Synchronising your Breeding Season

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The breeding season has commenced once again on many farms in the last couple of weeks. How is it progressing? Is your stock bull working or is your heat detection up to scratch? Do you know how long you will breed for? All key questions to ask yourself at this point

Synchronisation can pay dividends to the part-time farmer who wants to use Ai, mainly by facilitating Ai to genetically superior bulls, streamlining heat detection or at least focussing it on a key period, shortening the calving spread and hopefully creating an even bunch of calves which can be de-budded, vaccinated, weaned and sold as a group.

For anyone considering synchronising heats for the first time there are a few essential elements to ensure it is successful:

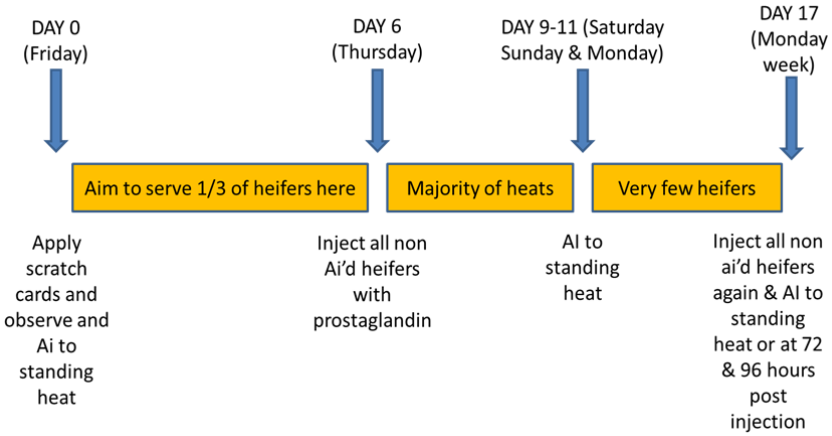
- Synchronisation should only be used in herds where there are high levels of management and in particular heat detection, good stockmanship along with some heat detection aids such as tail paint or scratch cards is required to pick up heat activity during this period
- All vaccinations/boosters/minerals that are to be used should be given well in advance of the breeding season
- Avoid, if possible, stressful events during the period
- Heifers must be well grown and ideally cycling previously
- Cows must should be on a rising plane of nutrition, not under conditioned and free from ill health
- Cows should be at a minimum 40 days calved, if she had a difficult calving or retained placenta she may need longer or examination by a professional
- Once the heat has been established use a competent inseminator

Protocols

Replacement Heifers

Heifers can be the easiest animals to synchronise often just requiring heat detection and one treatment with prostaglandin (PG) (figure 3 for commercial names). The protocol in figure 1 can be used very effectively to breed the majority of heifers in 10 days and is the cheapest. Alternatively, you could skip the initial 6 days of heat detection and use PG on day one, inseminate to standing

Figure 1. Synchronisation protocol for replacement heifers

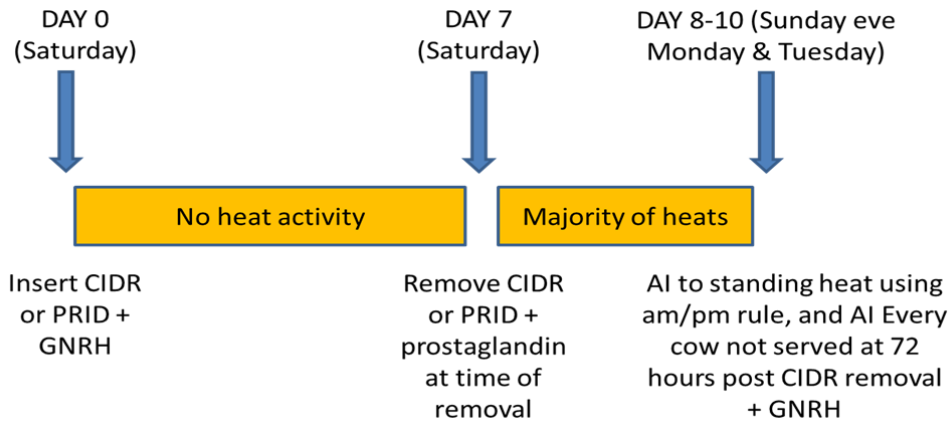


heat and complete the protocol as shown from there on.

Cows

Suckler cows can be slower to return to heat as the suckling inhibition from the calf can slow down the return to cycling activity. However, the majority of protocols will encourage the cow to cycle even if she has not been cycling previously. The protocol in figure 2 can be used on cows:

Figure 2. Synchronisation protocol for beef cows



- Inadvertent administration of prostaglandin to a cow/heifer during the first 3-4 months of pregnancy will cause abortion

As a part-time suckler farmer, I find synchronisation to be an effective tool in facilitating the use of Ai, over the last number of years conception rates to this protocol have averaged 70% on my farm. I usually work the protocols around weekends when more time can be allocated to gathering the cows and completing the treatments. When using these protocols if the cow repeats it will happen 18-24 days later, so time can be allocated to watch repeats as you know when to expect them.

There is no doubt that synchronising cows is not low-cost but I find when it is successful the benefits of an Ai calf and time management it is well worth it.

Good luck with your breeding season

Figure 3. Some commercially available prostaglandin, GnRH used for oestrous cycle control in cattle

Commercial Drug	Product Type	Active Ingredient	Dosage (ml/animal)		Classification
			Cows	Heifers	
Estrumate	Prostaglandin	Cloprostenol	2	2	POM (Prescription-Only Medicine)
Lutalyse	Prostaglandin	Dinoprost Tromethamine	5	5	POM
Enzaprost	Prostaglandin	Dinoprost	2	2	POM
Prosolvin	Prostaglandin		2	1	POM
Dalamzin	Prostaglandin	d-cloprostenol	2	2	POM
Receptal	GnRH	Buserelin	5	5	POM
Ovarelin	GnRH	Gonadorelin (as diacetate)	2	2	POM
Dalmarelin	GnRH	Iecirelin acetate	2	2	POM