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Larissa Tucker – New Senior Extension Associate for Dairy Youth Programs



As of July 1st, Larissa (Hayes) Tucker will be a member of our Dairy Extension team. Larissa was raised on a Guernsey farm in Rockcastle County and was actively involved in dairy youth activities. She is a graduate of the University of Kentucky and when in school helped the dairy extension team plan and conduct various dairy youth and adult educational programs. For the past 11 years, she has been a county extension agent in youth development in Wayne and Kenton Counties. Please help us welcome Larissa to the Dairy Extension team.

Corbin-Heerschesynch by George Heersche, Jr.

Many “programmed breeding” protocols are utilized by dairy farmers. The most popular are Ovsynch, Heatsynch and Cosynch. Some of our dairy farmers are now using Presynch. Presynch is two shots of prostaglandin F2alpha before the start of the Ovsynch programmed breeding protocol. Research has shown that Presynch will improve fertility on the Ovsynch insemination.

In 2003, I added one more option to the list... Heerschesynch. Heerschesynch is a combination of old fashioned heat detection, Presynch and Ovsynch. I later found out that David Corbin, Taylor County, had been using this protocol with success long before I thought of it so the protocol deserved a new name. The Corbin-Heerschesynch protocol is outlined below.

Day 0: Inject all cows in a cluster/breeding group with PGF2alpha (Day 0 will usually be the Monday of the week a cow enters the breeding herd).

Days 0-5: Watch for heat and breed those seen in heat at the appropriate time

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Day 14: Inject cows not bred after the first PGF2alpha

Days 14-18: Watch for heat and bred those seen in heat at appropriate time

Day 26: Start Ovsynch protocol on animals in the cluster not inseminated in the first 26 days of the protocol

Corbin-Heerschesynch has a modification for the cows that are inseminated at a predetermined time after Ovsynch. The modification is to inseminate cows and inject GnRH 72 hours after the Ovsynch PGF2alpha. In the regular Ovsynch protocol, GnRH is injected 48 hours after PGF2alpha and the cow is inseminated 64 to 72 hours after PGF2alpha. This modification is recommended because research by Dr. Jeff Stevenson at Kansas State shows that the highest conception is achieved when Presynch-Ovsynch cows receive GnRH and are inseminated 72 hours after the Ovsynch PGF2alpha. This recommendation is only for cows who have been through the entire Presynch-Ovsynch, and is not a recommendation for cows synchronized with Ovsynch only.

Remember that Ovsynch does not work well with heifers. In addition, the G6G Ovsynch protocol I wrote about in the first issue of Agents Notes for 2007 deserves consideration.

Summertime Dry Cow Management

by Donna M. Amaral-Phillips

The heat and humidity of the summer places some challenges on managing dry cows. First and foremost, we need to remember that your management practices for dry cows or lack thereof, directly impacts how well they milk after calving. Take a few minutes to review your dry cow program often over the next few months to make sure you are not leaving behind potential income this fall when these cows freshen.

1. Shade is very important for all dry cows to reduce heat stress. Close-up dry cows (cows within 3 weeks of calving) especially need adequate shade. Rotation of shade trees helps decrease the chances of mastitis especially in cows within a couple of weeks of freshening. Do not allow cows access to ponds to prevent future mastitis infections.

2. Feed troughs located in the sun are not used during the heat of the day and will limit feed intake especially for the close-up dry cow group.
3. If you use pasture for your dry cows, make sure they have adequate pasture to eat. Cool season grasses, such as fescue, bluegrass, and orchardgrass, do not grow much in the heat of the summer. When forage availability becomes limiting, hay or other stored forages need to be fed or the cows need to be moved to a crop that is growing.
4. Water consumption increases dramatically with increases in temperature and humidity. Water intake also governs how much feed, even a dry cow, eats. Cows and heifers drink less water when the water's temperature is above 80 degrees F. Thus, shading waterers or using insulated waterers is important to maintain water intake and thus feed intake.
5. Do not allow dry cows to lose weight or body condition. Proper amounts of body condition are important for these cows to milk well and rebred quickly after they calve.

Take a few minutes to routinely review your dry cow management program. Remember that the dry period is the start of the next lactation not a time to just "put them out on the back forty". With milk prices headed in a more positive direction, you do not want to leave behind any potential income this fall.

Length of the Dry Period Revisited

by Donna M. Amaral-Phillips

How long of a dry period should cows be given? Classically, the recommendation has been to provide second and later lactation cows with a 50-60 day dry period with first-calf heifers being dry from 60 to 70 days. Over the last few years, these recommendations have been challenged and the question asked, can we shorten the length of a cow's dry period? Can we decrease the dry period 30 days and increase the amount of milk these cows give over their lifetime? Then the question becomes, are we looking to maximize milk production over a cow's lifetime or in her next lactation?

To answer these questions, Drs. Kuhn, Hutchison, and Norman from the USDA Animal Improvement Program Lab examined current DHI production data of both

Holstein and Jersey cows. Their findings are summarized as follows:

- Cows dry less than 20 to 30 days give substantially less milk than those with longer dry periods. In Jerseys, cows with dry periods under 30 days had higher somatic cell counts the next lactation.

Take home message: Cows dry less than 30 days give less milk. These results again stress the importance of knowing a cow's expected calving date and thus the date she should be turned dry. Pregnancy check cows between 45 and 75 days pregnant especially in herds bred to a bull. This allows a veterinarian to more correctly predict the pregnancy date. Thus, your veterinarian should be palpating cows at least every other month if not monthly.

- Cows with dry periods greater than 70 days also give less milk their next lactation. This study showed that cows dry over 90 days gave 8800 less pounds of milk the next lactation. These cows probably were problem breeders leading to long days open, less milk, and possibly too much body condition when they calve the next lactation. Early lactation cows that are over conditioned eat less, have more metabolic problems such as ketosis and fatty liver, and do not rebred as well as properly conditioned fresh cows.

Take home message: Keep on top of the breeding program and work closely with your veterinarian to minimize the number of cows with long days open.

- Dry periods 55 days long resulted the most milk from cows in their third and fourth lactations. First calf heifers entering their second lactation produced the most milk when they were dry 41 to 60 days. This difference was attributed to the fact that first-calf heifers are more persistent in their milk production.

Take home message: Actual dry periods of 50 to 60 days maximize milk production the next lactation.

- Shorter dry periods result in more lifetime milk production. Milk production across adjacent lactations was maximized in first-calf heifers with

41 to 50 day dry periods and only 31 to 40 days dry after the second and third lactations. Shorter dry periods result in more days cows are in milk and, thus, higher total lifetime milk production.

Take home message: In second or greater lactation cows, shorter dry periods may increase total lifetime milk production. These cows will need to stay in the herd to recoup this production. Decisions on whether to purposely shorten a cow's dry period need to be made on an individual farm and individual cow basis.