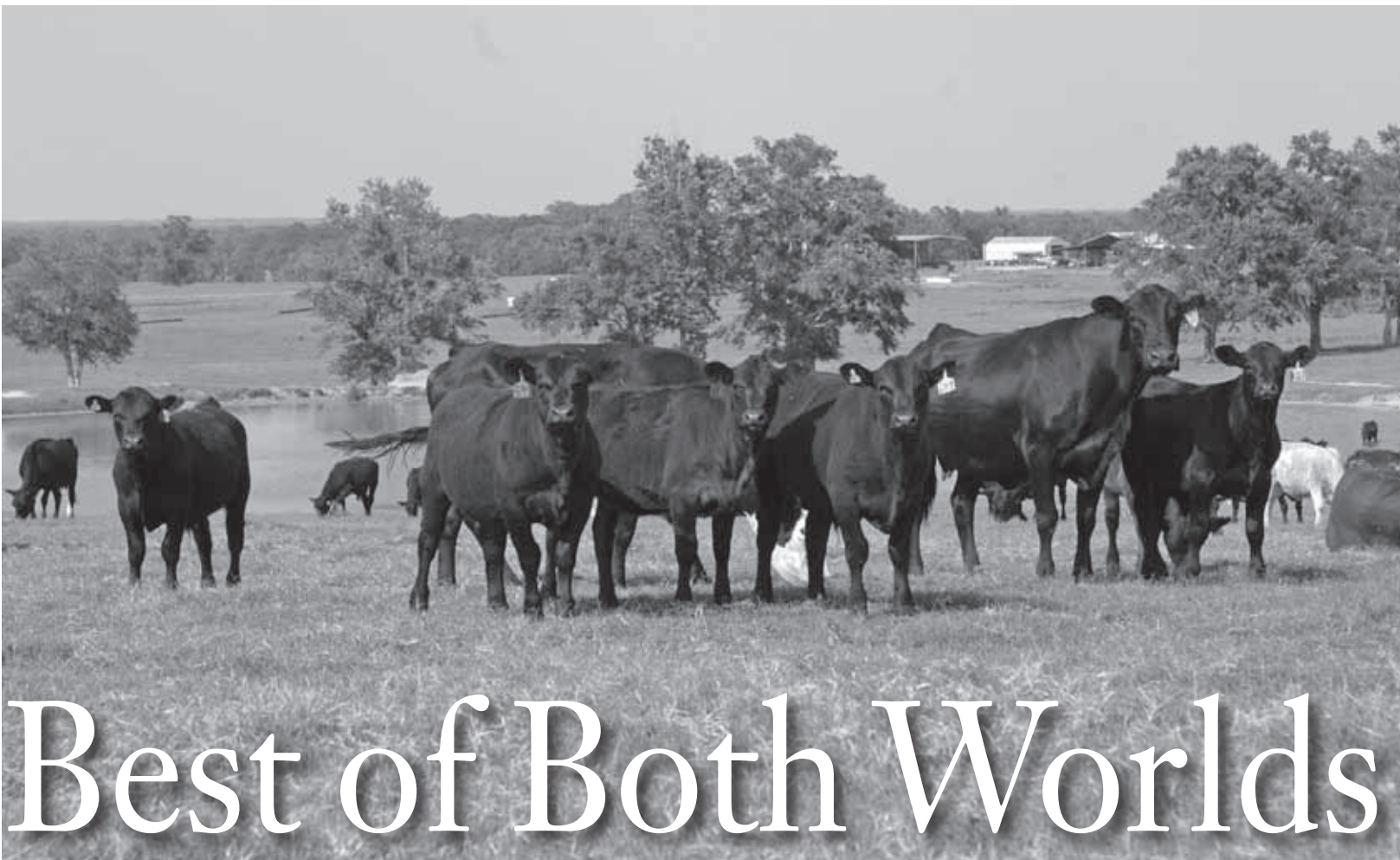


The combination of AI and Angus genetics results in top-quality steers and replacement heifers in Herman Laramore's operation.



Best of Both Worlds

Heat-synchronization protocol combines heat checking and timed AI.

Story & photos by
BECKY MILLS

With anywhere from 400 to 700 cows to artificially inseminate (AI) each winter, Marianna, Fla., commercial producer Herman

Laramore is always looking for workable synchronization options. So when Cliff Lamb, University of Florida animal scientist, approached him about an on-farm trial with a protocol that combines heat detection and timed AI (TAI), Laramore agreed.

Developed by South Dakota State University's George Perry, the PG six-day CIDR® and TAI protocol, which works for both cows and heifers, starts on Day 0 with an injection of prostaglandin (PG). For the next three days, the producer heat-checks and breeds any cows that come in heat. On Day 3,

gonadotropin-releasing hormone (GnRH) is administered and a CIDR (a progestin-releasing device) is inserted in the cow's vagina. On Day 9, the CIDR is removed and another injection of PG is given. The producer then heat-checks and breeds for 72-84 hours. Next, any cow that has not shown heat is given another injection of GnRH and is bred.

"I prefer pure TAI with no heat detection," says Lamb. "But there are some people who don't have the facilities or manpower or are overwhelmed at the idea of breeding a large group of cows at one time.

This protocol can help spread out breeding."

However, Lamb says this protocol probably won't jump-start cows or heifers that aren't already cycling any more effectively than other systems such as the Select Synch + CIDR and TAI.

To test the PG six-day CIDR and TAI protocol at Laramore's operation, they used a group of 250 cows with nursing calves. After giving PG on Day 0, 26% of the cows came in heat and were bred by AI.

(Continued on page 44)



Marianna, Fla., rancher Herman Laramore has been breeding his cattle by artificial insemination (AI) for 20 years.

20 years of improvements

Although it is a daunting task to artificially inseminate (AI) several hundred cows and heifers every winter, Herman Laramore is committed to the practice.

"We've been Aling for 20 years," says the Marianna, Fla., commercial cattleman. "We do it to make genetic improvement. And it definitely has improved our herd."

This past summer Laramore's weaned and preconditioned steers averaged 725 pounds (lb.) at shipping, while the heifers, minus 150 head of top-quality replacement prospects, averaged 625 lb.

He says he really can't compare those weights to ones before he started Aling. "We weren't as organized then. We didn't have a defined calving sea-

son, and we didn't precondition."

He says his calving season was probably six months long then, compared to a 75-day season now. "That is another advantage of synchronization. It tightens up the calving period."

Whether it is AI or putting in embryos in partnership with Ohio seedstock breeder Paul Hill, Laramore primarily uses Angus genetics.

The reasons are simple, he says. "First, the American Angus Association has done the best job of any breed in promoting their product and collecting data. Second, to provide heterosis, Angus cattle cross well with almost any breed. Third, black makes a difference to buyers."

Best of Both Worlds (from page 42)

Lamb tweaked the next part of the protocol a bit and left the CIDRs in for seven days instead of six so Laramore and his nephew, Blane Laramore, wouldn't

have to check heat or breed on the weekend.

Lamb emphasizes, "The PG six-day CIDR and TAI protocol is approved by the Beef Reproduction Task Force. The seven-day version is not."

At Laramore's, after the CIDRs were removed and another injection of PG was given, 42% of the cows came in heat and were bred in the 72 to 84 hours following the removal of the CIDR. The remaining cows were then given another injection of

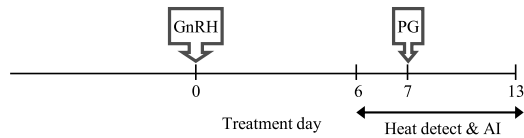
GnRH and were bred by TAI.

At pregnancy check, the conception rate was 61%. This compared to a 58% conception rate for a group of Laramore's cows that were bred using the Select Synch + CIDR and TAI protocol.

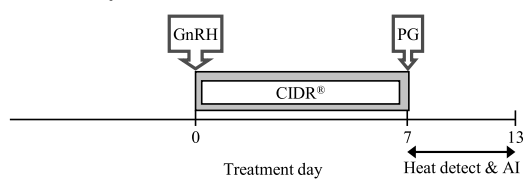
Fig. 1: Beef cow protocols, 2011

HEAT DETECTION

Select Synch

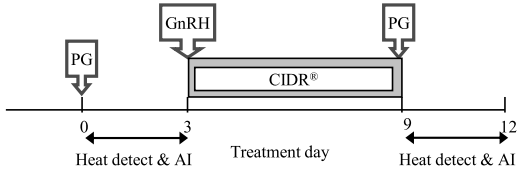


Select Synch + CIDR®



PG 6-day CIDR®

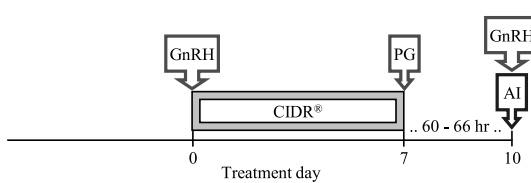
Heat detect and AI days 0 to 3. Administer CIDR to non-responders and heat detect and AI days 9 to 12. Protocol may be used in heifers.



FIXED-TIME AI (TAI)*

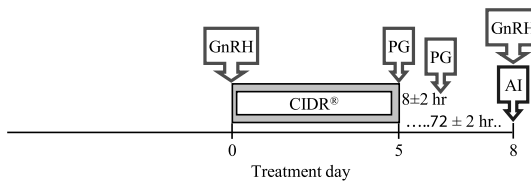
7-day CO-Synch + CIDR®

Perform TAI at 60-66 hours after PG with GnRH at TAI.



5-day CO-Synch + CIDR®

Perform TAI at 72 ± 2 hours after first PG with GnRH at TAI. Two injections of PG 8 ± 2 hours apart are required for this protocol.



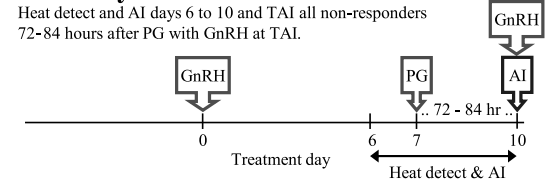
* The times listed for "Fixed-time AI" should be considered as the approximate average time of insemination. This should be based on the number of cows to inseminate, labor and facilities.

- GnRH Cystorelin®, Factrel®, Fertagyl®, OvaCyst®
- PG estroPLAN®, Estrumate®, In-Synch®, Lutalyse®, ProstaMate®

HEAT DETECT & TAI

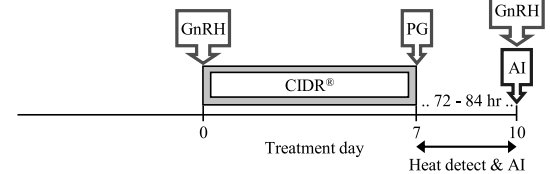
Select Synch & TAI

Heat detect and AI days 6 to 10 and TAI all non-responders 72-84 hours after PG with GnRH at TAI.



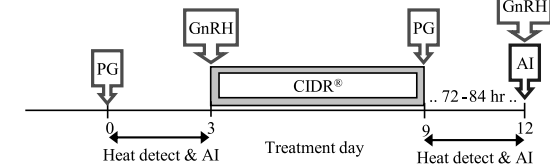
Select Synch + CIDR® & TAI

Heat detect and AI days 7 to 10 and TAI all non-responders 72-84 hours after PG with GnRH at TAI.



PG 6-day CIDR® & TAI

Heat detect & AI days 0 to 3. Administer CIDR to non-responders and heat detect and AI days 9 to 12. TAI non-responders 72-84 hours after CIDR removal with GnRH at AI. Protocol may be used in heifers.



Source: Beef Reproduction Task Force, 2011.

“I prefer pure TAI with no heat detection. But there are some people who don’t have the facilities or manpower or are overwhelmed at the idea of breeding a large group of cows at one time. This protocol can help spread out breeding.”

— Cliff Lamb



AI and Angus genetics produce uniform, top-quality replacement heifers for Herman Laramore.

“With the PG six-day CIDR and TAI protocol there is the potential to increase pregnancy rates by 3%,” says Lamb. “Producers need to figure out if the 3% increase is worth the extra costs of labor with heat detection and the extra injection of PG.”

Laramore says it is.

“It worked out very nicely for us,” he explains. “It spread breeding roughly into thirds. We did a third up front, seven days later we did another third, and we did a third TAI.”

He continues, “It only took a couple of hours a time to breed, and the cows weren’t crowded like they are when we breed in one or two days. It was easier for the cows and us. When we’d breed, we’d turn them out and they would pair themselves back up with their calves. We didn’t have to handle them again, plus we saved the cost of the CIDR, the GnRH and another PG injection on the ones we bred at first. There isn’t a much cheaper way to synchronize than giving a shot of Lutalyse, other than MGA.

“It is certainly a protocol to be considered,” he said.



Although it is a daunting task to artificially inseminate (AI) several hundred cows and heifers every winter, Herman Laramore is committed to the practice.