



# Repro Tracks

► by **Cliff Lamb**, University of Florida

## Decision aids for reproduction

Many of you are starting to consider the 2014 breeding season. You may have an idea of the genetics or specific bulls you plan to use in your program, or you may just be looking through an artificial insemination (AI) directory, trying to decide what the next genetic strategy may be. However, when thinking about your breeding season, don't forget to carefully plan the breeding season.

Know when you want to start breeding, and remember to remove the bulls at the end of the season. I am frequently asked where to find resources to assist in planning a reproductive-management program. Therefore, I hope answers to these frequently asked questions assist producers in setting up their breeding season.

### Where is a good resource to find information focusing on reproduction?

The Beef Reproduction Task Force was developed by a group of university experts focusing on reproduction to provide leadership and consistency in reproductive programming to the beef industry in the area of reproductive physiology through cooperative Extension efforts. The Task Force has become the primary recognized

contributor to beef cattle reproductive-management strategies in the United States. The Task Force works closely with stakeholders from the pharmaceutical industry, veterinary community and genetics/AI industry to provide a united message to enhance visibility and understanding of reproductive processes to beef producers.

The Beef Reproduction Task Force has developed a website, <http://beefrepro.info/>,

that provides users the opportunity to access resources associated with reproductive management of beef herds (see Fig. 1).

Perhaps the most notable contribution has been the

development and annual updates of recommended AI protocols that the task force provides to industry representatives for publication and distribution (published in the *Angus Journal* on page 107 in the February issue). This has decreased the confusion among cattle producers and industry representatives on current estrous-synchronization protocols that are effective for AI in cows. The protocol sheets can be accessed on the Task Force website or can be found in the sire directories of any major semen company.

The Task Force also organizes the annual Applied Reproductive Strategies in Beef Cattle (ARSBC) workshops, which are hosted in different regions of the United States every year. The next ARSBC workshop will be in Stillwater, Okla., in October 2014. Extensive online coverage of current and past meetings is made available by the *Angus Journal* editorial team at [www.appliedreprostrategies.com](http://www.appliedreprostrategies.com).

### How do I ensure that I do not make an error when synchronizing my cows?

The most effective way to reduce errors in compliance when setting up a synchronization system is to consider downloading the Microsoft Excel-based Estrus Synchronization Planner available from the Iowa Beef Center at [www.iowabeefcenter.org/estrus\\_synch.html](http://www.iowabeefcenter.org/estrus_synch.html).

With fewer than four entries, the planner will allow you to print off a barn calendar that details what dates to administer products and the dose of each product. By using the planner, producers can eliminate many steps that may result in incorrect products being administered or products being administered on the wrong day. I use this planner whenever I am asked to assist someone in setting up a synchronization protocol.

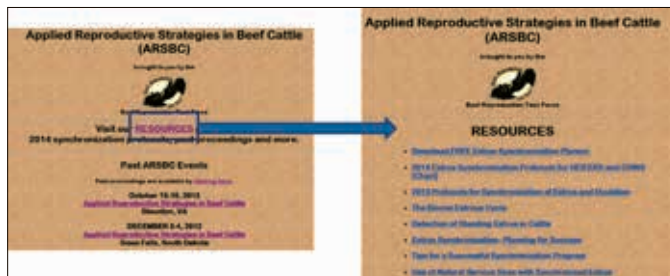
A new development with the planner is a

smartphone-friendly application. Using the browser on an iPhone or Android device, users may access the truncated version of the planner. This version is simple and only requires three steps (see Fig. 2). The outcome of the final step can be emailed directly to a user, which details the dates, times and when products should be administered.

### Is there a tool that helps me decide whether to use AI or purchase a herd bull?

As mentioned in the September "Repro Tracks" column (page 241, September 2013 *Angus Journal*), we developed a model that may be

**Fig. 1: Homepage and the Resources page of the Beef Reproduction Task Force website**



**Fig. 2: Three steps to the mobile estrous synchronization planner application**



**Fig. 3: Front page of the AI Cowculator App**



**Fig. 4: The AI Cowculator allows users to use sample values or enter their own values**



**Fig. 5: A toggle switch is included that when turned "ON" defines the input value**



useful to beef producers to incorporate their own costs and determine the value of estrous synchronization in their own operations. This model has been converted into a smartphone application for Android and iPhone/iPad users and is called the AI Cowculator (see Figs. 3-7). The AI Cowculator may be downloaded free of charge and is a decision-aid tool to assist producers in determining whether they should consider AI rather than purchasing herd sires for their cow herds.

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**Fig. 6: Results of calculations**

After all inputs are entered, users will touch "Cowculate," resulting in an output screen. A positive value (green) demonstrates that producers should consider TAI. A negative dollar value (red) indicates that producers should not consider TAI.



**Fig. 7: Other icon options**

Other icons allow users to: 1) source AI technicians and suppliers of semen and estrous-synchronization products ("Locator" icon); 2) find resources associated with reproductive management of beef cattle ("Resources" icon); 3) observe a gallery of pictures ("Gallery" icon); 4) be directed to the AI Cowculator social media sites, such as Facebook and Twitter ("Social Media" icon); and 5) access YouTube videos associated with the AI Cowculator, including a tutorial ("YouTube" icon).

