Fall has arrived, and with it a slower pace on the farm. Calves weaned and sold, breeding season is long since over and hay feeding hasn’t started in earnest. While there’s always something to do on the farm no matter what time of year it is, as the leaves start to fall and the land starts going dormant for winter, I start thinking about the future and the next generation that will arise with the coming spring. Few of us like to think about it, but one day we won’t be here anymore, and we want to leave a legacy for our families to enjoy for generations to come. With the average age of a farmer in Arkansas approaching 55, now would be a good time to make sure the legacy you leave is the one you want to leave.

The Cost of Doing Nothing

Many farmers and ranchers in Arkansas simply decide to do nothing and let the kids figure out what they want to do after they are gone. This is common among minority farmers and ranchers. But if you don’t have a plan, reassured the State of Arkansas does. So what happens to your farm if you don’t create an estate plan? First of all, your farm is a business, and if, like 86% of all Arkansas farmers, you are a sole proprietor (not a LLC, S or C corporation), the “company” dies with you. No transactions can be completed until after your estate has been settled and your creditors’ claims satisfied. Your family will only receive up to $1,000 from your estate to pay their bills or buy food until after the court decides how your estate should be divided. Partnerships face a similar problem.

If the farm has enough money to satisfy the outstanding bills, the farm real estate passes on to your heirs. But who are your heirs? According to Arkansas State Code (A.C.A. § 28-9-214), your children, and not your surviving spouse, are your heirs first (although your spouse does have certain rights to your property, called dower rights or curtesy rights). If you have no children and have been married for three or more years, your spouse is your heir. If you have been married less than three years, your spouse gets half and your parents get half. Of course, the situation becomes more complicated if your parents are no longer living. Their half goes to your siblings. (For complete details, see A.C.A. § 28-9-214, which is available at http://www.lexisnexis.com/hottopics/arcodes/Default.asp). As I said, it gets complicated. The end result is heir property.

Heir Property

Heir property is property that is controlled by multiple heirs with various numbers of shares of interest in the farm you leave behind. While many families are able to share the management of the farm agreeably, others are less able to do so. The more heirs there are, the more difficult this is to do. The upshot is that the property may not be farmed by any of the family members and may not be rented to another farmer if ALL the heirs cannot agree upon terms. Many farms in Arkansas are no longer farmed, and many younger heirs are not able to farm on the family farm because the heirs cannot agree upon who should be allowed to farm the property, what the financial return to the heirs should be or how the land should be farmed. Eventually, one or more of your heirs may file a partition suit, demanding the farm be divided or sold and the proceeds divided based upon the number of shares of the property to which each heir is entitled. In short,
your farm gets divided and sold, bringing your family’s farming legacy to an end (see A.C.A. § 28-53-115 (2012), which is available at http://www.lexisnexis.com/hottopics/arcode/Default.asp).

Wills and Estate Planning

Creating a will or planning how you want your estate divided is often a source of considerable stress. Heirs will be understandably curious. You may not want to tell them what is in your will to avoid a family quarrel. Professional estate planners and attorneys can help you create a document that is fair and equitable to all of your heirs. You may even invite them to be part of the process. The estate planner can help keep tempers cool and provide alternatives. For example, there are insurance policies available that can allow you to provide something to the heirs who do not wish to farm, while giving the farm to those who are interested in managing it along with a little money to help get them started. Perhaps you might choose to change your business structure to a corporation. Taking the time to plan for the future now, while things are a little slower on the farm, will ensure your farming heritage can be a legacy for many generations to come. And that makes a cup of hot coffee on a cool fall morning on the farm a little more enjoyable.

This material should not be considered an authoritative basis for interpreting the laws of the state of Arkansas on matters of property ownership or in estate planning. It is intended to help a person better understand property ownership and be prepared to use the professional services of an attorney.

Considerations for an Effective Teeth Floating Program

Dr. Mark Russell, Assistant Professor - Animal Science

Imagine sharp points on your teeth that rub your mouth or cheeks while you chew your meals. Considering that horses’ teeth continue to grow as they age, this is an expected occurrence when they attempt to eat grain or simply graze in the pasture. Adding to the problem, a horse will chew in an unnatural manner and consequently cause damage to other teeth and parts of the mouth in an attempt to relieve the pain.

Twice each year, your horse should have a dental examination to determine if he or she needs their teeth floated. These examinations should begin as early as possible for foals. Floating a horse’s teeth is defined as using a rasp (both by hand and power tools) to file down the rough edges on a horse’s teeth. The filing doesn’t hurt (no nerves there) and makes chewing much easier and more comfortable.

Many horses can go a few years in between each floating, but there are also many that require floating once or twice a year. It is a good rule of thumb to get teeth checked while conducting early spring vaccinations and again in the fall when preparing for fall care of your horse. The photos (below right) show examples of teeth going too long without a floating.

A thorough dental plan can extend the life of your horse greatly and allow their behavior to be much more pleasant and predictable.

Source: Dr. Rick Parker, Oklahoma State University Veterinary Teaching Hospital

Symptoms of a horse that may need his or her teeth floated:
- Difficulty chewing (accompanied by ears pinning and tail swishing)
- Reluctance to drink cold water
- Quidding (dropping food while eating)
- Excessive unchewed grain in manure
- Constipation colics
- Weight loss
- Swelling or tenderness in jaw area
- Reluctance to accept a bit (raises head high while bridling)
- Throwing head while riding
- Throwing head while stopping
- Reluctance to turn a certain direction while riding
- Excessive slobbering
- Turning their heads to the side when they chew
- Snotty nose from only one nostril
- Foul odor from mouth or nostrils
Maximizing Yield Potential and Utilization of Forage Turnips
Kenny Simon, Program Associate, and
Dr. John Jennings, Professor

The historical drought of 2012 has left many producers searching for alternative ways to provide forage for fall and winter grazing, especially since much of the winter hay supply has already been fed. Demonstrations conducted last fall showed that forage turnips planted between late August and early September can provide green forage for grazing by the end of October. The amount of forage produced will depend upon soil fertility and fertilization. The number of grazing days provided by forage turnips and other forage brassicas will be influenced by the type of grazing method implemented.

The optimum soil fertility for turnips includes a soil pH of 5.3 to 6.8, soil test phosphorus level of at least 60 pounds per acre and soil test potassium level of at least 250 pounds per acre. Follow soil test recommendations for the proper amount of lime, phosphorus and potash fertilizer to apply. Use Arkansas Soil Test Code 210, “Winter Annuals,” for the correct fertilizer and lime recommendation. Apply 40-50 pounds per acre of nitrogen at time of planting if planting into a well-prepared seedbed. If planting into lightly disked sod, delay nitrogen application until a successful stand has been established and the plants are 3 to 4 inches tall. If the soil test phosphorus or potassium levels are below optimum, the application of phosphorus or potash with the nitrogen tends to increase yield.

Proper grazing management is important to optimize the true potential of these crops. Rotational or controlled grazing can potentially increase forage utilization over continuous grazing by more than 40 percent. Grazing large areas increases trampling and waste of the available forage. Strip grazing small areas will provide the most efficient utilization. Increasing forage utilization creates additional management options such as a) increasing the number of animal unit grazing days per acre, b) extending the grazing period and c) reducing input costs and time savings.

Forage brassicas such as turnips and rape may be managed for multiple grazings. Forage brassica regrowth is initiated at the top of the root, so it is important to leave tall stubble after grazing to promote rapid regrowth. Begin grazing when the plants have reached 12-18 inches tall, and remove livestock when the forage is grazed down to 6-10 inches in height. Regrowth may be grazed in as few as four weeks after the first grazing. During the second or final grazing, the whole plant can be consumed.

Dry matter digestibility is high for all the plant parts. Forage brassicas maintain excellent forage quality through the fall and into early winter, making them ideal for stockpiling as winter pasture. Ruminant diets should not contain more than 75 percent brassica forage because the fiber content of brassica crops is too low for maintenance of proper rumen activity. With their high digestibility and low fiber content, brassicas should actually be considered as “concentrates” rather than “forage” in nutritional planning for livestock.

Brassica crops can cause health disorders in grazing animals if not managed properly. Researchers have discovered that these disorders can be avoided by adhering to two management rules:

1. Introduce grazing animals to brassica pastures slowly. Avoid abrupt changes from dry summer pastures to lush brassica pastures. Don’t turn hungry animals that are not adapted to brassicas into a brassica pasture.
2. Brassica crops should not constitute more than 75 percent of the animal’s diet. Supplement with dry hay if continually grazing brassicas, or allow grazing animals access to grass pastures while grazing brassicas. Broadcasting into lightly disked sod will reduce the risk of these disorders because of grass in the brassica pasture.

Note: Most livestock have never grazed forage brassicas and may appear to refuse grazing them at first turn-in. On the demonstration farms last year, we observed that the animals were slow to start grazing the turnips. The livestock tended to consume all other available forage before transitioning to the turnips. This transition period may take up to 4-5 days. Be patient. The livestock will eventually begin grazing them.

Summary

1. Turnips can produce high yields of palatable and nutritious forage for livestock during periods when perennial forages have limited production. The digestibility of the forage remains high over a relatively longer period than perennial crops.
2. To improve forage yield potential, apply fertilizer according to soil test recommendations.
3. Proper grazing management can increase the number of grazing days by 40 percent over continuous grazing.
4. Plan for a transition and adjustment period to allow livestock time to accept this new forage.
Trace mineral supplementation through injectable solutions may be beneficial in some management and environment situations. Numerous research studies have examined the effect of injectable trace minerals on beef calf performance and health as well as on reproduction in beef cows.

The benefit of injectable minerals has been studied in calves retained on-farm and purchased calves received into stocker or backgrounding management programs. Research at the University of Arkansas found that newly received calves given an injectable mineral solution gained 21 percent more weight per day than calves that were not given an injectable mineral. Morbidity was lower in the calves given the injectable mineral, which likely attributed to those cattle gaining more weight, and repeat treatments were fewer in calves supplemented with injectable mineral. In another receiving calf study conducted at Oklahoma State University, calves given an injectable mineral expressed a tendency toward greater weight gains and reduced sickness. However, a study in Tennessee reported no weight gain difference between calves receiving mineral injection and those not receiving mineral injection.

Unlike the studies with receiving cattle, studies involving calves supplemented on-farm have not demonstrated improvements in performance. In a second University of Arkansas study, calves given an injectable mineral 28 days before weaning did not exhibit improvements in weight gain or hair coat scores. The calves in this study were provided access to a complete mineral supplement that contained a high concentration of trace minerals. In addition to this preweaned calf supplementation study, two recent University of Arkansas producer-farm demonstrations examined the benefit of cows and calves given an injectable mineral supplement. At one location, calves only exposed to salt mineral supplementation did not exhibit a significant improvement in weight gain when either their dams had received injectable mineral prior to calving or the calves themselves had received the injectable mineral at 90 days of age processing. At the second location, calves did not have access to any loose or block form mineral supplements and were given injectable mineral at 90 days of age processing and a follow-up injection at weaning. Neither the initial or follow-up injection improved weight gain. In addition, blood serum did not show any differences in titers for BVD. Based on these studies, it appears that injectable minerals may be beneficial to cattle that are procured from auction markets and possibly experiencing the combined stressors of weaning, marketing and co-mingling. Current research and demonstrations with calves that are treated on-farm and remain on-farm through a retained ownership program do not appear to benefit from injectable forms of mineral supplementation.

Cattle producers are also interested in the benefits of injectable minerals for mature cows. Research at Kansas State University observed no differences in cow body weight change from pre- and postpartum injections of trace minerals. However, body condition gain from parturition to AI breeding was greater in supplemented cows. Pregnancy rate to timed AI was greater in supplemented cows, but overall pregnancy rate did not differ. In a Texas study, there was no difference in conception rate or postpartum interval between supplemented and nonsupplemented cows. A recent University of Arkansas producer-farm demonstration found that cows that received injectable trace mineral supplementation prebreeding tended to have greater body condition at 90 days of age calf processing. Body condition, however, did not differ at any other point in the study. Pregnancy rate was not affected by supplementation. Among these studies, it appears that benefits of injectable mineral may not be easily detectable in natural mating systems. Benefits may, however, exist in artificial insemination breeding programs. Although overall pregnancy rate did not differ in the timed AI study, if more cows conceive early in the breeding season to timed AI, the benefit of more calves born early in the calving season may carry over into more pounds weaned.

The variation in results among studies may be affected by differences in forage type (native range or improved pasture) or receiving ration fortification, oral mineral supplementation history and breed differences. As a result, recommendations for injectable mineral supplementation will improve in time with research that encompasses more environments. Based on the currently available research, it appears that the type of cattle that benefit the most from injectable trace mineral solutions are receiving cattle and cows in more intensive reproductive management programs than natural service.

There is also research at the University of Arkansas that has shown improved semen characteristics for bulls receiving injectable mineral; however, data is lacking as to whether or not this carries over into improved reproductive rates in the cow herd.
Managing Winter Annual Pastures
Paul Beck, Professor - Animal Science

If you, like many of your neighbors, have decided to plant winter annuals (annual ryegrass and/or small grains like oats, rye or wheat) this fall for grazing through the winter and possible hay or silage next spring, then you need to use management practices that will maximize the return on this investment. Successful establishment is only a piece of the puzzle; soil fertility, grazing management and livestock management have as much (or more) influence on productivity as planting date, establishment method or variety selection.

Soil fertility is a primary key to forage yield for this production system. We recommend that soil phosphorus and potassium deficiencies are met either with poultry litter or commercial fertilizer at establishment and that at least 50 pounds of actual nitrogen per acre (150 pounds of ammonium nitrate or 110 pounds of urea per acre) be applied to pastures in both the fall and the spring to drive forage yield. This is probably the most expensive part of the entire system, and it is essential to apply this fertilizer to obtain the forage yields necessary for profitability. For example, if no phosphorus or potassium is required, the cost of nitrogen fertilizer alone can be 40 to 50 percent of the entire establishment cost; while if the best forage producing varieties are purchased, then the seed cost is only 25 to 30 percent of the establishment cost (this also indicates how little true savings there are in using cheaper, less productive varieties for annual pastures).

Proper grazing management also has a large impact on animal performance and, thus, the profitability of winter pasture production systems. If stocking rates of growing cattle can be matched to the available forage on a pasture, then weight gains can be maintained at an acceptable level. Cattle cannot achieve adequate forage intake for production if small grain pastures contain less than 1,000 pounds of forage dry matter per acre. On the average, each inch of pasture height is equivalent to about 200 pounds of forage dry matter per acre, so pastures must be managed to maintain about 5 inches of residual height. Over the years, we have found that if forage allowance is 2.5 pounds of forage dry matter per pound of calf, body weight at turnout on pasture (1,000 pounds of forage for a 400 pound calf) is adequate for gains of 2 pounds per day, but if calves are stocked at forage allowance of 5 pounds of forage per pound of calf body weight, then their potential gain is 2.75 pounds per day. If forage allowance is allowed to go below these threshold values, then moderate supplementation rates of 0.75 percent of body weight (3 pounds of supplement per day for a 400-pound calf) can be used to replace forage deficiency and maintain acceptable performance.

Successful management is only a piece of the puzzle. Soil fertility, grazing management and livestock management have as much (or more) influence on productivity as planting date, establishment method or variety selection.

And finally, technologies developed to enhance animal performance should be used to increase weight gains of growing cattle. The pasture production costs are a fixed cost. If these gains can be diluted over more gain, then cost per pound of body weight gain can be reduced. Research at the University of Arkansas Southwest Research and Extension Center at Hope and the Livestock and Forestry Research Station near Batesville indicate that growth-promoting implants can increase gain of calves on winter pasture by 0.3 pound per day and ionophores (compounds that alter the rumen environment, increasing nutrient use efficiency) increase weight gains by 0.2 pound per day. Since these technologies work in different ways, they can be used together and still get the same gain response with both, so utilizing ionophores and implants together for wheat pasture stocker cattle can increase gains by 20 percent and decrease cost of gain by 25 percent. Implanting can increase net return per steer by $62. Ionophores can increase net return per steer by up to $52, depending on supplement type used as a carrier, whereas total profitability may be increased by over $100/steer when both technologies are used.