

# FIXED TIME ARTIFICIAL INSEMINATION

*Courtesy of ABS Australia*

Fixed Time Artificial Insemination (FTAI) has revolutionised the use of artificial breeding for beef cattle.

The rapid uptake of FTAI has been responsible for a 250% increase in AI of beef cattle in Brazil from 4 million head in 2008 to 12 million head in 2011.

FTAI synchronization has many benefits, firstly cattle only need to be yarded 3 times, heat checking is not required and labour requirement is greatly reduced.

Secondly, FTAI results in more AI calves being born to a herd when compared to other methods, and careful AI sire selection means calves will generally enhance the performance and increase the rate of genetic gain in the herd.

Thirdly, FTAI concentrates calving into tighter pattern, thus giving breeders more opportunity to stay within the herd.

Research shows that if a maiden heifer calves within the first 3 weeks of her calving period, she is 13% more likely to remain within the herd for her breeding life. This increases the returns and profitability of the operation.

The practical use of FTAI has achieved some amazing results with farmers claiming up to 80% AI calves born in their herds, although 60-65% is a more common result with one round of FTAI in cows.

The genetic gain for the herd is reflected when the majority of replacement females are the AI sired daughters, that were born in the first 7 to 10 days of calving and then have the opportunity to be AI'd to industry leading sires again.

Industry practice has shown that when using FTAI it is important to keep the process simple and follow the program carefully. Re-Synchronization is possible, for those wanting to do a second round, however it is important to remember to reinsert CIDR's 12 days after AI for heifers and 13 days after AI for cows.

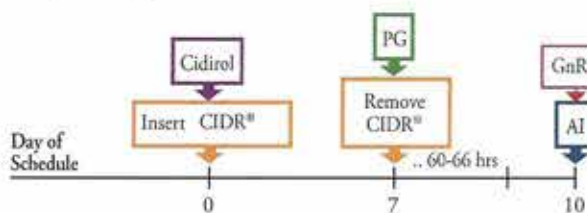
Research shows that the process of FTAI on average, increases the number of calves born in the first 21 days by as much as 70% over natural service.

FTAI is a well proven process that has the ability to improve labour efficiency and increase the cost effectiveness of AI within beef herds resulting in accelerated genetic gain for beef breeders.

## BEEF SYNCHRONIZATION PROTOCOLS

### Fixed - Time AI

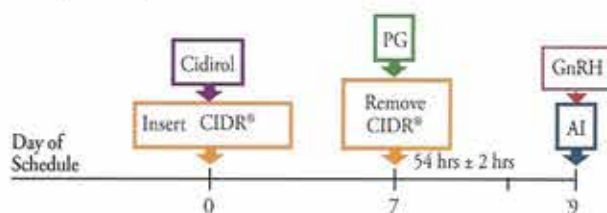
#### 7-day Co-synch & CIDR® for Beef Cows



Timed AI at 60-66 hours after CIDR® removal is critical. Inject GnRH at AI.

### Fixed - Time AI

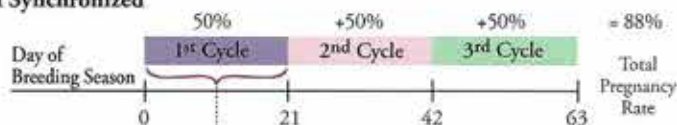
#### 7-day Co-synch & CIDR® for Beef Heifers



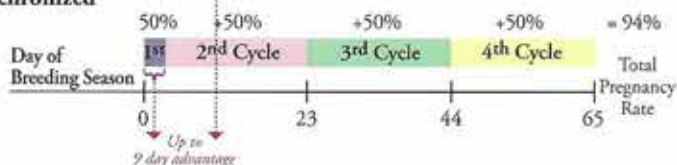
Timed AI at 54 hours (with + or - 2hrs) after CIDR® removal is critical. Inject GnRH at AI.

## The Value of Synchronization

### Non Synchronized



### Synchronized



### More Calves

- More chances to conceive during the breeding season
- Some synch systems induce cows to cycle earlier

### Heavier Calves

- Calves born earlier on average
- 9 days x 1.0 ADG x \$6.50 = \$58.50 which covers the cost of most Synchronization programs.