

DAIRY PIPELINE

Department of Dairy Science

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“There is no way individual farmers can consistently match the pedigree merit of young sires in the PT programs of major studs.”

PROGENY TESTED AI BULLS ARE AN ASSET

Virginia dairy producers, through AI, have easy and affordable access to the best genetics available anywhere in the world. Ready access brings an abundance of options, sales promotions, do-it-this-way, no, do-it-that-way advice that can minimize apparent value in the minds of producers. But consider the alternative of trying to find decent herd bulls, control diseases, avoid big inbreeding problems, and keep cows and heifers pregnant at the same time. Progeny tested AI bulls are readily available, known commodities with more pedigree variety than can be found in herd bulls. Producers benefit from twice-selected AI bulls. Only the very best, most current pedigrees ever enter the AI sampling programs. There is no way individual farmers can consistently match the pedigree merit of young sires in the PT programs of major studs. A few farmers might find flush-mate to AI young sires for use as a herd bull every once in a while, but there is no way to do that con-

sistently. The proven bulls are the very best of these top pedigreed youngsters – one in ten or less meet proven bull requirements. Herd bulls NEVER face that secondary selection – they’re too old, ornery, and dangerous by that stage of their lives and what are the choices in a single herd anyway? We know SO much more about proven AI bulls – production and conformation, fertility of the bull and his daughters, survival, somatic cell score and the ever important calving difficulty and stillbirth data are all known to one degree or another through progeny tests. Knowledge isn’t perfect on any of these traits, but don’t kid yourself. We know a great deal more from progeny performance than pedigree information can ever reveal. Progeny tested AI bulls are a major resource for US dairy producers. Use them – all the time if you can.

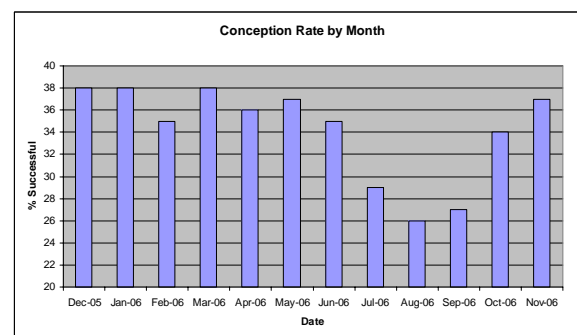
—Bennet Cassell

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REPRO NOTES:

To maximize reproductive efficiency on your dairy farm, it is important to start planning for summer now. Reproductive parameters on Virginia dairy farms decrease significantly due to summer heat (see Table 1), with conception rates dropping from 35-37% to 26-29%.

It is November before conception rates fully recover (See Graph 1). Maximizing the number of pregnant cows on your dairy by June 30 will minimize the number of cows that have to be bred during summer. There are three ways farmers can accomplish this task:
1) Watch more closely for heats. This system requires no out of pocket costs except the labor required but is difficult to achieve on many farms. Spring is a busy time of year on farms and contributing an extra 30-60 minutes a day to catching cows in heat is hard. Combine this fact with the difficulty in finding the modern dairy cow in heat (see Table 2, next page) and this system alone will not work on most farms.



Graph 1

2) Aggressive use of prostaglandin

Another system that farmers can use is prostaglandin shots every two weeks. All cows past the voluntary waiting period and without a current breeding should get a shot of prostaglandin every two weeks until found in heat and inseminated. The positive aspect of this program is that cows will have more opportunity to come into heat. The downside to the program is that cows still have to be found in heat.

DATE OF TEST	% HEATS OBSERVED	% SUCCESSFUL
2-06	42	35
3-06	43	38
4-06	41	36
5-06	40	37
6-06	39	35
7-06	39	29
8-06	37	26
9-06	40	27
10-06	43	34
11-06	42	37
12-06	44	-
1-07	42	-

Table 1

Upcoming Activities

April 10 - 11: Innovations in Dairy Trip—Robotic Milking Tour

Mason-Dixon Farms, Gettysburg, PA. Contact Chase Scott for details at (276) 223-6040.

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

DATE	DURATION OF ESTRUS	# OF MOUNTS
1975 ¹	8-14 hours	20
2000 ²	7.3 hours	7.2
2003 ³	6.2 high production 10.9 low production	-

Table 2: Change in standing heat characteristics of modern dairy cows

¹Hurnik et al 1975 Applied An. Ethology 2: 55

²Nebel et al 2000 Animal Reproductive Science 60-61: 713

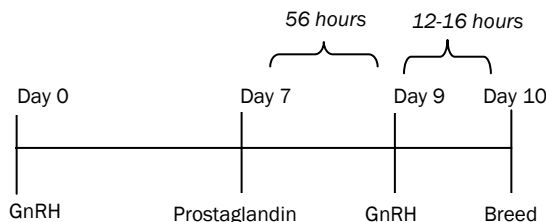
³Lopez et al 2003 JDS 86 (1): 239

3) Use of timed AI Synchronization Protocols

The way to ensure the maximum number of breedings in your cows is to make use of one of the timed AI protocols. Timed AI protocols have been used extensively for over 10 years. Numerous research protocols and field trials have demonstrated that they can be used as a tool to help increase the number of pregnant cows.

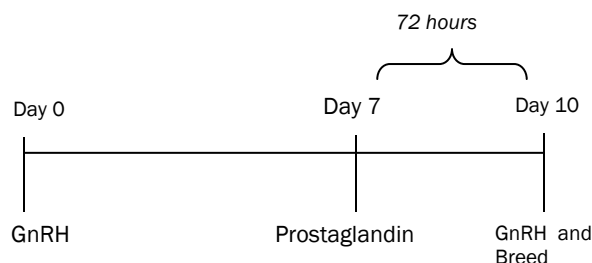
The two protocols that I would currently recommend are:

To Maximize Conception Rate: OV Synch S6



Or

To Maximize Convenience: Co Synch 72



One thing is certain—temperatures will increase

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as we move into summer and this will likely result in fewer cows pregnant on your farm. At your next herd check, discuss any changes you need to make to your reproductive program to better prepare for summer. Your veterinarian can be a valuable resource in helping you adjust your reproductive program as needed.

—John Currin
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“...lush spring grasses can adversely affect the health of spring calving cows.”

GRASS FEVER

About this time of year we all look forward to the appearance of green grass—cows included. After a winter of confinement and bland stored feeds we look forward to turning cows out on grass for recreation and a little grass picking. While the exercise and minimal nutrients are beneficial to the milking herd, dairymen should watch for negative impacts on close up dry cows.

Whether you utilize DCAB in your close up ration or not, lush spring grasses can adversely affect the health of spring calving cows.

Vegetative grass tends to have elevated levels of nutrients, particularly potassium. The elevated levels of potassium can predispose close up dry cows to milk fever and the whole host of metabolic disorders commonly associated with calving.

To minimize the impact, restrict the access to pasture such that close up cows continue to receive the majority of their dry matter intake from forages low in potassium.

—John Welsh
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For more information on Dairy Extension or to learn about current programs, visit us at VT Dairy—Home of the Dairy Extension Program on the web at: www.vtdairy.dasc.vt.edu.

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