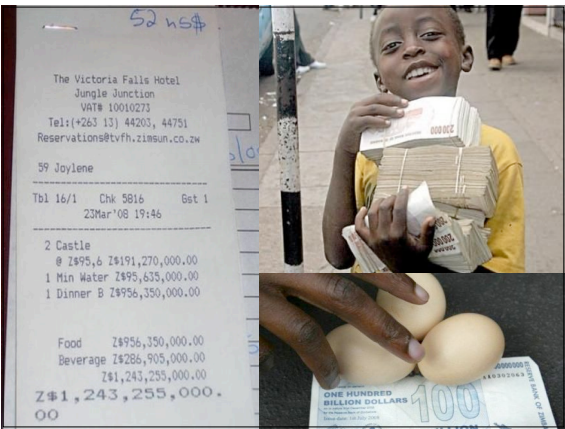


Estrus Synchronization Protocols for Cows

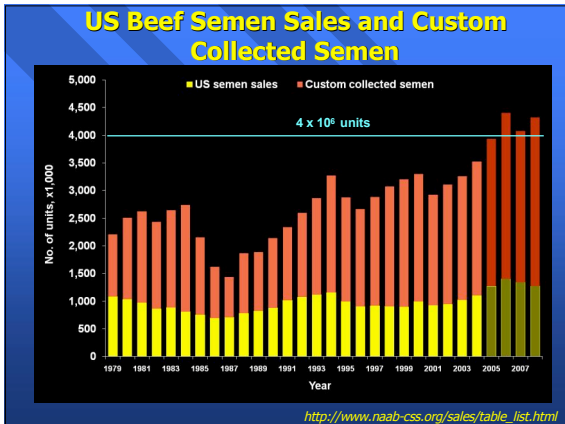
Cliff Lamb
University of Florida

Applied Reproductive Strategies in Beef Cattle
NCBA Convention
January 28, 2010

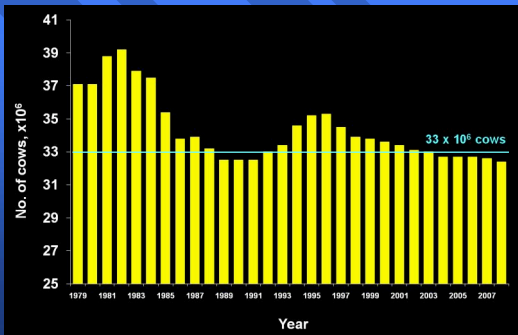


Estrus Synchronization Protocols

- Hybrid Synch
- Two shot PGF
- Select Synch
- MGA/PGF
- 7-11 Synch
- Ov-synch
- MGA Select
- Hybrid Synch+CIDR
- Resynch
- Presynch
- One shot PGF
- CO-synch
- CIDR/PGF
- CO-synch+CIDR
- Heat Synch

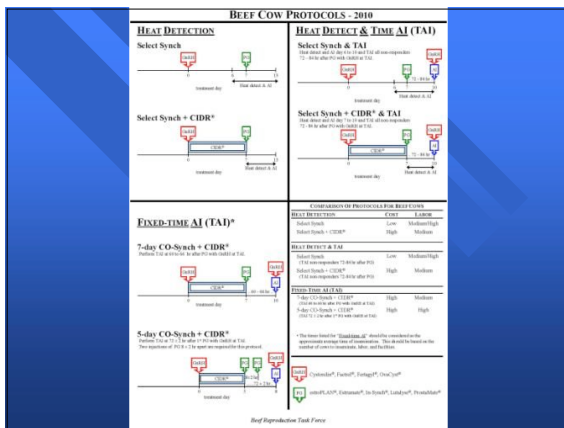
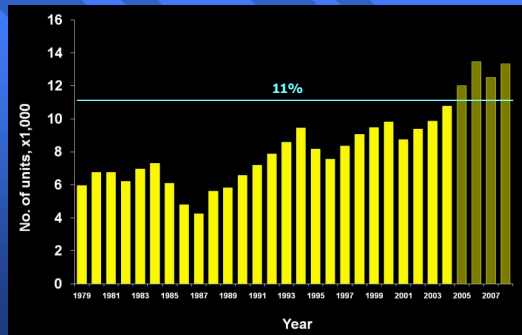


US Beef Cow Inventory



<http://www.nass.usda.gov>

Percentage of Semen Sold and Collected Compared to Beef Cow Inventory



Definitions

- ☞ **Synchronization Rate:**
% of females detected in estrus compared to total number synchronized.
- ☞ **Conception Rate:**
% of females pregnant compared to number of females inseminated.
- ☞ **Pregnancy Rate:**
% of females pregnant compared to total number synchronized.

2 × Prostaglandin (PGF_{2α}) System



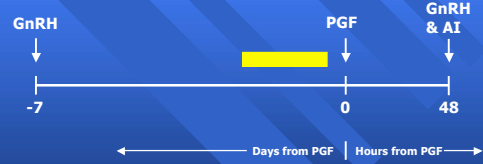
Select Synch



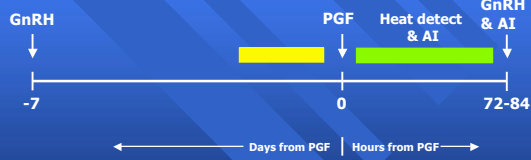
Ovsynch



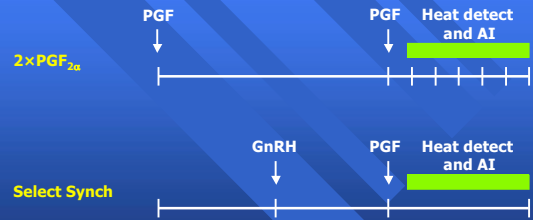
CO-Synch



Select Synch & TAI



2xPGF_{2α} vs. Select Synch



(Stevenson et al., 2000)

2xPGF_{2α} vs. Select Synch

Item	2xPGF _{2α}	Select Synch
No. of Cows	294	289
Synchronization rate, %	142/294 (48)	175/289 (61)
Conception rates, %	86/142 (61)	115/175 (66)
Pregnancy rates, %	86/294 (28)	115/289 (38)

(Stevenson et al., 2000)

Select Synch vs. CO-Synch



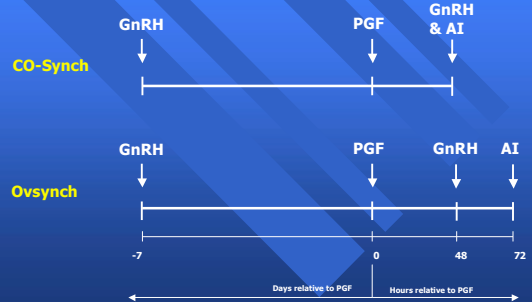
(Grieger et al., 2001)

Select Synch vs. CO-Synch

Item	Select Synch	CO-Synch
No. of Cows	237	223
Synchronization rate, %	130/237 (55)	-
Conception rates, %	93/130 (72)	106/223 (48)
Pregnancy rates, %	93/237 (39)	106/223 (48)

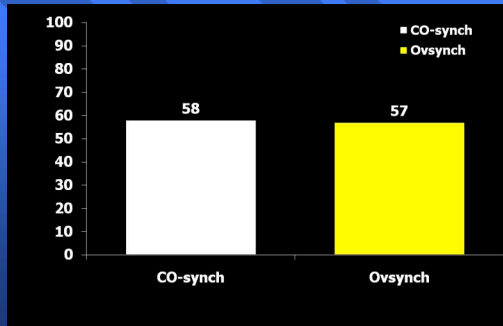
(Gieger et al., 2001)

CO-Synch vs. Ovsynch



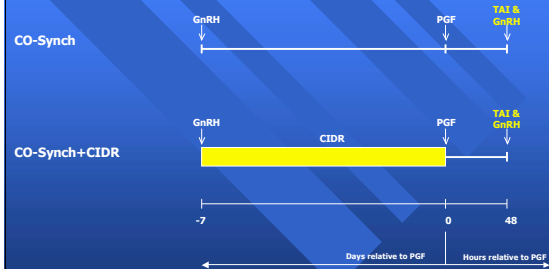
(Geary et al., 2001)

CO-Synch vs. Ovsynch



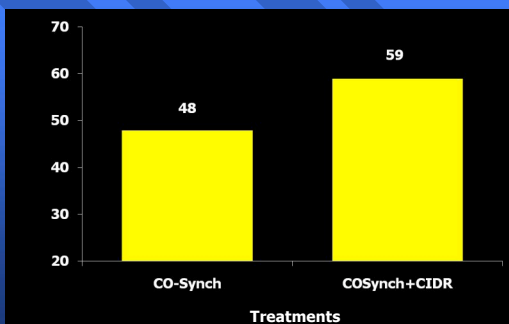
(Geary et al., 2001)

CO-synch vs. CO-synch+CIDR



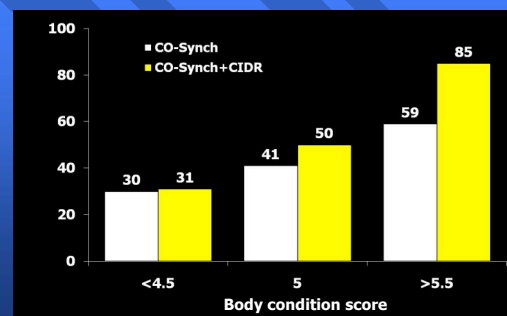
(Lamb et al., 2001)

First Service Pregnancy Rates

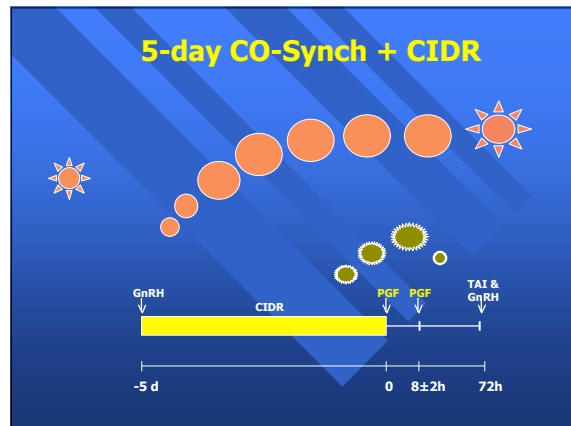
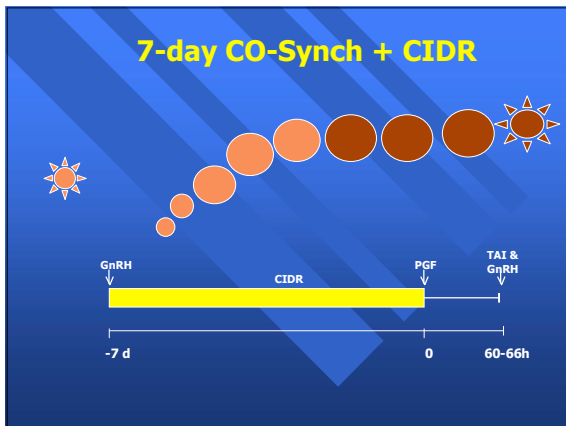
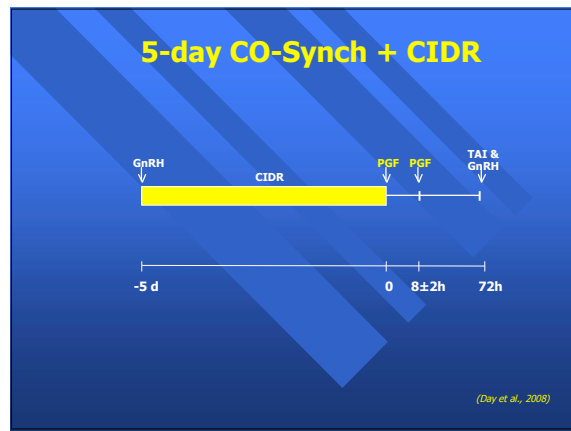
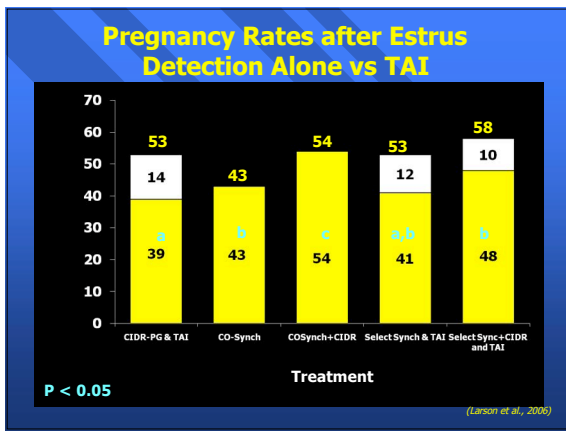
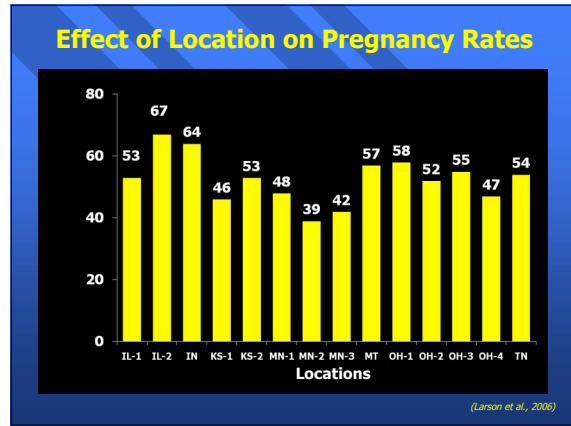


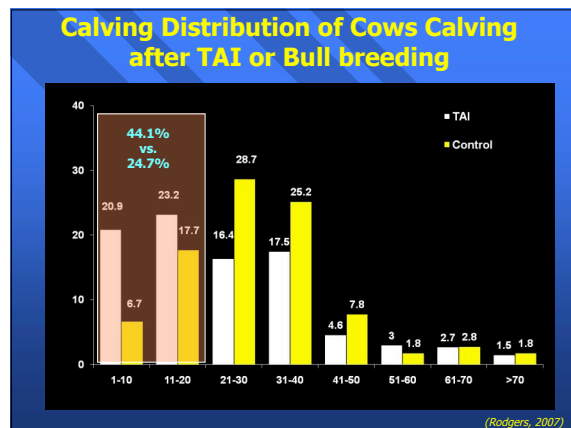
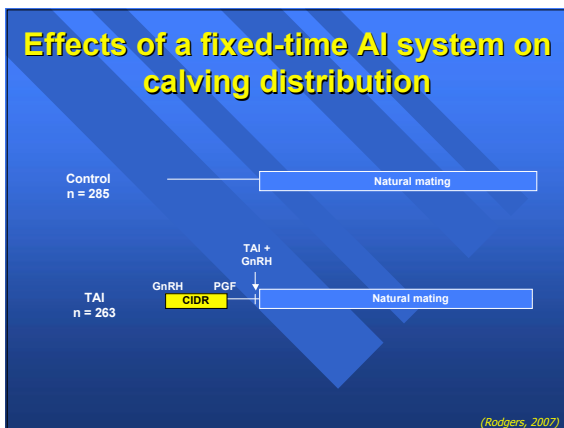
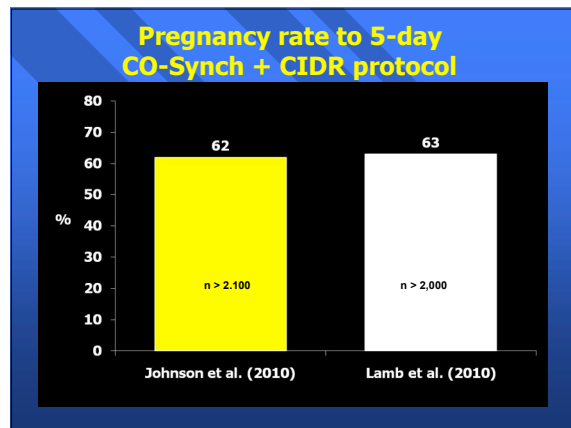
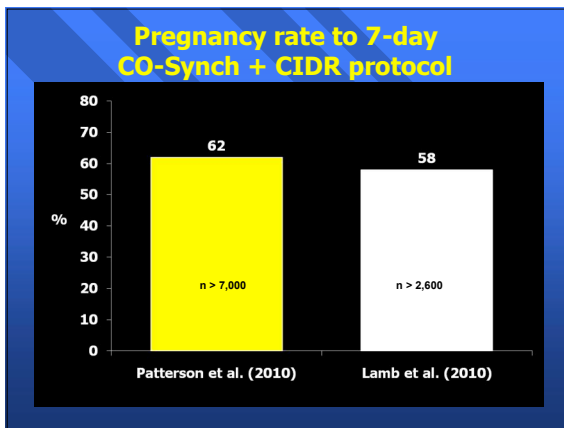
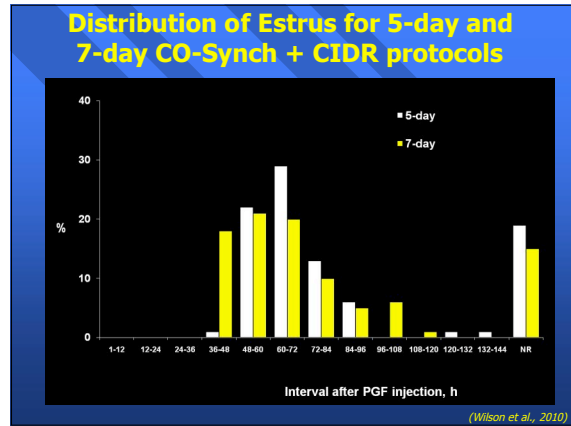
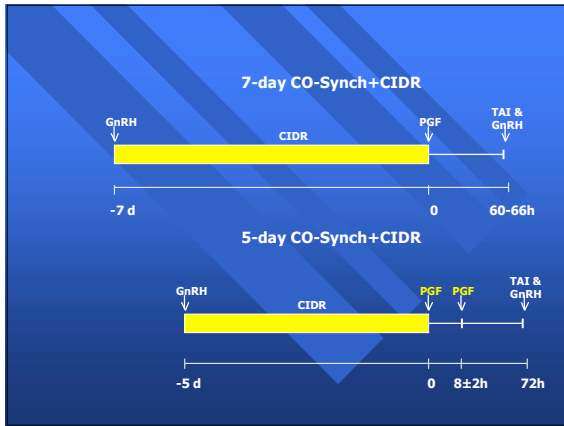
(Lamb et al., 2001)

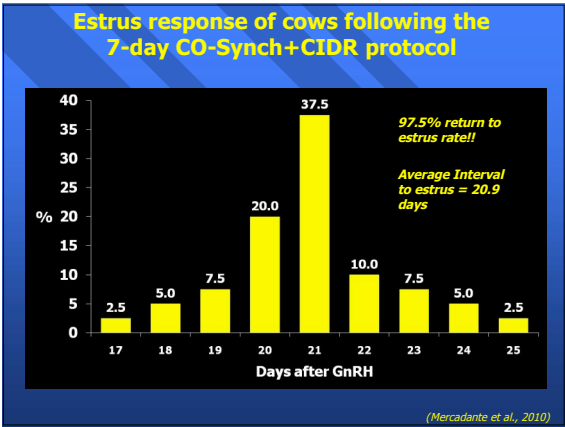
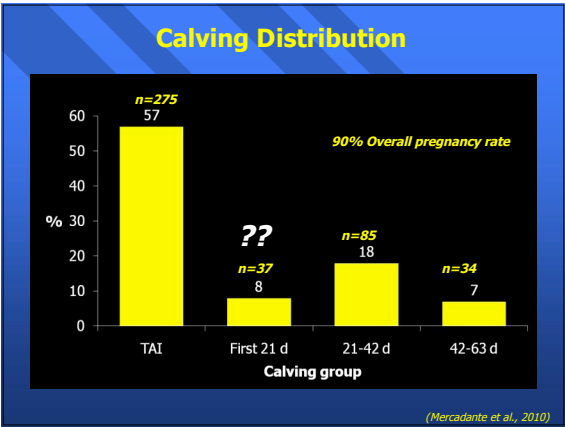
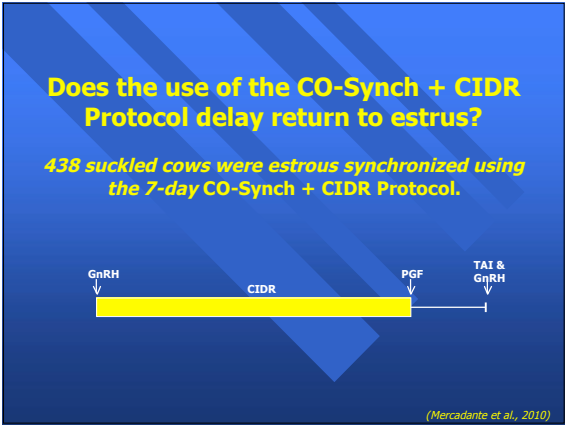
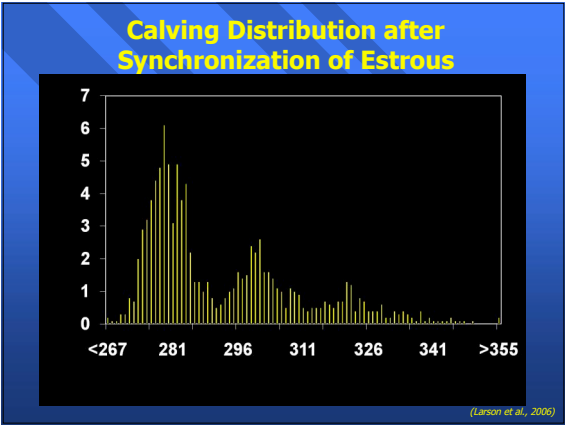
Effect of BCS on Pregnancy Rates



(Lamb et al., 2001)







BEEF COW PROTOCOLS - 2010

HEAT DETECTION		HEAT DETECT & TIME AI (TAI)	
Select Synchrony 	Select Synchrony + CIDR* 	Select Synchrony & TAI 	Select Synchrony + CIDR* & TAI
FIXED-TIME AI (TAI)* 7-day CO-Synch + CIDR* 5-day CO-Synch + CIDR*			

Beef Reproductive Task Force

- ### Acknowledgements
- #### People

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Thank You!



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