TREATING CULL COWS AS A SOURCE OF REVENUE

Usually when producers have cull cows on their operation, they immediately become disappointed. However, what if the mindset was changed and you could turn that cull cow into a substantial amount of revenue for your operation. According to Kansas Farm Management Association, cull cow revenue is a substantial part of the cow-calf operation. Data from KFMA during a five year span, 2010-2015, shows that 20 breeding animals per year were sold with the average herd size being 126 head. The sale of cull cows was 24% of the gross income of those operations. This data is with the assumption that the cattle that are moving were open cows going to the local auction barn.

The question now becomes, “How do I get the most revenue out of my cull cows as possible?”. Everyone knows that the cattle market is cyclic. Playing this game with your cull cows could be beneficial in your operation. The cull cow market tends to decline during the fall and winter months due to the increase in supply. If you watch the cull cow market during the summer months, the market tends to go back up. During the summer months the market is somewhere from 60 to 65 cents with the cull cow market peaking at 80 cents this year. However, if you market those animals during the fall and winter months then the market has traditionally been 50 to 60 cents.

In the past, as well as the current, I express how crucial it is to focus on reproductive efficiency in your herd. This is yet another benefit of having those cattle identified as open or pregnant early. If a producer can identify those cattle early and have the ability to get them to the auction barn in mid-August, then you might still be able to catch the summer month spike in cull cow prices without putting additional feed resources into your cattle. However, if this is not an option, then we still have additional resources for maximizing the revenue of your cull cows.

If your operation finds itself doing a later pregnancy check, then you might consider retaining those cows and putting them into a low input feeding program. The first thing every producer must take into consideration is what type of feed resources you have available. From that point on, it is just putting the pencil to the paper and seeing what becomes the most profitable for your operation. Research from meat science resources as well as cattle performance indicates that an optimum condition for selling cull cows is a body condition score of six. If milo and corn stalks are available, then this is a cheap option to put on extra gain as open cow requirements are low.

With all of this said, remember there are two drivers that will impact a producers bottom line with cull cows. Those two drivers are the time of marketing and the body condition of the animal. Next time you have a few cows come up open at the end of the breeding season, think about it as being 24% of your gross income when using conscious marketing tools. If you have any questions regarding historical data of cull cows, please contact Katelyn Brockus in the Washington office, 785-325-2121 or kbrockus@ksu.edu.
After attending the Applied Reproductive Strategies meeting in Manhattan recently, it really started turning the gears in my head on what I could do to assist producers with reproductive performance in their herd. There are many tools and management practices that are being underutilized in the area of reproduction. Hopefully this article will get your gears turning as well.

Let’s start with the basics. Is your operation utilizing synchronization in your herd? If not, this is the first step in making your herd more uniform. Sometimes the various synchronization protocols can be overwhelming as producers can struggle with not knowing what protocol is “the right one”. First of all, there is no silver bullet that will help you to achieve 100% pregnancy. It is important to remember that all synchronization protocols work, but it is a matter of different management styles, age of cattle, and herd choices that really make the difference in making “the right” choice. I would be happy to sit down with producers and see what protocol best fits their operation. If you are not interested in using artificial insemination techniques, that is ok too. There are still synchronization opportunities for those that use natural service. If you choose this management practice, then it creates a shorter calving window and will result in a more uniform set of cattle. If you choose to use AI techniques, but are struggling with the protocols, then let’s visit and find out what the recommended protocols are for 2017.

Now let’s touch on genetics. Reproduction is a lowly heritable trait. This means that your herd is not going to have the ability to change quickly. It will take time. This will be a long process that over time will pay off and result in the possibility of having more money in your pocket. Simple management strategies can help increase your reproductive efficiency in the herd. One management practice that has been statistically shown to be effective is keeping heifers that are born early in the calving season. Please do not confuse this statement with picking the largest calves in your herd. While the earliest heifers born might be the larger heifers, do not make genetic selections with relation to reproduction based off of size. Over time, the industry has chosen to keep the biggest heifers out of their herds for replacements. We now have an average cow size that is too large and difficult to manage. This creates a struggle in the industry as we attempt to get our mature cow size back down to 1200 pounds cows rather than 1500. When making your decisions on heifer replacements, be sure to choose the earliest calving, moderate sized heifers.

Lastly, you can’t manage what you don’t measure. There are many new tools available to producers that should be utilized. The first tool is a calendar called Management Minder. This program can track the breeding season and remind you of upcoming pregnancy stages, allowing you to adjust feed rations for energy needs. The calendar can also remind you to arrange vaccines in time for processing calves, change feeding schedules, set up calving reminders, and more. Once you have set up your calendar for the first time, then the items from that year can be automatically sent to the next year, minimizing record keeping time for the following year. The best part of this tool is that it is free! Another tool that can be used is the BCI Pregnancy Analytics App. This app is being used by veterinarians and beef producers to enhance monitoring and evaluating cowherd breeding season success. The ability to visualize the percentage of a cowherd that becomes pregnant each 21-days of the breeding season can provide important information to identify the contributing causes for situations when lower than desired percentage of the herd becomes pregnant, or to identify areas for improved reproductive efficiency. The best part of this tool is that it is also completely free and completely mobile! With the evolution of technology, this would be a great start to getting your herd ahead of the curve!

Obviously, I have not hit on all of the tools available to increase the reproductive efficiency in your herd, but I hope that I have those gears turning. If you would like to visit about ways to increase reproductive performance in your herd, then please feel free to stop by or contact me in the Washington office, 785-325-2121 or kbrockus@ksu.edu.
WHEAT SOWING INFORMATION

From about now to October 20 is the time to sow wheat here in the River Valley District. The thought of wheat sowing brings up some questions that need to be addressed: What population should I be planting? When should I be doing my soil testing for wheat? What are some proper fertilizing techniques/ideas? The thoughts and questions can be daunting; we are going to answer those questions as well as add some tips and tricks for establishing a healthy wheat crop.

One of the first questions that comes up is what is the optimum population? There are many variables in answering this question, but there are also some points to consider when trying to answer it. One point to begin with when considering optimum seeding rate, is your location. The River Valley District is split in the middle of Republic and Cloud counties between two different population ranges. The east halves of Republic and Cloud counties, along with Clay and Washington want to stay in the range of 900,000-1,125,000 seeds per acre (around 60-75 lbs./acre assuming 15,000 seeds/ lb.), while the west halves of Cloud and Republic counties want to stay in the range of about 750,000- 900,000 seeds per acre (50-60 lbs./ acre assuming 15,000 seeds/ lb.). It is important to remember these are suggested ranges and that soil types, producer management, and other outside factors (like irrigation) greatly influence the optimum seeding rate. Another consideration to keep in mind is that the wheat population after entering into the second week of October. Planting at a higher population later on allows compensation for higher rates of winterkill and also the fact that the wheat will not have the same amount of time to tiller.

In conjunction with wheat population comes the thought about fertilizer techniques/concepts. When considering testing for soil nitrogen there are 2 dates to keep in mind: July 1 and November 1. Testing for pre-plant nitrogen should be done after July 1, while testing for top-dress nitrogen should be done after November 1 for proper results. Moreover, as for nitrogen application, top dress in the spring is preferred for wheat fields in Kansas over anhydrous Ammonia application. Spring applications allow for the knowledge of soil moisture content and crop condition prior to expense of nitrogen fertilizer application and decreased time interval between top-dress application and harvest. Note that it is important to fertilize wheat before it begins to joint (approximately the middle of March) when doing a spring top-dress nitrogen application.

Furthermore, with nitrogen application, it is important to keep nitrogen fertilizer in a starter fertilizer below 20lbs/acre when including a potash application to avoid chemical burn to the seed. Another starter nutrient to put great emphasis on during the starter fertilizer stage is the addition of phosphate fertilizer. Phosphate along with application of potash (potassium) greatly enhance the wheats ability to tiller and increases hardiness to winterkill. Even with adequate phosphate content in the soil, an additional application of 10-20 lbs./ acre will promote quicker growth and healthy root development. Please contact Tyler Husa at the Concordia office 785-243-8185 or thusa@ksu.edu with any questions.

TRICKS AND TIPS FOR ALFALFA PLANTING

Alfalfa is a favorite forage for many livestock producers across the state due to its high protein content and digestibility. Typically fall is the optimum time to plant alfalfa due to decreased weed pressure, but anytime that there is an adequate soil moisture level to establish a stand enough to reach the 3 to 5 trifoliate leaf stage before the first frost will suffice. One of the greatest limitations that deters producers from growing alfalfa is its high initial cost of establishment, but if it is properly managed (planting time, fertilizer input, soil tests, etc.) it is generally not that expensive if the cost is able to spread over the lifespan of the alfalfa.

What I consider to be the first essential step in alfalfa establishment is to perform a soil test. Soil testing particularly for the phosphorus (phosphate) and potassium (potash) is especially important. Phosphorus levels should be above 25 ppm and potassium levels should be above 120 ppm. Even if phosphorus and potassium levels are sufficient, an application of 15 to 25 lbs./A of both phosphorus and potassium will ensure those nutrients are readily available. Sufficient levels of both potassium and phosphorus ensures quicker and healthier establishment of the alfalfa stand while promoting hardiness over the winter months against the severe cold. One more important thing to look at on the soil test is the pH level (or acidity or alkalinity of the soil). The pH of the soil ideal for alfalfa is around 6.5-7.5, if the soil pH needs to be raised (made less acidic) the application of lime will work, but it is important the lime be incorporated into the soil because it is relatively immobile in the soil.

Now that the pre-plant work is done, it is time to consider alfalfa seed and planting. For here in north central Kansas, I would consider getting a seed with a fall dormancy rating from 4-6 (with higher preference for the shorter season alfalfa or “4”). Additionally, important is choosing varieties that aren’t susceptible to many of the rots and wilts that affect alfalfa (including phytophthora root rot, fusarium wilt, bacterial wilt, etc.). As far as seeding rates for typical dryland conditions it ranges from 12-15 lbs./ A, as well as around 12-15 lbs./ A for medium soils that will be irrigated. Plant about 1/4-1/2 inch deep in medium soils and up to 3/4 inch in sandier soils, use of the press wheels ensures good seed to soil contact and helps with timely establishment of the alfalfa stand.
WORKING GARDEN SOIL
IN THE FALL

Fall will be here before we know it! Vegetable gardens are starting to slow down and it’s time to start thinking about what can be done now to plan for next year’s garden. Fall is the preferred time to prepare garden soil for the next spring. Spring is often too wet, making it difficult to work soil without forming clods that will remain for the rest of the season. Fall usually is drier allowing more time to work the soil. Even if you work soil when it is wet in the fall and clods form, the freezing and thawing that takes place in the winter will break down the clods, leaving a smoother soil for the following spring.

Another reason to work the soil in the fall is to get rid of any insects and diseases you might have had from the previous year. Insects can overwinter in garden debris. If that debris is worked into the soil, insects will be less likely to survive the winter. Diseases are also less likely to overwinter if old plants are worked under. Working in garden debris will also increase the organic matter content of the soil.

Fall is an excellent time to add organic matter. Not only are organic materials (leaves, rotten hay or silage, grass clippings) usually more available in the fall but fresher materials can be added in the fall, allowing more time for them to break down before planting. The general rule is to add two inches of organic material to the surface of the soil and work it in. Be careful not to over work the soil. You should end up with particles the size of grape nuts or larger. By working the organic material into the soil, you are allowing it to sit there all winter and break down into nutrients that your vegetable plants will need next summer. By working your garden in the fall, you are allowing the soil to rest over the winter and be ready for vegetable plants in the spring.

DIVIDING PEONIES

Peonies are a favorite perennial of most gardeners because of their beauty and low maintenance. In Kansas, peonies provide a beautiful display of flowers each spring around Memorial Day. Although peonies can be planted in one place indefinitely, some gardeners may wish to divide their peonies. Keep in mind, however, that peonies often take about three years to return to full bloom and size after division.

Fall is the traditional time to divide these plants. The first step when dividing your peonies is to remove the foliage. Peonies are essentially dormant by September 1 even though the foliage is still green. Once you have removed the foliage, you want to dig out the entire plant. Shake or wash off as much soil as possible so that the pink buds or “eyes” are visible. Make sure each division has three to four buds. Peony roots are tough, and a sharp knife will be needed to cut the roots into separate pieces.

When choosing where to plant your new peonies, you will want to make sure the location receives at least a half-day of full sun, however, the more sun, the better. Planting divisions of peonies should be done the same way you would for new plants. When planting you want to allow enough space in between the plants so that they aren’t crowded when they reach mature size. There should be at least two feet between dwarf types of peonies and four feet between the standard types of peonies. When planting, place the pink buds about 1 inch below the soil surface. If you plant them too deep, flowering may be delayed or they may not flower at all. As you are planting your peonies, make sure to firm the soil around them as you are adding it. If the soil isn’t firmed, it will settle and pull the plant down with it, which can result in delayed flowering. After you have your peonies planted, water them in well, and water as needed throughout the fall and winter.

With our unpredictable winters, it is a good idea to add a layer of mulch to newly planted peonies to protect them from the changing temperatures. The alternate freezing and thawing that occurs during our winters can cause damage to weakly or newly rooted plants. You can add any type of mulch; straw, leaves, or woodchips after the soil freezes. Remember, it’s not the cold that harms the plants, but the alternating freezing and thawing of the soil that will hurt them. If you have any questions feel free to stop by or contact me in the in the Washington office, khanesohl@ksu.edu or 785-325-2121.

KSU Risk & Profit Presentations On-line

The Annual K-State Research and Extension Risk and Profit Conference was held in August in Manhattan but presentations are now available on-line at www.AgManager.info for those that were not able to attend or those that would like to watch a presentation again. The site is: http://www.agmanager.info/events/risk-and-profit-conference/previous-conference-proceedings/2017-risk-and-profit-conference

There are great sessions ranging from livestock and grain outlooks, to Kansas Land Values and Rental Rates, to Replacing Farm Equipment; to Margin Protection Insurance; and many more.
COMMUNITY BOARD
LEADERSHIP SERIES

The River Valley Extension District in cooperation with the K-State Research and Extension Community Development Program Team will once again be offering the Community Board Leadership Series February 6, 13, 20, and 27, 2018.

The Board Leadership Series provides an opportunity to give community-based boards — elected, appointed, or recognized by local units of government — affordable training necessary to be most effective and efficient with their responsibilities.

The four-session series will be held during the day this year, being offered from 11:00 a.m. to 1:00 p.m. with a light meal served. The sessions are high tech/high touch with a presenter being linked into all sessions being held across the state via Zoom technology. John Forshee will serve as the local facilitator and will lead the local group in a variety of hands-on activities throughout the session. The agenda will include:

**February 6**  Board Basics: Roles & Responsibilities of Board Members/Effective Meetings

**February 13**  Fiscal Responsibilities, Fundraising, and Legal/Ethical Issues

**February 20**  Understanding Fellow Board Members/Conflict Resolution

**February 27**  Strategic Planning

Registration will be $40 per individual seat at the series. However, group rates may be negotiated for boards or businesses wanting to send multiple individuals. Boards may also buy one seat and send a different individual to each session.

Mark your calendars now and watch future newsletters for the location that is yet to be determined. Contact John Forshee at the Clay Center Office for more information or to negotiate rates for your group.

KANSAS INCOME TAX INSTITUTE

The Kansas State University Department of Agricultural Economics invites you to attend the 69th annual Kansas Income Tax Institute. The program is intended for tax professionals and is designed to provide up-to-date training on current tax law, regulations, and updates. This year’s program will review recent cases and rulings and key legislation, provide an in-depth review and analysis of a number of tax areas, and cover newly enacted regulations and procedures critical to tax practitioners. The program stresses practical information to facilitate the filing of individual, small-business, and farm returns.

The Kansas Income Tax Institute will begin at 8:00 a.m. and adjourn at 4:30 p.m. each day, with registration and sign-in at 7:30 a.m. Lunch will be served on-site each day at 12:00-1:00 p.m.

There will be a morning and afternoon break each day.

The dates and locations are: October 31 & November 1, Garden City; November 1-2, Colby; November 2-3, Hays; November 20-21, Overland Park; November 27-28, Topeka; November 28-29, Salina; November 29-30, Wichita; and December 13-14, Pittsburg. A Webinar Tax Institute is available from the Pittsburg location on December 13-14. The Webinar is not NASBA approved but provided CPE credits for EAs, OTRPs, and CLE.

For more information or brochure visit [www.agmanager.info](http://www.agmanager.info) or contact Rich Llewelyn at 785-532-1504 or rvl@ksu.edu. Online registration is available at [http://commerce.cashnet.com/KSUagecon](http://commerce.cashnet.com/KSUagecon).

K-STATE AG LENDERS
CONFERENCE

K-State’s annual Agricultural Lenders Conferences are designed to provide the Kansas financial community with updates on current agricultural topics such as: Grain Marketing Outlook for 2018; Rainfall Index and Margin Protection Insurance; Farm Bill Changes and Crop Insurance; Macroeconomics and Interest Rate Outlook; Beef Cattle Market Outlook for 2018; and Land Values and Rental Rates in Kansas.

The conferences will be held at two locations. Tuesday, October 10 in Garden City and Wednesday, October 11 in Manhattan. Each day will start with registration and refreshments at 8:30 am with the program starting at 9:00 am. Lunch is included and the program wraps up at 3:00 p.m.

Pre-registration deadline is October 5th with a fee of $100. Registration after the deadline or at the door is $110. Register by check made payable to K-State Research & Extension by mailing to: Rich Llewelyn, Department of Agricultural Economics, Kansas State University, 345 Waters Hall, Manhattan, KS 66506. Register by credit card at [http://commerce.cashnet.com/KSUagecon](http://commerce.cashnet.com/KSUagecon). Brochures and information are available at any K-State Research and Extension office or by visiting [www.agmanager.info](http://www.agmanager.info).

For more information, contact Rich Llewelyn at 785-532-1504 or [rvl@ksu.edu](mailto:rvl@ksu.edu).
KANSAS CROP INSURANCE WORKSHOP

This one-day workshop will help crop insurance agents, agricultural lenders, farmers/ranchers, and other financial consultants provide better risk management information and advice to their clients or apply to their farm/ranch. If you are involved in the crop insurance industry, either as an agent, a producer, or an ag lender, you should consider attending this workshop.

The workshop will be held: October 31, Brush, CO; November 1, Grand Island, NE; November 2, Salina, KS; and November 3, Enid, OK. For more information and registration details visit www.agmanager.info. Register online at https://www.regonline.com/2017cropinsurance

FORESTRY FIELD DAY FEATURES LOCAL EXPERTS

The 23rd annual Fall Forestry Field Day has now been scheduled for Wednesday, October 4th just north of Manhattan on Bill Kennedy’s Tree Farm.

Kennedy has been recognized by the Kansas Forestry Association and the Kansas Forest Service as the 2017 Forest Stewardship Tree Farmer of the Year. With over 27 years of tree planting and woodland management, Kennedy’s Tree Farm provides an excellent hands-on learning venue for other landowners interested in managing woodlands.

Kennedy will kick off the day with an overview of his experiences followed by a variety of educational sessions throughout the day.

Landowners with invasive species issues like bush honeysuckle, black locust, and sericea lespedeza will hear from Ryan Armbrust, Forest Health Specialist with the Kansas Forest Service regarding expert’s best thinking for control and management of these and other unwanted plants.

Concerns for tick borne diseases is on the rise. Dr. Brian Herring, K-State Vet Medicine, will be on-hand to provide the latest information on control and protection from Rocky Mountain Spotted Fever, Ehrlichia, and Tularemia some of the more common problems in Kansas.

Understanding the potential for wood products is another aspect of woodland ownership. Dave Bruton, Utilization and Marketing Specialist, with the Kansas Forest Service will discuss new advances in Biochar and other specialty product opportunities in Kansas.

More and more landowners are raising honeybees and with the added concerns for declines in pollinators, a session will be offered on bee keeping by Gary LaGrange, from Save the Farm, a non-profit that provides a vocational pathway to service members transitioning to civilian life. Gary will be joined by Holly Shutt, Pheasants Forever wildlife biologist, together they will provide ideas on how to address the pollinator issue.

Improving woodlands for wildlife habitat, recreation, and the beauty they provide are some of the main objectives for Kansas woodland owners. Kansas Forest Service forester Thad Rhodes and wildlife biologist Corey Alderson, Department of Wildlife, Parks and Tourism will explain basic approaches to these important topics.

The day will end with a panel of Kansas master woodland owners who will field questions from participants.

A registration fee of $12 will cover a hot lunch provided by the well-known Ricky’s Café out of Hanover. Morning refreshments and educational materials will also be provided. Registration brochures may be found on the web at www.kansasforests.org by clicking on News & Events or by calling the Kansas Forest Service State office at 785-532-3300.

Learn more about the Kansas Forest Service at https://www.kansasforests.org. Story by: Bob Atchison at 785-532-3310 or atchison@ksu.edu.

HARVEST SAFETY TIPS

Plan for an injury/accident free harvest by:

* communicating with all family members & employees;
* reviewing emergency procedures with all team members;
* participating in trainings/operator refresher courses;
* setting expectations for personal protective equipment;
* planning to take regular breaks and get adequate sleep;
* ensuring safety features/maintenance are in place;
* watching for overhead power lines and other hazards;
* following road rules and being aware of motorists;
* Dressing for comfort and safety one should:
  - wear protective footwear;
  - wear close fitting clothes with no strings or frays;
  - wear gear to reduce noise, dust, and toxin hazards.
Preparing Your Newly Planted Trees for Winter

October 26th, 2017
Afternoon & Evening Workshops

4-H Building, Republic Co Fairgrounds
901 O Street
Belleville, Ks 66935

This training session will provide hands-on experience.

We learn how to correctly mulch young trees, use trunk protective wraps, selective pruning techniques and proper tree selection.

Participants should dress for working outside. Please bring gloves. Tools will be provided but attendees may bring their own.

Afternoon Session-
2:30pm to 4:00pm
or
Evening Session-
5:30pm to 7:00pm

RSVP to the Washington Extension Office at 785-325-2121 or email Kelsey at khatesohl@ksu.edu

Kansas State University is committed to making its services, activities and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, contact John Forshee, 785-632-5335.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service
K-State Research and Extension is an equal opportunity provider and employer.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
<th>PROGRAM</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 4</td>
<td>8:30-4pm</td>
<td>Fall Forestry Field Day</td>
<td>Kennedy Tree Farm-Five miles south of Randolph</td>
</tr>
<tr>
<td>Oct. 9</td>
<td>10:30am</td>
<td>Extension Fall Fling</td>
<td>Clay Center-4-H Conference Center, Fairgrounds</td>
</tr>
<tr>
<td>Oct. 11</td>
<td>8:30-3pm</td>
<td>Ag Lenders Conference</td>
<td>Manhattan-KSU Alumni Center</td>
</tr>
<tr>
<td>Oct. 13</td>
<td>5:30-9:30pm</td>
<td>Animal Science Family and Friends Reunion</td>
<td>Manhattan-Stanley Stout Center</td>
</tr>
<tr>
<td>Oct. 15-Dec. 7</td>
<td></td>
<td>Medicare Part D Enrollment</td>
<td>Contact your local RVD Office for an appointment</td>
</tr>
<tr>
<td>Oct. 26</td>
<td>2:30-4pm</td>
<td>Preparing Your Newly Planted Trees for Winter</td>
<td>Belleville-4-H Building, Fairgrounds</td>
</tr>
<tr>
<td>Oct. 26</td>
<td>5:30-7pm</td>
<td>Preparing Your Newly Planted Trees for Winter</td>
<td>Belleville-4-H Building, Fairgrounds</td>
</tr>
<tr>
<td>Nov. 16</td>
<td>8:00-5pm</td>
<td>KSU Swine Day</td>
<td>Manhattan-KSU Alumni Center</td>
</tr>
<tr>
<td>Dec. 19</td>
<td>8:30-3:30pm</td>
<td>Farming for the Future</td>
<td>Salina-Webster Conference Center-2601 N. Ohio</td>
</tr>
<tr>
<td>Jan. 9</td>
<td>7-11pm</td>
<td>RVED Lease Workshop</td>
<td>Washington</td>
</tr>
<tr>
<td>Jan. 30</td>
<td>9:30-3:30pm</td>
<td>Grant Writing Workshop</td>
<td>TBD</td>
</tr>
<tr>
<td>Feb. 6, 13, 20, 27</td>
<td>11-1pm</td>
<td>Board Leadership Series</td>
<td>TBD</td>
</tr>
</tbody>
</table>