

Growing requires energy and protein. For one pound of gain daily we have to feed about 2 ½ more quarts of milk replacer a day. For our 100 pound calf that needs 3 ½ quarts daily for maintenance at 50° adding the extra milk replacer for one pound of growth (2 ½ quarts) brings her needs up to 6 quarts a day.

Average size Holstein heifer calves at two weeks of age in cold weather need *at least* 6 quarts of milk replacer daily. That will meet her needs to stay alive and to grow about 1 pound a day.

## BEDDING CALVES IN BARNS DURING COLD WEATHER

Recent research supports the need for good ventilation and plenty of bedding in cold weather. The Wisconsin-based research team said,

pens naturally ventilated calf barns in frequently microenvironments of poorer air hygiene within the barn. Increased ventilation rates effectively improve air hygiene in the alleys, but solid fronts, rear panels, and hovers result in the accumulation of airborne bacteria within the pens. The accumulation of high bacteria counts in the pens was associated with increasing prevalence of calves with respiratory disease. Solid fronts and hovers are sometimes recommended to prevent drafts and chilling, but it appears that supplying deep straw bedding in which the calf can "nest" is a preferable **strategy.** Although straw bedding was associated with higher pen counts than wood-based bedding, the thermal control benefits of nesting appear to outweigh the increased airborne bacteria associated with straw. Although enclosing the pen with solid fronts or covers should be avoided, a single solid barrier between calves is associated with decreased prevalence of respiratory disease. The study suggests that the ideal pen provides 3 square meters (32 square feet) or more area, has solid panels on 2 sides to separate each calf from the next, mesh panels in front and rear, and deep loose bedding during months when temperatures fall below the thermoneutral zone of the calf (60° for newborns, 40° for month-old calves)."

A. Lago and Others, Journal of Dairy Science October, 2007 89:4014-4025.



Merry Christmas from all of us at your Attica Veterinary Clinic!

## WANTED

Large round or square straw bales, non-processed. (585) 356-3572. Blumer Dairy