STEER FEEDOUT FINALE
The 147 steers in the 2012-13 feedout now have lots of numbers, objective data, to tell their story. We know which ones really gained well, all the way from 1.28 lbs. per day to 4.34 lbs. Those numbers tell which steers graded U.S. Standard and which ones were Premium Choice. We now know which steers had a desirable ribeye area and which ones yielded a light-muscled carcass.

We’ll reveal all these cold, hard facts at the Steer Feedout Finale on June 27 at 7 pm. This year’s finale will be in the University Extension Center in the courthouse in downtown Mt. Vernon.

There are 15 cow-calf raisers with the steers in the program. They come from southwest and northeast Missouri and most have been in the program before. We encourage participants to enter more than just once and to consign several head that more truly represent the overall genetic makeup of their herd.

Unfortunately, since the herds represent such a distance across the state, the Mt. Vernon location will mostly have owners from this area. A variety of breeds, colors, weights, grades, etc. of steers were in this year’s program so the results will attract the usual good-natured ribbing about the various traits measured during their time from last November to May in southwest Iowa.

Darrell Busby, director of the Tri-County Steer Carcass Futurity will come down to give the overall assessment of the steers performance compared to other state’s cattle. He’ll also review a multi-year trial where the USDA grades for frame and muscle of incoming cattle from across the U.S. are compared to the carcass results. If you follow very many beef publications you’ll see references to many of the educational trials that Darrell and the TCSCF crew have worked on the last 30 years.

I hope we’ll have some good photos of part of the cattle as they neared slaughter. I’m sorry there may not be as many pictures as in the past as the two days I went up to photograph in April turned out to be rainy.

BREIMYER SEMINAR
Another important date for your calendar is July 17, 9:30 am in Columbia. That’s the date for the Breimyer Ag Policy Seminar. This year’s topic should attract your attention as it’s the “The Future of the Missouri Cattle Industry.” The focus will be on the factors that have caused the number of cattle in Missouri to decline and the opportunities for growth.

Speakers include University of Missouri and Kansas State faculty members. A panel of Missouri producers and wrapping up the day will be Trent Loos, host of “Loos Tales.”

The leader for decades in gross farm income in Missouri was cattle sales. Now, it ranks number 3 behind soybeans and corn. Plan to attend and see what the speaker’s crystal ball says about the years ahead. Contact extension agricultural specialists for registration details.

BEEF COW NUMBERS
Back in May I read a brief report on the 2012 ag census numbers for beef. They listed the top 50 counties in the nation for beef cows. Leading the pack was Cherry county, Nebraska with 150,000 head of cows. Lawrence county, Missouri came in 29th with 45,500 cows. Polk county had 42,500 cows to rank 44th.

Just across the line in Arkansas there are two counties in the top 50. Washington county has 56,000, ranking 17th and Benton county has 50,000 at 23rd.

Missouri, as a state, ranks third in beef cows behind Texas and Nebraska. We are number two, behind Texas, in total cattle operations in the state with 59,000.

Missouri is widely recognized as a forage-producing state. For many years the primary forage consuming animal has been the beef cow since our quality of forage may not be the greatest to support big stocker-backgrounder numbers.
ELECTRIC FENCE WORKSHOP
Mark Green, district conservationist with the NRCS Springfield office sent word they will have an electric fence workshop on June 27, 8:30 am until noon. It will be held at Tommy Bowers, 10107 W Farm Rd 34, Walnut Grove. If you plan to attend, call 417-831-5246 ext. 3 by June 25.

POISON HEMLOCK
Have you ever seen so much poison hemlock as we have this year? A couple of dry years, followed by our unusually wet, cool spring must have been ideal for it. Some of you may call it carrot weed or wild carrot.

It’s pretty hard to miss here in early June with it’s 5 to 7 foot height and an abundance of white blossoms. The main stalk is hollow and has purple blotches on it. It does have an odd aroma about it described in the literature as, “mousey.”

The big question is will it poison my cattle? As much as we have this year every cow, horse, goat, sheep and hog would die if it was really toxic. Animals must eat quite a bit for death to occur. I found a couple of references that said a cow would need to eat around one pound for it to be deadly.

The toxicity is reduced when the plant dries as in making hay. I’ve seen cattle eat the lush new growth in the early spring as well as when it’s flowering with no adverse reactions. Apparently they didn’t eat enough of it.

Poison hemlock is not on the Missouri noxious weed list. Control is relatively easy if herbicides are applied in the early stages. It is a biennial so treatment may be done in the fall or early spring, probably before the plant is knee high.

RFI RELATIONSHIPS
Residual Feed Intake (RFI) has become a popular tool to use when evaluating differences in animal performance. It’s primary purpose, as I see it, is to evaluate feed consumption and gain. Anytime you select animals for a trait that involves genetics, you should be aware that putting selection pressure on a trait like RFI could affect some performance trait you don’t want to change. It can however work both ways.

Since RFI is relatively new and perhaps not enough generations of selection have been done, we likely don’t fully understand what other traits that may be affected.

I saw in the May, Journal of Animal Science a research report from the University of Florida and the USDA Research Station in Brooksville, FL. The study was to evaluate temperament and lactation performance as three year old cows with varying RFI rankings.

Their conclusions were that RFI for postweaning and lactation phases do not appear to be related. They feel selection of the most feed-efficient heifers, which means they have negative RFIs, may reduce their feed cost and maintain cow performance throughout lactation. Temperament was not related to feed efficiency. However, temperament did affect feed consumption, weight gains and energy-corrected milk.

In their literature review, they stated that low RFI cows calve 5 days later than high cows. Another interesting note was that cows selected for 1 to 2.5 generations of low RFI were thinner at the start of the breeding season.

The beef cows at the Southwest Center, Mt. Vernon have been evaluated for RFI, both in the Grow-Safe pens and on pasture. They’ve also milked them and measured backfat and I’ve given them body condition scores. I’m anxious to see their research report and compare the findings to Florida’s.

HEIFER PRICES
Last month, I mentioned that the Show-Me-Select sale was a buyer’s sale. Since then I’ve had several folks say they wished they’d have been there to take home some of the good heifers that sold under $1500. Their bottom-line assessment was “I can’t raise my own that cheap.”

The June issue of Beef has an insightful column by Harlan Hughes, retired beef economist on the very subject of heifer costs and whether it’s time to plan a herd expansion. Below are the numbers that show the purchase value depending on the numbers of years a cow successfully weans a calf.

<table>
<thead>
<tr>
<th>Number of Calves</th>
<th>Purchase Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 calves</td>
<td>$1209</td>
</tr>
<tr>
<td>2 calves</td>
<td>$1502</td>
</tr>
<tr>
<td>3 calves</td>
<td>$1849</td>
</tr>
<tr>
<td>4 calves</td>
<td>$2110</td>
</tr>
<tr>
<td>5 calves</td>
<td>$2352</td>
</tr>
<tr>
<td>6 calves</td>
<td>$2540</td>
</tr>
<tr>
<td>7 calves</td>
<td>$2691</td>
</tr>
</tbody>
</table>

Harlan adds that a first-calf heifer that is open for her second calf but kept anyway and has five more consecutive calves is valued at $1854. He adds that the economic value of a preg-checked heifer this fall is $1992 per head.

My April letter gave the example of Philip Brook’s SMS heifers he purchased in 2005. They should be on their eighth calf this year so they’ve made Harlan’s hurdle.

AI VS. NATURAL SERVICE
The Arkansas Beef Cattle Research Update included a Colorado State study of yearling heifers comparing AI vs. natural cleanup service for lifetime productivity. Lifetime revenue used price and weaning weight data for each calf.

As yearlings, females that bred to AI had greater lifetime weight weaned, calves weaned and revenue than did females that settled to natural service. I’m glad to see more interest in heat synchronization and AI. This CSU study should validate that management practice.
RFI & HEIFER DEVELOPMENT
Feed conversion has become a trait of great concern as feed costs escalate. Feed of course is the big cost item in the annual cost of keeping cows or in cattle finishing enterprises. We’ve always known that feed measurement was important but it just wasn’t practical in most situations.

Then along came the Grow-Safe Feeding System which allowed for more accurate data gathering on individual cattle intake of feed out of the bunk. From this data a term evolved known as residual feed intake (RFI). Researchers, bull test stations and some large purebred operations now use this to get a feel for feed efficiency among a group of cattle. Form the feed intake data, we know two animals might make the same average daily gain but one eats more than the other. If their gain is the same, the one with less feed intake is more efficient.

When you select for a trait among animals there are other traits that may be affected either positively or negatively. As we select for RFI, researchers are discovering some interesting things. I saw a review in a recent Journal of Animal Science from Texas Agri Life Research, Randel and Welsh that implied selection for low RFI results in selection for leaner heifers that reach puberty at an older age. Those heifers calve later in their first and future calving seasons. In their summary and conclusion statement they state there may not be an acceptable method to improve feed efficiency without negatively affecting reproductive efficiency.

Our research at the Southwest Research Center has used RFI for several years to evaluate feed usage. Their primary interest was to see if efficient cattle on a mixed grain-forage diet would be efficient when grazing fescue pasture. They’ve also compared RFI values at different ages and under different stages of lactation. I’ll sure be interested in what they find here at Mt. Vernon.