

# OFF THE HOOF

*Kentucky Beef Newsletter – July 2012*

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*Published Monthly by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky*

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## Timely Tips

*Dr. Roy Burris, University of Kentucky Beef Specialist*

### Spring-Calving Cow Herd

- Hay yields were generally lower than usual this spring. Be sure that you have enough feed to survive a drought and/or a long winter. Plan ahead.
- Fescue pastures tend to go dormant in July and August, so look for alternatives like warm season grasses during this period of time. Try to keep the young calves gaining weight. Go to pastures which have been cut for hay to have higher quality re-growth when it is available.
- Remove bulls from the cow herd by the end of the month and keep them away from the cows. A short calving season can concentrate labor during the calving season; group calves by age so that it is easier to find a convenient time to vaccinate, castrate, dehorn, etc.; and provide a more uniform group of calves at market time.
- Mid-July (when the bulls are being removed) is a good time to deworm cattle, use a product that is effective against inhibited ostertagia. Re-implant calves which were implanted at birth if the type of implant and amount of time indicate. Calves which haven't been vaccinated for blackleg should be. Spraying or using a pour-on for flies while cattle are gathered can supplement other fly control methods. Remember to work cattle early in the morning when it is cool and handle them gently to minimize stress.
- Continue to watch for pinkeye and treat if necessary. Minimize problems by clipping pastures, controlling face flies and providing shade. Monitor the bulls' activity and physical condition as the breeding season winds down.
- Consider warm season grass pastures for hay, if reserves have not been restored yet.

## **Fall-Calving Cow Herd**

- Fall-calving cows should be dry and pregnant now. Their nutrient needs are minimal and they can be maintained on poor pasture to avoid over fattening. Keep a good free-choice mineral mix available at all times. You can use a lower phosphorus mineral supplement now, if you want to save a little money. These cows are regaining body condition after a long winter feeding period.
- De-worm cows in mid-July with a product that is effective against inhibited ostertagia.
- Get ready for fall calving and plan to have good pasture available at calving and through the breeding season.

## **Stockers**

- Sell heavier grazing cattle before rate of gain decreases or they get into a heavyweight category. This will also relieve grazing pressure as pasture growth diminishes. They can be replaced with lightweight calves after pastures recover.
- Lighter cattle which are kept on pasture need to be rotated to grass-legume or warm-season grass pastures to maintain a desirable level of performance. Re-implant these calves and deworm with a product that is effective against inhibited ostertagia.

## **General**

- Be sure that clean water is always available, especially in hot weather. Make routine checks of the water supply. Cattle need 13 to 20 gallons of clean water in hot weather.
- Maintain a weed control program in permanent pastures and continue to “spot-spray” thistle.
- Check pastures for downed wild cherry trees after storms (wilted wild cherry leaves are toxic to cattle).
- Have forage analyses conducted on spring-cut hay and have large, round bales covered. Begin planning the winter feeding program now. Most of the hay was cut late due to a wet spring but a dry period permitted it to be put up without getting it rained on – so overall not a bad haying season.
- Start soil testing pastures to determine fertilization needs for this fall.

## **The Best Food I Ever Tasted**

*Dr. Roy Burris, Beef Extension Specialist, University of Kentucky*

Karen and I just returned from a cruise to Alaska (in honor of our 40<sup>th</sup> anniversary) and a lot of the emphasis seemed to be on food. So I began thinking about those eating experiences when food tasted the very best to me and about our love affair with. . . . food.

I remember when I was in my early teens and would help neighbors haul hay for some extra money. It wasn't unusual to sleep as late as possible then skip breakfast and go to the field. I would be hungry, thirsty and hot by the time we would stop by the old country store. You wouldn't believe how good bologna with crackers and hot sauce, washed down with an RC Cola, could taste! So, food is definitely better when you are hungry.

I've had some good food at Sunday dinners, too. That's when families put their best “dishes” on the table. I hate to admit it but, during some church services, my mind would wander ahead to the dinner table and I

could taste the home cooking that would be spread out on the table. After eating, no one seemed to be in a hurry to clear the table. We just sat there and visited about everything. Special times, maybe that's what makes food taste so good.

When I was a kid we grew our own food -- churned our own butter, raised broilers, had free-range chickens and eggs, killed hogs and grew a large garden. Sometimes, during the summer months, our extended family (usually cousins from "up north") would visit and everyone would get together for a feast of farm-raised, home-grown, natural food that was great. Maybe that's why a lot of people want to get back to home-grown foods. . . .or maybe we yearn for a simpler time when food "tasted" better. Thanksgiving and Christmas dinners are always tasty at our house. I am not a big fan of turkey but it tastes mighty good when you share it with your children and grandchildren. The little folks eat at the small table and the grown-ups linger around the big table after dessert. The men eventually go sleep in front of the television while "watching" a ballgame (probably just to get out of doing the dishes). Ah, that's some great food. Maybe food is best when shared with family.

There have been other times related to my job when I've had some fine meals. Some of you have invited me to sit at your table with your families and that has always been a treat. Great food coupled with talk about your cattle operations, your families and your dreams makes those experiences special, too. I've never had a bad meal when I was surrounded by a farm family. That makes food taste good, too.

Breakfast is not a big meal for me but it can be special. I think my favorite breakfasts were eating with my Mom in her later years – biscuits, sausage gravy, homemade strawberry freezer jam and a steaming hot cup of coffee. We would just sit at the table and talk until the pot of coffee was finished. You have no idea how much I would give for one more cup of coffee like that.

So, I am not sure what the best food is. My favorite meat is beef – especially a T-bone hot off the grill. But, I can tell you this – "meatloaf with a friend is a lot better than a T-bone by yourself." Food is very important when you are hungry but once you get past that basic need it seems to me that fellowship, which is a part of most meals, is what's really important. Families, especially farm families, have always understood that. Here's to an abundance of good food, friends and family. Put a couple of extra steaks on the grill and invite some friends over. The steaks will taste better. Have a great summer!

## **Nitrate Poisoning in Livestock**

*Dr. Ray Smith, Dr. Jeff Lehmkuhler, Dr. Cynthia Gaskill, and Dr. Michelle Arnold, University of Kentucky*

Due to the extreme drought conditions throughout the Commonwealth of Kentucky, it is important to be aware of nitrate poisoning that may occur as a consequence of nitrate accumulation in certain forages. Nitrate concentrations tend to be higher at the base of the plants, and higher in the stalks than the leaves. Grains, seeds and leaves do not accumulate significant nitrate levels. Plants with high stem-to-leaf ratios are the most likely to cause nitrate intoxication.

Nitrate and nitrite poisoning may be considered as one entity. When nitrates are ingested, they are reduced to nitrites in the rumen before being absorbed from the digestive tract as microbial proteins. Nitrate poisoning in ruminants may occur as a result of consumption of nitrate fertilizer or forage with a high nitrate content. Cattle with access to nitrate fertilizers, especially when deprived of salt, may consume toxic quantities. Cattle consuming plants containing excessive amounts of nitrates cannot convert the

nitrate to protein quickly enough without accumulation of nitrite. It is the rapid formation and absorption of large quantities of nitrite that causes poisoning.

Few plants normally contain high nitrate levels. Under normal growing conditions, roots of forage plants absorb nitrate from the soil. Shoot tissues then convert nitrate into plant protein. Under certain conditions, such as high nitrate fertilization, drought, or sudden weather changes, plants can develop potentially dangerous nitrate levels. Highest levels of nitrate tend to be found in the stems where nitrate reduction normally occurs, and not in the leaves. Ensiled forage crops high in nitrates may have the nitrate content reduced by up to 60% with proper fermentation. There is little reduction of nitrate in dried hay. Common crops in Kentucky that may accumulate nitrates include corn, wheat, sudangrass, rye, millet, alfalfa, soybeans, and oats. Common weeds that are nitrate accumulators include ragweed, pigweed, thistle, bindweed, jimsonweed, and johnsongrass. These are not complete lists but these forages cause the most problems within the state.

Nitrates in water sources may also poison livestock. Surface water or water from shallow wells may contain nitrates, especially if there is run-off from fertilized land contaminating the water. Both water and forage should be analyzed to ensure that total nitrate does not exceed toxic levels.

**Cause:** Nitrates, when consumed more rapidly than they can be converted to protein, enter the bloodstream as nitrite. The absorbed nitrites combine with hemoglobin of red blood cells to produce methemoglobin, a form incapable of transporting oxygen. Death occurs as methemoglobin levels approach 80%.

**Signs:** The first sign of nitrate poisoning is usually the sudden death of one or more animals. Oxygen deprivation (asphyxiation) results from the tying-up of hemoglobin. Signs include rapid, labored breathing; rapid, weak heart beat; staggering; muscle tremors; and recumbency (downer animal). Affected animals typically show signs of poisoning within 6-8 hours after consumption of a toxic dose of nitrates. Examination of the mucous membranes, especially the vaginal mucous membranes, may reveal a brownish discoloration that occurs well before other clinical signs. Venous blood also has a chocolate brown discoloration. Death can occur within 2-10 hours depending on the quantity and rate of absorption of nitrite and the amount of stress or forced exercise the animal is subjected to. Pregnant cows may abort following recovery from nitrate poisoning.

**Prevention:** Nitrate fertilizer should be stored where cattle do not have access to it and accidental spills should be cleaned up promptly. Avoid grazing warm season grasses fertilized with high amounts of nitrogen when growth ceases due to drought or cold damage. Corn should be properly ensiled at least 3 weeks and tested for nitrates before feeding. Do not green chop forages suspected to be high in nitrates. Cool season grasses and small grain pastures that have been heavily fertilized with nitrogen may be high in nitrates during early spring when cool, overcast days retard growth. All suspected forages should be tested for nitrate levels. Consult your County Extension Agent for Agriculture for information concerning sampling, sample preparation and location of a testing laboratory. Forage with high nitrate levels can be mixed with forage known to be low in nitrate to reduce the risk from feeding. Feeding low nitrate forage or hay before turning cattle on to high nitrate forages will reduce the amount of nitrate consumed. Cattle have the ability to increase their tolerance to nitrates in their diet with time. To aid in increasing this tolerance, the diet should be sufficient in vitamin A and the trace minerals normally contained in trace mineral mix. A gradual increase in the total energy content of the ration enhances metabolism in the rumen and helps cattle tolerate higher nitrate levels in their diet.

**Treatment:** Animals showing signs of nitrate poisoning should be removed from the source of toxicity and a veterinarian should be contacted immediately. Administration of a 2% solution of methylene blue intravenously by the veterinarian will aid in converting methemoglobin back to hemoglobin. Mineral oil or other emollients may be given to protect the lining of the digestive tract. Vinegar given orally via stomach tube will help prevent nitrate reduction in the rumen.

Please see the UK webpage: [http://www.uky.edu/Ag/GrainCrops/Briefs/nitrate\\_testing2012.html](http://www.uky.edu/Ag/GrainCrops/Briefs/nitrate_testing2012.html) for more information on nitrate issues including testing guidelines.

## **Considerations for Harvesting Drought-Stressed Corn**

*Dr. Donna Amaral-Phillips, Dr. Jeff Lehmkuhler, and Dr. Chad Lee, University of Kentucky*

### **Remember to consider:**

1. If corn is going to be fed as green chop, grazed, or as hay, test for nitrates before harvest to be sure the crop will be safe to feed. For corn harvested properly as silage or baleage and which goes through a good fermentation, nitrate levels could decrease 30 to 50% and can be tested after fermentation and before being fed. If you need to decide which corn fields to harvest as silage or hay, testing before harvesting will allow one to determine which fields need to be harvested as silage (those higher in nitrates) and those with safe levels of nitrates which can be harvested as corn hay. For sorghums and sorghum-sudangrasses, nitrates should be tested before harvest to be safe for your harvest method.
2. Check herbicide withdrawals to make sure the crop can be fed to livestock.
3. Raise the cut high—nitrates are highest in the plant stem closer to the ground. This may be more difficult if using a disc mower or other hay equipment for the purpose of making hay or baleage.
4. If at all possible, harvest as silage and let ferment for 4-6 weeks before feeding. You may want to consider using a silage inoculant. Again, test for nitrates before feeding.
5. Immature corn will be more variable in nutrient content than “normal corn silage”. After harvest, test the forage for its nutrient content and develop and feed a balanced ration to your cattle.
6. Watch the moisture content of the crop closely. A small amount can be chopped to determine the current moisture content. Corn is drying down quickly in parts of KY. You will need to use a Koster tester or microwave to determine the actual moisture content. Silage and baleage need to be correct moisture to ferment properly and make good feed.
7. Can you add enough water at the bagger or silo blower to increase the moisture content of the silage? For each 1% increase in moisture content, approximately 7 gallons of water is needed per ton. A typical garden hose delivers approximately 8-10 gallons per minute. Thus, it is nearly impossible to deliver enough water to make a difference. For example, to increase the moisture content from 45% moisture (55% dry matter) to 60% moisture (40% dry matter) for a wagon load of silage (4 ton capacity), you need to add 420 gallons of water-- Not feasible!!

### **Can you make baleage out of corn? Yes- but moisture and other harvesting techniques are important.**

1. Moisture content needs to be between 45 to 60%. Getting the crop at the moisture content can be very challenging.
2. Material needs to be crimped and/or conditioned before baling. Conditioning is a must to get the crop to ferment. Using a rotary mower (i.e. bushhog) may also work but make sure the blades are sharp to reduce shredding of the corn plant. If your baler has knives, they can be used to chop the corn plant.

3. Newer balers work the best. This is a very coarse crop that is tough on hay equipment and some older style balers may have difficulty handling the crop.
4. Inoculate can be added at the baler, if you are equipped to handle this.
5. Wrap with at least 2 extra layers of plastic for a total of 7 layers of plastic due to corn stalks puncturing the plastic.
6. Net wrap may work better than string tie balers. If you use a string tie baler, additional wraps of string should be used.

**Can you make hay out of the crop? YES--- BUT**

1. Nitrates will not decrease from the standing crop. The crop needs to undergo normal fermentation to decrease the level of nitrates. Hay does not ferment!!! If they are high in the standing crop, they will not decrease with harvest and storage.
2. Moisture needs to be about 15%. If the crop is harvested with over 18% moisture, it will heat and make a very poor feed. It can spontaneously combust if too wet and goes through a heat.
3. Corn stalks can be very variable in nutrient content (protein and energy) and may require supplementation depending on the cattle being fed.

**Early Weaning Management Considerations of the Beef Calf During Drought Conditions**

*Dr. Jeff Lehmkuhler, Extension Beef Specialist, University of Kentucky*

The continued dry conditions have resulted in a drastic decline in forage availability. Pastures conditions are deteriorating at a rapid rate forcing many to begin making difficult management decisions about their livestock. The widening drought region is impacting corn and other crop production which is expected to result in greater supplemental feed costs this fall and winter. In addition, many had reduced hay yields due to the late cold snap this spring and early dry conditions. Early weaning the calf crop is a viable option during these drought conditions.

Early weaning removes some grazing pressure. More importantly, early weaning reduces the nutrient needs for the cow herd and helps maintain body condition. This reduced nutrient need allows for the utilization of lower quality forage and or reducing the supplemental feeds needed. Cows that are in good body condition can be fed to maintenance requirements and lower daily feed costs.

The average age at weaning for beef calves today is 6-9 months of age. For many spring-calving herds, calves are born between late February and April. The youngest calves that are born in late April would be 90-100 days of age by mid-July. These three month old and older calves can be weaned early. Research has shown that with proper management, calves at this age can be very efficient at converting feed to live weight.

When making the decision to early wean calves, several factors should be considered. Factors that contribute to early weaning include:

- Drought conditions that limit pasture forage availability
- Limited stored forages
- Expensive hay and feed costs
- High feeder calf prices
- Strong cow markets for cull cows
- Poor body condition of cows

These younger calves require additional management to ensure they remain healthy during the weaning phase. If you are planning to early wean, the same recommended management protocols should be followed. Just remember to plan ahead. Ideally, calves will receive a first round of respiratory vaccine for BVD, IBR, PI3 and BRSV prior to weaning and then receive their booster at weaning. Deworming may be necessary if fecal egg counts dictate that a heavy internal parasite burden is present. Additional vaccinations such as those for clostridial disease should be administered as recommended by your local veterinarian or Extension agent.

If you intend to wean calves on the farm, there are some management strategies that can aid in reducing the weaning stress for the cows and calves. First, fence-line weaning has been shown in one study to reduce the associated stress of weaning for calves. This process requires a solid fence between the two areas where the cows and calves will be separated. Both areas need ample fresh water and feed sources. Be sure that there is no place where calves can get through the fence and that the fence can withstand some pushing by cows that try to get back with their calves. My general observations would suggest that if quality grass pasture is available, the cows are more agitated than the calves. This is possibly due to increased milk pressure in the udder leading to some discomfort in which the cows are calling to their calves to come relieve. The calves generally only walk the fence line when the cows are calling and walking the fence. Within 3-5 days, the activity is greatly diminished and the calves and/or cows can be moved to another pasture or area on the farm. Be sure that pastures provide adequate shade during extreme hot weather periods during the weaning process. The goal is to minimize all stress factors that can suppress the immune system.

During the weaning period, it is important that the calves have access to high quality, palatable feedstuffs. Stockpiled pasture is ideal, but soft, leafy grass hay is the second best thing. A grass-legume mix hay is acceptable, but high quality alfalfa should be avoided as it can cause scours. Scours will only further dehydrate stressed calves. These smaller light weight calves will require a slightly more energy and protein dense feed the first 7-14 days during the weaning period. Low intakes and smaller rumen capacity can result in nutrient intakes below their requirements. During the first seven days, a 16-18% crude protein diet is suggested to be offered. The protein source should be of plant origin such as soybean meal, distillers grains, corn gluten feed, cottonseed meal, and urea should be avoided. A diet that is 65-70% total digestible nutrients (TDN) should also be a target. Most hay in the area is 50-55% TDN with 8% crude protein and will require additional energy and protein supplementation. Using a 20% crude protein supplement fed at a rate of three to four pounds per day will often provide adequate protein for this period. A 25% soybean meal, 25% corn and 50% soybean hull mixture is an example that provides a 20% crude protein supplement. Another example using dried distillers grains would be 12.5% corn, 37.5% dried distillers grains and 50% soybean hulls. A mineral should also be used and ideally mixed in with the grain. The use of feed additives is also easy with hand-feeding a supplement. It is recommended that an ionophore be used to reduce the risk of a coccidiosis outbreak and improve feed efficiency. Once calves' appetites have returned to normal, the supplement intake can be increased to 5-6 pounds to support gains near 2 to 2.5 lbs.

It is recommended to avoid the use of fermented feeds such as silage and balage during the weaning transition. Calves are not accustomed to the taste of silage and intakes may be hampered which is not desirable. Calves that have been creep-fed will likely transition slightly easier and the same creep feed should be used the first few days following weaning along with the forage. Place feed bunks perpendicular to the fence closest to the cows. This will force the calves to walk around the feed troughs and investigate what is in them stimulating intake.

Monitor the health of the calves daily. Early detection of sick calves is critical and is the best method for ensuring an effective treatment response. Visit with your local veterinarian about what medications are the best suited for treating respiratory disease. Recommended products may require a prescription from a veterinarian and having a relationship with your local veterinarian will speed up the process of getting calves treated.

It seems like the rain continues to miss many of us, but being proactive will help your operation in the long run. Be ready to make an informed decision and don't dwell on the decision later. Too often we ask was that the right move, but as they say the past is history. We need to focus on the next step and once you have the calves weaned, you should consider what the next step is for dealing with the drought conditions. Be sure to visit with your local beef producers and county Extension agents to learn more about what can be done to manage the herd in these dry conditions.

## **Feeding Co-Product Feeds to Cattle on Fescue Pastures**

*Dr. Glen Aiken, USDA ARS Animal Research Scientist, Lexington, KY*

Tall fescue covers 5 million acres of hay meadows and pastures in Kentucky and has been the predominant forage in the state for over 50 years. Popularity of the grass is due to its productivity, persistence, and low cost of management. Unfortunately, a fungal endophyte that infects most plants of tall fescue produces ergot alkaloid toxins that cause a toxicosis in cattle and other grazing livestock. Fescue toxicosis may reduce reproductive performance of cow herds and weaning weights, and drastically reduce post-weaning weight gain and overall thriftiness. Consequently, fescue toxicosis is estimated to cost the U.S. beef industry approximately 1 billion dollars each year.

Clovers can be interseeded into endophyte-infected tall fescue to boost cattle performance and dilute ergot alkaloids in the cattle diet, but adverse weather conditions and patterns, lack of grazing management, or the use of excessive stocking rates will reduce the reliability of clovers as contributors to cattle diets. An alternative to clovers is to feed co-product feeds to provide a similar effect as clovers. Grain concentrates may also be fed, but grain prices have escalated in recent years and made them less feasible for feeding pastured cattle. This has turned cattlemen to cheaper co-product feeds, such as soybean hulls (SBH), cottonseed hulls (CSH), or dried distillers grains (DDG). An increased demand for co-product feeds has increased their prices, but they still remain a cost-effective alternative to grain-based concentrates. There are a multitude of co-product feeds besides SBH, CSH, and DDG that are available to cattlemen; for example, wet distillers grains, dried brewers grains, and bakery wastes. Many of these co-product feeds are sold at a low (or no) cost directly from the processing plant. However, logistics and cost of transporting co-product feeds to the farm must be considered as farm distance from the processing plant increases. There has been less research on the nutritive value and feeding management of many of the co-product feeds.

Co-product feeds can be fed in cost effective quantities to cattle grazing toxic endophyte-infected tall fescue while providing some dilution of the ergot alkaloids. We have conducted research with beef steers at the USDA-ARS Forage-Animal Production Research Unit (FAPRU) to determine if daily feeding of pelleted SBH at 0.8 to 1.0% of bodyweight (a 500 lb calf is fed 4 to 5 lbs) per day on toxic endophyte-infected tall fescue can increase average daily gain and reduce the severity of fescue toxicosis. Two experiments were conducted separately in the spring and summer. In both experiments, steers fed SBH had average daily gains that were over 30% greater those not fed SBH. A higher percentage of the steers fed SBH also shed their winter hairs and had sleeker hair coats than steers not fed SBH. These results



indicated that feeding SBH may reduce the severity of toxicosis, increase cattle growth rates and increase marketability of calves off fescue pastures.

Preliminary research conducted by Dr. Eric Vanzant, a ruminant nutritionist with the UK Animal and Food Sciences Department, demonstrated that DDG can provide substantial increases in the daily weight gain of steers grazed on toxic tall fescue. He will conduct more experiments to determine the optimum amount of DDG to feed for maximum cost effectiveness in increasing average daily gain and reducing the severity of fescue toxicosis.

It cannot be concluded that dilution of ergot alkaloids with consumption of co-product feeds or clovers can alleviate fescue toxicosis because it is apparent that cattle will still consume some ergot alkaloids, and recent research conducted by Dr. Jimmy Klotz, a ruminant physiologist at FAPRU, provided evidence that ergot alkaloids accumulate in tissues of cattle. Nonetheless, co-product feeds may reduce the amount of consumed ergot alkaloids to an extent that allows for low accumulation of alkaloids in the cattle.

## **Tall Ironweed Control in Grazed Pastures**

*Dr. J. D. Green, Extension Weed Scientist, University of Kentucky*

Tall ironweed (*Vernonia altissima* Nutt.) is one of the more commonly found weeds in grazed pasture fields and other non-cropland areas (**Figure 1**). In Kentucky, tall ironweed is ranked as the most troublesome and third-most common weed found in grazed pastures. The quantity of grass available for grazing can be substantially reduced in pastures by the presence of tall ironweed because of its unpalatability to livestock. This further leads to an increase in tall ironweed populations over time as animals graze and selectively avoid this weed.

Mowing alone can help suppress top growth of tall ironweed plants, but does not reduce plant populations. Mowing or clipping pasture fields, which is often performed once per year, can also lead to more multi-stemmed tall ironweed plants. Whereas, using a timely herbicide application in problem fields is one method to effectively reduce tall ironweed populations. Based on several field research studies tall ironweed populations can be reduced 80 to 95% the year following herbicide treatment when combined with other management strategies.

A herbicide-based control program for tall ironweed in grazed pastures may require a 12- to 18- month time period to reduce tall ironweed populations and allow for reestablishment of clover. Tall ironweed control should start in early to mid-July by mowing emerged tall ironweed stems. Mowing removes top growth of currently emerged plants which often have older, tattered leaves. This also forces the plant to use more stored energy from its roots to develop new shoots. When plants regrow 10 to 20 inches in height (generally in mid to late August) the younger stems and leaves are more conducive for herbicide uptake. In August or by early September apply a pasture herbicide containing either triclopyr (eg. PastureGard, Crossbow, etc.) or aminopyralid (eg. ForeFront, etc.) as a broadcast treatment. Although mid-summer (June and July) treatments can provide good control, better herbicide movement to the root system occurs with perennial weeds such as tall ironweed with late summer applications. Consult product label or Extension bulletins for recommended use rates for herbicides.

One of the drawbacks to the application of broadleaf pasture herbicides is that they can impact desirable clover stands. Emerged clover within the treated areas of the field are likely to be killed. Consult the herbicide label of the product used for minimum reseeding intervals for clovers and other desirable forage grasses. Also, observe other precautions prior to application.

This approach for tall ironweed control is best suited for fields with moderate to heavy tall ironweed populations. For lighter infestations levels, a spot treatment of individual plants may be warranted to keep tall ironweed populations from becoming a major problem. Use of rope wick applicators and roller wipers have also been evaluated for tall ironweed control as a method to minimize injury to clover. However, the results have consistently been less successful than broadcast herbicide treatments for control of tall ironweed.



Figure 1. Tall Ironweed plant

## **Options for the Herd During Dry Conditions**

*Dr. Jeff Lehmkuhler, Extension Beef Specialist, University of Kentucky*

## **Kentucky Beef Cattle Market Update**

*Dr. Kenny Burdine and Dr. Greg Halich, Extension Specialists in Ag Economics, University of Kentucky*

To say that June was a wild month for the feeder cattle market would be an understatement. Many factors put downward pressure on feeder cattle prices including a softening live cattle market, mounting weather challenges nationwide, a rapid deterioration of the corn crop, and a decrease in anticipated harvested corn acreage. The result was a significant drop in fall feeder cattle futures at the same time that many cow-calf operators and backgrounders were dealing with drought.

While USDA won't release an actual estimate of the corn crop until August, weather factors and crop progress reports have continued to paint a scenario of deterioration. As stakeholders absorb the effect of the likely yield losses, new crop corn prices moved from the low \$5's in early June to nearly \$7 at the time of this writing. This type of movement can easily shave \$5-\$8 per cwt off feeder cattle prices. Although overshadowed by crop conditions, USDA's acreage report confirmed a historically high level of corn plantings at 96.4 million acres. The market is also wrestling with how much of that planted acreage will actually end up being harvested for grain given the poor conditions.

Also compounding the problem has been a fed cattle market that just can't seem to find a bottom. Fed cattle prices typically reach their seasonal highs in the spring, reach their lows in early summer, and move up through the fall and winter. While feeder cattle prices should primarily be driven by deferred live cattle futures, there is a tendency for all live cattle futures contracts to move in tandem. In all likelihood, the feeder cattle market will show some increased confidence when it appears that fed cattle have put their seasonal bottom behind them.

The uncertainty in the market, coupled with deteriorating pasture conditions, make management decisions very challenging. The opportunities to price fall feeder cattle on a \$160+ board that were discussed in the May issue seem like an anomaly now. If drought conditions remain, there is little doubt that calves and feeders will continue to move and put additional downward pressure on price. Backgrounders currently grazing stockers and getting short of pasture should seriously assess their pasture resources and start pricing alternative feeds if they have not yet done so to determine what their best strategy may be if drought conditions persist. When deciding whether to sell early, or purchase feed and stay the course, additional costs should be weighed against likely difference in market prices between summer and fall.

At the time of this writing, the August contract was trading around \$147 and the November contract was trading around \$154. This \$7 per cwt is a pretty wide premium for November over August, and likely reflects expected drought selling as the summer moves forward. Backgrounders should also be aware that basis for heavy feeders tends to soften by only about \$1 or \$2 per cwt from August to November, so when modifying budgets, producers should be sure to make these price adjustments.