GIT-R-DONE Approach to Dairy Reproduction

George Heersche, Jr.
Extension Dairy Specialist
University of Kentucky

Introduction

I have been giving different versions of this talk for almost 30 years. Frankly, it is not easy to find a new way to say the same thing that does not seem to soak in anyway. However, I have received new inspiration from the great philosopher, Larry the Cable Guy. GIT-R-DONE

Goals and Options

One obvious goal for all dairy farmers is to get cows and heifers pregnant in a reasonable amount of time at a reasonable cost. Some accomplish this by turning in the bull. This looks to be a good decision to the heat detection challenged because he gets cows pregnant (if he has good semen and is physically sound). However, turning in the bull is a decision that puts human safety at risk and risks the genetic ability of the future herd.

A few farms still get cows pregnant with a bull kept in a separate pen. They lose the main advantage of using the bull (heat detection), risk the genetic future of the herd, but have a situation where humans are somewhat more safe (if the pen is built correctly and no one tests the ›Only Those With Common Sense Survive‹ theory).

The goals of artificially inseminated herds are more lofty... to get cows and heifers pregnant, in a reasonable amount of time, at a reasonable cost, but to a genetically superior sire. Artificial insemination is much safer for humans and cows, holds definite genetic advantages, makes sexually transmitted diseases a non-issue, but requires a continual GIT-R-DONE approach by management.

Key Components of the GIT-R-DONE Approach to Dairy Reproduction

Transition cow management. Cows which have proper close-up dry cow and postpartum care feel good, eat well, milk well and breed back. Cows that do not get off to a good start after calving do not. If you do not know how to properly care for the periparturent cow, learn how and GIT-R-DONE.

Utilize synchronized estrus and programmed breeding. My favorite synchronized estrus and programmed breeding protocol for cows (does not work well in heifers) is called Corbin-Heerschesynch (David Corbin and George Heersche). Outside the state of Kentucky this is also known as a modification of the Presynch-Ovsynch protocol.

The Corbin-Heerschesynch protocol is as follows:

- Day 0: Inject PGF_{2a} (Lutalyse, Estrumate, etc.). Day 0 will usually be the Monday after the week a cow enters the breeding herd.
- Days 0-5: Watch for heat and breed those seen in heat at the appropriate time. Conception rate may be lower at this heat depending on days postpartum.
- Day 14: Inject cows not bred after the first PGF_{2a} with PGF_{2a}.
- Day 14-18: Watch for heat and breed those seen in heat at appropriate time.
- Day 26: Inject all cows not previously inseminated with GnRH.
- Day 33: Inject all cows not previously inseminated with PGF_{2a}
- Days 33-36: Any cows which come into heat on these days are inseminated at the appropriate time in relation to standing heat.
- Day 36: Seventy-two hours after prostaglandin inseminate all cows not previously inseminated and inject GnRH. (Note: this is different than the Ovsynch protocol where cows receive the second GnRH 48 hours after prostaglandin and are inseminated 16 hours after the second GnRH)

Cows which are not yet cycling at day 26 of the protocol should benefit from having a CIDR in place on protocol days 26 through 33. One can also resynch the cows inseminated on protocol day 36 by having a CIDR in place for 14 to 21 days after insemination (protocol days 50 to 57) and detect heat and breed after the CIDR is removed. Another resynch protocol to consider is to administer GnRH seven days before pregnancy check so if a cow is open she has already received the first shot of an Ovsynch protocol.

The main benefit of Corbin-Heerschesynch is more cows get pregnant earlier compared to a conventional detect heat and breed program. The downsides are that Corbin-Heerschesynch requires more planning and purchase of hormones. I quickly point out that breeding the cows in heat after the first two prostaglandin shots results in less hormone cost than the standard Presynch-Ovsynch program.

There are numerous synchronization programs which work well for heifers. The MGA and PGF_{2a} protocol which follows has been used successfully on thousands of dairy and beef heifers.

- Days 0-14: Feed MGA at .5 mg/head/day for 14 consecutive days
- Days 15-21: Do not breed on first estrus after MGA
- Day 33: Inject all animals with PGF_{2a} 19 days after last MGA feeding
- Days 33-36: Watch for estrus and breed after estrus
- Day 36: At 72 hours after PGF_{2a}, inseminate all heifers not seen in heat and inject GnRH after insemination

Utilizing the EAZI-BREED CIDR and Lutalyse protocol presented below also works well for heifers:

- Day 0: Insert EAZI-BREED CIDR in vagina
- Day 6: Inject Lutalyse
- Day 7: Remove CIDR
- Days 8-11: Watch for heat and breed after standing heat (most will be in heat on protocol days 8, 9 and 10)

Some heat detection required

If we are using A.I. in the dairy herd, checking heats every day is going to be a part of our life. We might as well accept that fact and GIT-R-DONE. Even in herds using programmed breeding aggressively. The biggest practical downside to aggressive use of programmed breeding is that management is lulled into a no heat detection required frame of mind. If programmed breeding is not accompanied by efficient heat detection, many of the cows who do not get pregnant on the programmed breeding insemination fall through the cracks for way too long and end up with long days open simply because they were not reinseminated in a timely manner.

I could use up several more pages expositating on how to accomplish efficient and accurate heat detection in the dairy herd. However, information on how to do this is available from many sources. I will simply end by encouraging you to **GIT-R-DONE**