Beef/Forage Update

Well, it's not exactly end of February but finally an update…..

Included in this issue is an update from all the major Beef/Forage Programs and some beef management tips. MOST IMPORTANTLY, THE NEW ADVANCED MASTER CATTLEMAN COURSE OFFERINGS AND THE DEMONSTRATION PROJECT TOPICS ARE INCLUDED AT THE END OF THIS ISSUE!

IRM: The IRM committee is continuing to develop the new programs submitted by the participants from the Beef Summit. The Advanced Master Cattleman Program and the Program are described in great detail at the end of this publication. The potential topics for both programs are listed.

For more information, contact either Les Anderson (859-257-2856; landerso@uky.edu) or Roy Burris (270-365-7541 ext 208; rburris@uky.edu).

IRM Calendars: The IRM committee printed 7,000 calendars this year. VERY FEW ARE LEFT. If you need calendars, please contact Ag Distribution as soon as possible.

Kentucky Beef Book (Volume 2): The newest version on the Kentucky Beef Book is available for purchase from Ag Distribution. For more information about the new Kentucky Beef Book contact Roy Burris (270-365-7541 ext 208; rburris@uky.edu).

New FCS Beef Training Program: A new beef training program for FCS agents was developed by the IRM committee. Cristy Honaker, FCS agent in Pike County, has led the committee consisting primarily of FCS agents, FCS Specialists, and Beef Specialists. The trainings will be held in June at three different locations across Kentucky. The first training was outstanding. If you think your FCS agent would be interested, have her contact Cristy Honaker (606-432-2534; chonaker@uky.edu) for more information.

Cow College: The dates for Cow College 2006 have been determined. They are as follows: Economics/Marketing, July 18-19; Nutrition, August 10-11, Health, August 30-31; Genetics/Reproduction, October 10-11; Forage/End Product, October 23-24. We will begin advertising in Cow Country News. The cost of Cow College is $250. To enroll in Cow College or for more information, contact either Les Anderson (859-257-2856; landerso@uky.edu) or Land Dale (859-278-0899; lldale0@email.uky.edu).

Master Cattleman Program: The program in 2006 consists of 14 different groups around the state most of which have started. Master Cattleman Field Day’s are being organized now. The dates will be sent out to participating agents as soon as they are finalized. For more
Record Keeping: About 400 people are using CHAPS and 45 herds are using custom processing. We are in the process of printing more herd record books (ones similar to the IRM Red Books). They should be available soon. Our SPA program is not performing at an acceptable level. We are not receiving or inputting data from many farms. We have decided to change our course of action. First, we are inviting in Dr. Miller from the University of Illinois to conduct some SPA trainings in Kentucky. These training will be for specific county groups that we feel have adequate numbers of record-keepers and adequate interest to actually take record-keeping to the next level. We will then focus our efforts predominately on getting data from those groups and using that data in our trainings. We have not decided which specific county groups to target so if you are interested please let us know. For more information on our record-keeping system contact Arren Heenan (859-278-0899; ArrenHeenan@uky.edu).

Animal Health: New BQA Agent training sessions have been occurring at Princeton and Lexington. Thirty-two agents attended these trainings. Dr. Scharko, Jim Akers, and others are working on a new training manual which will available sometime soon. Remember that certification is good for 3 years. BQA producer certification is required for CPH sales and it is simply a good idea to participate! For more information contact Dr. Patty Scharko (859-253-0571; pscharko@uky.edu).

Bovine viral diarrhea virus (BVDV) is a pathogen of great economic significance to cattle producers worldwide. As a vital part of Kentucky’s agri-business, cattle producers would be better served by knowing the incidence of BVDV-persistent infection (BVDV-PI) in calves purchased from Kentucky stock yards. Calves persistently infected with BVDV are the known carriers which unsuspectingly spread the virus throughout the herd via body secretions. Acute infections can result in abortion or the establishment of additional PI calves in pregnant cattle, and additionally can cause a variety of signs including anorexia, diarrhea and immune system dysfunction. Especially for the case of stocker or feedlot cattle with highly concentrated population of cattle, a BVD-PI calf can exacerbate the spread of disease. This exposure results in increased morbidity and mortality in the pen of cattle. A central Kentucky cattle producer allowed the sampling of cattle on arrival for this study beginning in January 2006. Calves were purchased from several local stockyards. A total of 962 calves were tested with an ear notch sample. Four (4) calves were identified as BVD-PI which represents 0.41% infection rate. Reports from other areas in the U.S. average 0.5%. Due to the partial protection of BVDV vaccines in cattle from the various diseases associated with the virus, stringent biosecurity measures are advised for all cattle producers. This recommendation is of utmost importance for producers that rely on stockyards, which are known for increase exposure to disease, as their main source for replacement stock. Identifying and eliminating BVDV-PI calves prior to introducing them into the general population on cattle farms would significantly reduce the possibility of introducing BVDV into a herd, which in turn should result in greater herd health. This program was coordinated by Drs. Patty Scharko, Morgan McCoy, R.C. Giles, Mary Lynne Vickers, and John Johns. For more information contact Dr. Patty Scharko (859-253-0571; pscharko@uky.edu).

Forage: The U.K. AGR-162 publication “Stockpiling for Fall and Winter Pastures” has been revised and is now available in the bulletin room. An electronic version is also available on the
forage website at [www.uky.edu/Ag/Forage](http://www.uky.edu/Ag/Forage). For more forage information, consult the Forage News publication available on the forage website.

**Animal Identification:** Following is a brief update on the Process Verification Program and Quality Systems Assessment Program prepared by Becky Bennet from KCA/KBN.

**Disclaimer:** The Process Verification Program and Quality Systems Assessment programs were designed under the Beef Export Verification to satisfy export requirements from Japan and other countries. This isn’t a part of the National Animal ID program for disease management.

**Basics of BEV**
- **Beef Export Verification (BEV)**- set of criteria packers must follow in order to export beef to other countries
  - Japan under 20 months
  - Other Countries under 30 months
- **Qualifications for BEV**
  - Operate under a PVP or QSA program that is approved by the USDA
  - Sell animals to an approved buyer that operates under a PVP or QSA
- **Drivers of BEV**
  - High quality meat
  - Offal- tongue, liver

**Difference between QSA and PVP**
- **QSA- Most major packers and feeders**
  - Participant Certification
  - Producer must have documentation of birth records and in some cases send to buyer to satisfy feeders QSA
  - Paper trail is developed and moves with the cattle
  - Packer must have records to verify cattle for export
  - Audits
- **PVP- Higher level of certification**
  - Participant Certification
  - Producer can qualify cattle for local market claims and export possibilities
  - Info remains confidential within 3rd party system and maintained by producers
  - Provides a framework to protect customer base (privatized)
  - Audits

**SLN/KBN PVP**
- **Roles within a PVP**
  - **PDSN- Private Data Sharing Network- KBN**
    - Under AgInfoLink’s PVP with USDA
    - Submits Data from IDDS and DDS to a online database
  - **IDDS- Indirect Data Supplier- Order Buyers/Some Markets**
    - Submits data on behalf on DDS
    - DDS must be enrolled before a IDDS can submit data
  - **DDS- Direct Data Supplier- Producers**
    - Submits data on their own behalf
    - Can enroll directly under a PDSN or IDDS
  - **Auditors- Facilitators, Agents (?), Order Buyers**
Do onsite visits
- Enroll participants
- Complete audits
- *Some states are using agents to perform the function of an auditor*

♦ **KBN Commitment**
  - Help producers capture additional market value
  - Keep as simple as possible
  - Minimize costs
  - Continue to push to simplify process for small producers, markets, buyers
  - Provide accurate and up to date information
  - Emphasize and maintain integrity

♦ **KBN Role (PDSN, IDDS)**
  - Maintain relationship with AgInfoLink
  - Manage data
  - Manage tag allocation system
  - Enroll participants
  - Provide certificates to buyers
  - Assure confidentiality
  - Provide markets/buyers tools and resources to legitimately market source and age verified animals

♦ **Producer’s Role (DDS)**
  - Record and maintain calving dates by group age or individual ages
    - Record books
    - Calendars
      - Keep track of all current dates (bull turnout dates, dates of first calves being born for that calving season, AI dates, Ect.)
      - Keep a list of eids tied to visuals with each calving group
  - Complete enrollment forms/customer agreements
  - Participate in an onsite audit
  - Complete a source/age affidavit that claims age and source verification
  - Submit required data to KBN/IDDS

♦ **Non-conformance**
  - Animals that can’t support the age and source verification claims through records
  - Help maintain KBN’s integrity- non compliance hurts/jeopardizes everyone
  - People must be notified up and down chain of non conforming product

♦ **General Facts**
  - KBN is required to do 10% on site audits of its enrolled participants a year
  - The PVP isn’t for all producers

For more information regarding these new developments in animal identification contact our IRM coordinator Jim Akers (859-278-0899; jakers@uky.edu).
Beef Management Tips

Reproduction

Late winter is an important time in reproductive management. Many cows are calving and preparations must be made. Following are several specific things a producer can do to have a successful calving season:

- Separate first calf heifers from mature cows. This allows producers to concentrate their efforts on the group of females that experience the highest incidence of calving problems.
- Provide a clean area for calving
- Be familiar with the signs of calving
- Check cows frequently; observe 3-4 times daily.
- Intervene early if calving difficulty is evident. Intervention is justified when 1.5-2 hours have passed without delivery of the calf. Early assistance aids the cow in recovery and they begin estrous cycles earlier after calving.
- Be sure the calf is breathing normally
- Be sure the calf consumes colostrum. To ensure good health, calves need to consume colostrums (first milk) within 4 hours after calving.
- Increase feed after calving. Cows need to be in a body condition score of 5 or better to ensure early rebreeding. As BCS increases the percentage of cows that are cycling at the beginning of the breeding season increases.

Now is the ideal time to prepare for the breeding season. Mark on your IRM calendar the dates you will turn in and remove your bulls from the herd. Producers should consider synchronizing estrus. If natural service is to be used, producers can synchronize estrus either by feeding MGA for 7 days prior to the breeding season or by inserting a CIDR device for 7 days before the bulls are turned out. Below is a little article on estrus synchronization with natural service.

Estrus synchronization can greatly improve reproductive efficiency and profitability in cow-calf operations. Estrus synchronization increases profitability by improving pregnancy rate, increasing weaning weights, enhancing calf uniformity, and improving cow productivity. Cow productivity is increased because more early-born heifers are available for use as replacements. Research has demonstrated that early-born heifers become more productive cows because they are more likely to conceive early in their first and subsequent breeding seasons and therefore wean older, heavier calves. Estrus synchronization has been used mainly to enhance the use of artificial insemination. The objective of this experiment was to determine the effect of estrus synchronization on reproductive performance after exposure to natural service in postpartum beef cows.

Methods

Mature cows and 2-year-old cows approximately 65 ± 3 days postpartum were randomly assigned to by calving date and age to one of three treatments. The cows in the first group were not treated (CONT) and were exposed to natural service for 60 days. The cows in the second group (MGA) were fed the orally active progestin melengestrol acetate (MGA, .5 mg/hd/d) for 7 days and were exposed to natural service for 60 days beginning the day after
cessation of MGA feeding. Cows in the third group (CIDR) had a EAZI-BREED CIDR device inserted for 7 days before being exposed to a 60-day natural service season. All bulls used in this experiment were mature and were subjected to breeding soundness exams approximately 30 days before the breeding season. Bull-to-cow ratios (BCR) ranged from 1:23 up to 1:42. Date of conception was determined using rectal palpation approximately 30 days after the end of the breeding season. Statistical analysis was used to determine difference in treatment and the effect of BCR.

Results

The results of this experiment are illustrated in Table 1. More cows conceived and conceived earlier in the treated than in control groups. Treatments did not differ because of BCR.

Table 1. Effects of estrus synchronization prior to natural service on reproductive response in postpartum beef cows.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Number of Cows</th>
<th>Pregnancy Rate (%)</th>
<th>Pregnant in the First 30 Days (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONT</td>
<td>1,040</td>
<td>83</td>
<td>46</td>
</tr>
<tr>
<td>MGA</td>
<td>614</td>
<td>93</td>
<td>78</td>
</tr>
<tr>
<td>CIDR</td>
<td>421</td>
<td>91</td>
<td>80</td>
</tr>
</tbody>
</table>

Conclusions

Synchronization prior to exposure to natural service markedly enhanced the rebreeding performance in this experiment. The use of estrus synchronization prior to natural service certainly improved pregnancy rates, should improve weaning weights (because the calves will be older), and should improve uniformity of the calf crop. Rough estimates indicate that based on the predicted reproductive response, cows in the treated groups returned approximately $121 more profit than cows in the control group. Therefore, inclusion of estrus synchronization should be recommended.

If AI is to be used, contact your technician to set up the dates and order semen and other supplies. Contact your local veterinarian to set up a date for a breeding soundness exam for your herd sires. Remember, every bull needs to be subjected to a breeding soundness exam about 30 days before the breeding season. One infertile cow means one fewer calf at weaning while one infertile bull means zero calves at weaning.

Genetics

Many producers are currently looking for herd sires. Selecting a herd sire is one of the most important decisions a producer can make since the bull contributes one-half the genetics to each calf. The first decision to make is what breed of bull you should use. Select a breed or combination of breeds based upon the following:

- Goals of your operation
• Marketability in your area
• Cost and availability of good seedstock
• Climate
• How the breeds complement each other
• Personal preference

Once a breed is selected, it is time to select an individual bull for purchase. Five criteria should be used to select a bull. First, a bull must be reproductively sound. All bulls should pass a breeding soundness exam at least 30 days prior to the breeding season. Also, select bulls with a large scrotal circumference. Bulls with a larger scrotal circumference produce more semen or higher quality and can service more cows. Serving capacity is not limited in bulls with a yearling scrotal circumference of 35 or more centimeters. Second, a bull must be physically sound. Bull with poor feet and leg structure have a more difficult time servicing cows. Third, the bull must have EPD’s (expected progeny difference) that fit your marketing and production system. Fourth, the bull should be visually inspected for capacity, muscling, and disposition. The last criterion used to select a bull is price. It is to your advantage to comparison shop and select bulls that will work from many different seedstock dealers. Chose the bull that best fits your production needs and your budget.

Record Keeping Tips:

- Record January 1 inventory of cow-calf and backgrounding herd.
- Record January 1 inventory of stored feed
- Record winter feed usage for SPA records
- Complete 2004 SPA workbook and return for processing.
- Record calf data for CHAPS: birth date, birth weight, ID and sex.
- Fall calving herd: collect and submit weaning data for CHAPS
- Spring calving herd: Update calf data worksheets
Advanced Master Cattleman Program Description:

Background

Kentucky’s Master Cattleman program is the envy of many states. Since its inception in the year 2000, more than 2500 producers have completed this educational program. It is widely known to be successful and is a featured program of the UK College of Agriculture. Over the last several years, a need was identified for a program that would provide a logical next step for producers above the Master Cattleman level. Advanced Master Cattleman is intended to fill that role in Kentucky.

The Advanced Master Cattleman program is designed for producers who want a level of education above the Master Cattleman curriculum. **Participating producers must be graduates of the Master Cattleman program.** The goal of Advanced Master Cattleman is to move these producers to the next level of beef production. Producers should learn how to apply what they have learned in Master Cattleman and put those concepts into practice in their beef operation. The intent of Advanced Master Cattleman is to actually change producer behavior rather than just provide information.

In general, Advanced Master Cattleman sessions will be more in-depth, and in appropriate subject areas, may also be more hands-on. The topics covered in Advanced Master Cattleman will be driven by local needs. Each interested multi-county Advanced Master Cattleman group will choose topics that are needed most in their area. Therefore, the topics covered in each area will not necessarily be the same.

Areas that would like to hold an Advanced Master Cattleman program will be asked to apply to the program. This will be used to choose the groups that will participate. During the first year (2006), 5 multi-county Advanced Master Cattleman programs will be implemented. This will give everyone involved a chance to test the concept on a small scale. Details will be forthcoming, but groups will be selected based geographic dispersion, number of participating producers, and other educational programs being offered in the counties (i.e: Master Cattleman, Master Grazer, etc.). We truly want to reach as many people across Kentucky as possible.

The Role of the Specialists

Specialists will provide a “menu” of topics that Advanced Master Cattleman groups can choose from based on the feedback received through the county agents. Based on feedback, specialists will provide a short outline of each Advanced Master Cattleman session they would be able to offer. Two or three different potential Advanced Master Cattleman sessions from a single Master Cattleman topic are possible. For example, from the Master Cattleman Marketing and Profitability session – we may offer an Advanced Master Cattleman Session on (1) Record Keeping, (2) Futures Markets and Price Risk Management, and (3) Long-range Planning within the Cattle Cycle. Then it would of course be up to the specialists to design these educational sessions.

The specialists will work with the Advanced Master Cattleman coordinator to schedule sessions on each topic in each location where it is requested. The Advanced Master Cattleman coordinator will also be working with the extension agents on scheduling. The
specialist and the Advanced Master Cattleman coordinator should work together to see that each meeting location is reserved and equipped with any necessary equipment based on the needs of the specialist and the requests of the producer groups (ie: laptop, projector, working facilities, cattle, etc.).

**The Role of the Agents**

The role of the County Extension Agents is crucial to the Advanced Master Cattleman program. The County Extension Agents will work to reassemble Master Cattleman graduates in their multi-county areas. They will gauge the interest of the groups in having an Advanced Master Cattleman program. The agents will also be responsible for actually applying to hold an Advanced Master Cattleman program. This application will be made to the Advanced Master Cattleman Coordinator, Land Dale, at (859) 278-0899.

These groups will choose what topics they would like to focus their Advanced Master Cattleman Program based on the “menu” of specialist topics. The Agents will communicate these topics to the advanced Master Cattleman coordinator who will then communicate these requests to the specialists who will actually put together the programming. Every effort will be made to offer programming in as many areas as possible. Clearly, priority will be given to topics that are requested by multiple Advanced Master Cattleman groups.

Once groups are chosen and available topics are identified, the agents will work with their Advanced Master Cattleman groups to select topics that they would like covered in their programs. Each group will select 2-3 topics to be addressed in their area. They will be asked to rank sessions by their priority. Again, every effort will be made to offer the sessions that are requested, but it is possible that conflicts and schedules may not allow for each group to get exact 4-6 sessions that they would choose first. These sessions will be the Advanced Master Cattleman program for that area.

The agents will work with the Advanced Master Cattleman coordinator to schedule sessions in each location. The Advanced Master Cattleman coordinator will then work to schedule specialists for each session. The agents and the Advanced Master Cattleman coordinator should work together to see that each meeting location is reserved and equipped with any necessary resources based on the needs of the specialist and the request of the producer groups (ie: laptop, projector, working facilities, cattle, etc.)

The course topics that have been developed are:

The Advanced Master Cattleman course topics are flexible. Please contact Land Dale (859-278-0899; lldale0@uky.edu) if an Advanced Master Cattleman group has an additional idea for a course or would like to alter the offered courses somewhat to fit their specific needs.
Demonstration Projects Description

On-farm demonstrations have been developed to help illustrate the production and economic advantages of applying proper beef and forage production practices. Short, Moderate, and Long-term projects have been developed by UK Specialists as templates for local use. The producer, agent, KBN facilitator, and specialist will implement the project then document the impact on production and profitability. These demonstrations will provide opportunity for hands on training in a real world environment while collecting valuable data to document the impact of our programs.

The following projects have been developed. For a complete description of the projects, please view them on the IRM website (http://www.uky.edu/Projects/BeefIRM/). They will be available for viewing by the middle of next week.

Reproduction
- Shortening the Breeding and Calving Season
- Targeted Reproductive Management
- Economic Advantage of Estrus Synchronization and AI

Genetics
- Expected Progeny Differences/Record-Keeping
- Crossbreeding/Record-Keeping

Ag Engineering/Forages
- Hay Storage Options and Hay Quality

Nutrition
- Using Distillers Dried Grain with Solubles as a Supplement
- CPH-45/Preconditioning Demonstration
- Strategic Winter Feeding of Spring/Fall Calving Cows Using Stockpiled Fescue

Again, the detailed descriptions of these projects will be available on the IRM website early next week. This program is flexible; suggestions are welcome. If you have any questions, please contact Darrh Bullock (859-257-7514; dbullock@uky.edu).

The Beef/Forage Update is organized and distributed by Dr. Les Anderson. To include material in the next issue of the Beef/Forage Update, feel free to contact him by phone (859-257-2856) or email (landerso@uky.edu).

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin.