

116 Prospect St., Attica, NY (585) 591-2660 www.atticacows.com

Issue No. 10



As the leaves begin to fall it is a great time to get your fall vaccinations done. With different ones to suit your farm's needs, Ask your veterinarian what vaccines would be best for your animals

## **Early Pregnancy Diagnosis and Embryonic Loss**

Early pregnancy diagnosis can help improve reproductive performance by decreasing the time between services. Cows diagnosed open at an earlier date can be re-enrolled sooner in a breading program. However, early pregnancy diagnosis can be complicated by early embryonic loss (pregnancy loss). Some level of embryonic loss is normal as not all embryos are healthy. A variety of causes exists for early embryonic loss:



- Quality of the embryo
- ➢ Uterine health
- Blood progesterone levels must be maintained to support pregnancy
- General health of the Dam

Approximately 10-20% embryonic loss is normal before the 40<sup>th</sup> day of pregnancy. An embryonic loss of 6% is normal from 40 to 56 days, and 2% from 56 to 98 d post AI (Vasconcelos et al. 1997). From this information we can see that the rate of loss is greater during early pregnancy, then decreases as the pregnancy proceeds. Therefore, the amount of pregnancy loss detected is greater the earlier post breeding that a pregnancy diagnosis is made. In other words, cows diagnosed pregnant earlier post breeding. To compensate for this normal pregnancy loss, cows diagnosed pregnant early post breeding must undergo one or more pregnancy loss, cows diagnosed pregnant early post breeding must undergo one or more pregnancy reconfirmations to identify and rebreed cows that have lost a pregnancy. Pregnancy reconfirmation is therefore an essential part of managing the reproductive performance of your herd. This complications caused by pregnancy loss occurs with all currently available methods of pregnancy diagnosis including rectal palpation, ultrasound, and bioPRYN.



October 2013

## PENS AND BEDDING FOR CALVES HOUSED IN BARNS

Research supports the need for good ventilation and plenty of bedding in cold weather. The Wisconsin-based research team said that calf pens in naturally ventilated calf barns can become microenvironments of poorer air hygiene within the barn.

They observed that increased ventilation rates effectively improve air hygiene in the alleys. However, solid fronts, rear panels, and hovers result in the accumulation of airborne bacteria within the pens. Their data show that accumulation of high bacterial counts in the pens was associated with higher rates of treatment for 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 lower treatment rates for pneumonia. The study suggests that the ideal pen provides 32 square feet or more area, has solid panels on two 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.

## bi**opryn**°

bioPRYN is a blood pregnancy test that can detect pregnancies as early as 28 days post breeding. Call the clinic today and ask us how. 585-591-2660 More info available on our website www.atticacows.com (look under the bioPRYN section)



Happy Halloween!