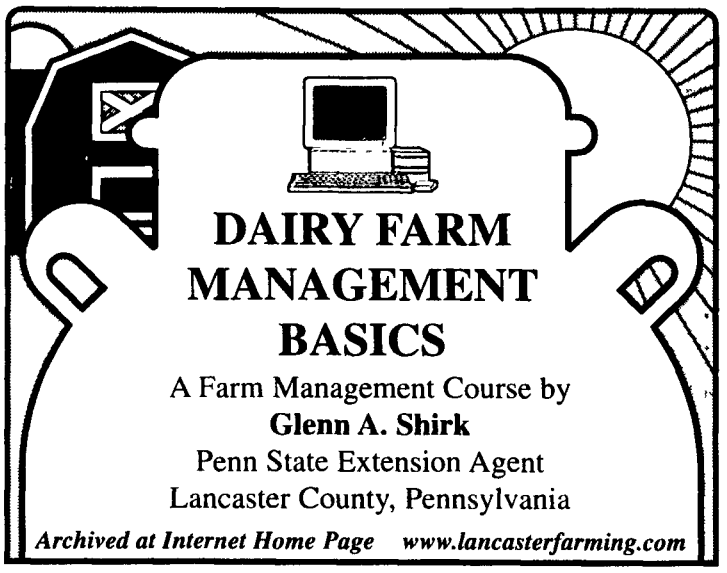

Pregnancy Success - Article 24

The last article focused on setting reproductive goals and calving intervals Setting goals is easy, but accomplishing them can be a challenge, because "things" don't always go as planned

In Table 1, examples 1 and 2 compare what happens when there is a problem with heat detection and conception rates In example 1, heat detection rate was only 53% and if only 38% of those heats resulted in a pregnancy (conception rate), the overall pregnancy success rate was only 20%! In other words, only 1/5 of the heats resulted in a pregnancy At that rate it will take 105 days beyond the volunteer waiting until you get cows settled That translates into 165 days open and a 15 month calving interval Each extra day open can cost you about $2 50 Thus, the extra 2-month delay could cost you $140 per lactation or $113 per cow per year! If you are aiming for a 13 month calving interval, as illustrated in example 2, you'll need to have an 80 % heat detection rate and a 60% conception rate, or some combination thereof

So, what goals do you need to set for yourself to attain the pregnancy success rate you want? Are you on track with the goals you have set? When things are not going right, what can you do to help improve the reproductive performance of your herd? Here are a few things to consider

- Is the breeding problem nutrition related? Check the energy balance of the ration, the flesh condition of the cows, and milk urea nitrogen (MUN) levels Cows don't conceive very well when they are in negative energy balance, when the ration is out of balance, or when urea nitrogen levels are high
- Is the breeding problem caused by heat stress? If so, plan your breeding and calving seasons accordingly, or take measures to protect cows from heat stess
- Is the breeding problem caused by infections and diseases? If cows' have calving difficulties and retained placentas, and if maternity areas are unsanitary, the risk of uterine infections increases

  Check the sanitation of the maternity area?

  Is the herd bull spreading infections?

  Are cows carrying diseases that suppress their immune systems?

  Were cows properly vaccinated?

  Consider using hormone therapy to help flush infections out of cows' reproductive tracts and prepare them for insemination, it might be cheaper and more effective than doing rectals

- Is the breeding problem related to heat detection, semen handling, and inseminating techniques?

  Consider programmed breeding in an effort to bring groups of cows into heat at one time It creates more sexual activity, concentrates heat detection time, and makes heats easier to detect

  Cows are most active between 6 p m and 6 a m Watch cows for heat twice a day, between these hours, when they are not preoccupied with other activities such as eating

  Consider using heat detection aids, such as marking the rumps with crayon, using pressure pad sensors on the rumps, motion detectors, etc

  Check timing of insemination and inseminating techniques

  Discuss these concerns with your veterinarian and your AI technician

Table 1 Pregnancy Success Rates and Calving Intervals

	Examples No 1	Examples No 2	Yours
% heats detected (decimal)	0 53	0 80	
% services that conceived (decimal)	x 0 38	x 0 60	x
Pregnancy success % (expressed as a decimal)	0 20	0 48	
No heat periods needed per conception (1 0 – the breeding success rate, above)	5	2	
Days per heat period	x 21	x 21	x 21
Days needed beyond VWP[1] to conceive	105	42	
Volunteer waiting period (days)	+ 60	+ 60	+
Days open	165	102	
Gestation period	+ 281	+ 281	+ 281
Calving interval - days	446	383	
Goal - days (mo x 30 days)	- 390	- 390	-
Extra days open	56	0	
Calving interval - months (days – 30)	14 9	12 8	
Goal - months	13 0	13 0	
Extra days open	56	0	
Cost per extra day open ($)	x 2 50	x 2 50	x
Cost per cow - per lactation	140	0	
- per year[2]	113	0	

Foot notes
1 VWP = volunteer waiting period (days to wait after calving before breeding)
2 Cost per year = cost per lactation x 12 mo – actual calving interval in mo