**HEAT DETECTION**

Select Synch

- GnRH
- PG
- Treatment day
- Heat detect & AI

Select Synch + CIDR®

- GnRH
- CIDR®
- PG
- Treatment day
- Heat detect & AI

**HEAT DETECT & TIME AI (TAI)**

Select Synch & TAI

- Heat detect and TAI day 6 to 10 and TAI all non-responders 72 - 84 hr after PG with GnRH at TAI.

Select Synch + CIDR® & TAI

- Heat detect and TAI day 7 to 10 and TAI all non-responders 72 - 84 hr after PG with GnRH at TAI.

**FIXED-TIME AI (TAI)**

7-day CO-Synch + CIDR®

- Perform TAI at 60 to 66 hr after PG with GnRH at TAI.

5-day CO-Synch + CIDR®

- Perform TAI at 72 ± 2 hr after 1st PG with GnRH at TAI.
  - Two injections of PG 8 ± 2 hr apart are required for this protocol.

**COMPARISON OF PROTOCOLS FOR BEEF COWS**

<table>
<thead>
<tr>
<th>HEAT DETECTION</th>
<th>COST</th>
<th>LABOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select Synch</td>
<td>Low</td>
<td>Medium/High</td>
</tr>
<tr>
<td>Select Synch + CIDR®</td>
<td>High</td>
<td>Medium</td>
</tr>
</tbody>
</table>

**HEAT DETECT & TAI**

| Select Synch               | Low     | Medium/High |
| (TAI non-responders 72-84 hr after PG) |         |            |
| Select Synch + CIDR®       | High    | Medium    |
| (TAI non-responders 72-84 hr after PG) |         |            |

**FIXED-TIME AI (TAI)**

- 7-day CO-Synch + CIDR®
  - (TAI 60 to 66 hr after PG with GnRH at TAI)
  - High Medium
- 5-day CO-Synch + CIDR®
  - (TAI 72 ± 2 hr after 1st PG with GnRH at TAI)
  - High High

- 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.

- Cystorelin®, Factrel®, Fertagyl®, OvaCyst®
- PG: estroplan®, Estrumate®, In-Synch®, Lutalyse®, ProstaMate®

*Beef Reproduction Task Force*
**HEAT DETECTION**

1 Shot PG

7-day CIDR®-PG

**HEAT DETECT & TIME AI (TAI)**

Select Synch + CIDR® & TAI

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

MGA®-PG & TAI

Heat detect and AI day 33 to 36 and TAI all non-responders 72 - 84 hrs after PG with GnRH at TAI.

14-day CIDR®-PG & TAI

Heat detect and AI day 30 to 33 and TAI all non-responders 72 hrs after PG with GnRH at TAI.

**FIXED-TIME AI (TAI)**

CO-Synch + CIDR®

Perform TAI at 54 ± 2 hr after PG with GnRH at TAI.

MGA®-PG

Perform TAI at 72 ± 2 hr after PG with GnRH at TAI.

14-day CIDR®-PG

Perform TAI at 66 ± 2 hr after PG with GnRH at TAI.

**COMPARISON OF PROTOCOLS FOR BEEF HEIFERS**

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Heat Detection</th>
<th>Cost</th>
<th>Labor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Shot PG</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>7-day CIDR®-PG</td>
<td>Medium</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>MGA®-PG</td>
<td>Low</td>
<td>Low/Medium</td>
<td></td>
</tr>
</tbody>
</table>

**HEAT DETECT & TAI**

Select Synch + CIDR®

(TAI non-responders 72-84 hr after PG) High | Medium

MGA®-PG

(TAI non-responders 72-84 hr after PG) Medium | Medium

14-day CIDR®-PG

(TAI non-responders 70-74 hr after PG) Medium | Medium

**FIXED-TIME AI (TAI)**

CO-Synch + CIDR®

(TAI 54 ± 2 hr after PG with GnRH at TAI) High | Medium

MGA®-PG

(TAI 72 ± 2 hr after PG with GnRH at TAI) Medium | Medium

14-day CIDR®-PG

(TAI 66 ± 2 hr after PG with GnRH at TAI) Medium | Medium

* 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 heifers to inseminate, labor, and facilities.

* Cystorelin®, Factrel®, Fertagyl®, OvaCyst®

* estroPLAN®, Estrumate®, In-Synch®, Lutalyse®, ProstaMate®