Landowners Have a Responsibility for Thistle Control
By: Tim Schnakenberg

After the recent years of drought, thistles have taken advantage of weakened grass stands and full-bloomed plants are visible in many fields through the area. Many tracts of land in Stone County are inundated with heavy populations of musk and bull thistles. Some landowners have taken extra steps this year to keep the problem in check, while others have done nothing.

As a reminder for all Missouri landowners, section 263.190 of the Revised Statutes of Missouri provides that “It shall be the duty of every owner of lands in this state to control all Canada, musk or Scotch thistles growing thereon so often in each and every year as shall be sufficient to prevent said thistles from going to seed”.

Thistle control can be very difficult but it is not impossible. I know several farmers who have spot sprayed thistles throughout the spring who still have a few patches of thistles that slipped through. It is common to have a few here and there, but large tracts of uncontrolled thistles make it more challenging to neighbors who have worked hard to keep thistles on their side of the fence from going to seed.

What is to be done at this point in time? Since the majority of the seed for the growing season is already produced, control measures at this time are after-the-fact. Most thistles are biennials, meaning they germinate in the fall, bolt with a seed head in the spring, produce seed and die by mid-summer. Since the plants that have blooms and seed are almost dead because of the proximity to the end of their lifespan, spraying is almost fruitless now.

Mowing is the first impulse of many to control it now, but one risk of mowing is the spreading of the seed to other areas on the mower deck, making matters worse for the fall germination period. Sometimes this is what it takes however to clean up a mess.

Over thirty years ago, efforts on the part of the University of Missouri and USDA in our state brought about the introduction of the flower head weevil and rosette weevil that specifically targets thistles. There is lots of evidence that these weevils are doing a massive job of consuming many of the seed in the flower heads scattered across our county. There is no way that they can keep up with all the seed produced, but if they are getting perhaps 30-40 percent of the billions of seeds that are produced each year, they are having an impact.

Watch for dried up seed heads and take a sharp knife and cut them open for evidence of weevil damage. Many times you will find 2-4 flower head weevils in the heads. At this time of year, this is probably the best control going.

Biological control does not take us, as landowners, off the hook for keeping thistles from going to seed. Obviously the weevils need our help. This includes spraying at appropriate times of the year with products such as 2,4-D, dicamba, Grazon P+D, GrazonNext or other registered products. The best times to spray are when the plants are still in the rosette stage which is the stage these plants are in for 70-80 percent of their lifespan. This corresponds with an ideal time of the year to spray being in the fall (October) or early spring (March-April). Sometimes widespread broadcast spraying is necessary for control over spot spraying.

Mowing multiple times is also an option in the spring or early summer. A Kansas study found that only 11 percent of the musk thistles mowed at the early bud stage was killed. When mowed a second time four weeks later, 79 percent of the thistles were controlled. The best time to start mowing is within two days after the terminal flower head blooms in order to inhibit seed production and prevent rebolting. Remember however, that viable seed can start to develop within seven days of the first pink coloring in the heads.

“Let’s all do our part to keep thistles from going to seed,” says Schnakenberg. “It is challenging but will make our property more productive, keep our neighbors happy with us and improve property values in the long-run.”

For more information regarding thistle control or for help identifying the species of thistle, contact your local MU Extension Agronomy Specialist.

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Forages and Grazing Systems for Small Ruminants

By: Jodie Pennington

Introduction

Feed usually accounts for 50-65 percent of the costs of producing livestock, including sheep and goats. Generally, forages are the least expensive source of nutrients for sheep and goats; and pasture is the least expensive method of harvesting forages. Presently, efficient use of forages is especially critical; this is true because grain and related by-product prices are at near all-time highs. The goal of all grazing systems is to provide adequate nutrients to sheep and goats with minimal or no grain supplementation. In general, younger animals and lactating females will need the highest levels of nutrition, while dry animals will need the least.

The selection of a “best” system for using forage depends on the goals of the operation, the land, and other resources that are available. Many small farms have limited equipment and cannot justify the planting and harvesting costs of traditional forages. With grazing, sheep and goats can use forages on their own or as part of multi-species grazing. Multi-species grazing is the practice of using two or more species of livestock together or separately on the same land in the same growing season. Continuous (conventional) grazing systems are used more often than either multi-species or management intensive grazing (MIG, sometimes called rotational grazing systems).

Importance of Availability of High Quality Forages or Browse

All grazing systems must have forages and browse that is high in nutrients; this enables sheep and goats to obtain the nutrients needed for maintenance, growth, reproduction, and lactation. There is a lot of variation in forage quality, but legumes (clover, alfalfa, etc.) are usually superior to grasses (fescue, Bermuda, wheat, ryegrass, etc.). This is because legumes are lower in fiber, more digestible, and higher in energy and protein than grasses. Generally, cool season forages are lower in fiber, thus more digestible, then warm season forages. For both legumes and grasses, the vegetative or growing stage has greater nutrients than the mature stage of growth. A trade-off must be made based on economics on time to harvest forages since there is an inverse relationship between yield and maturity of forages. It is surprising to some that leaves of browse (bushes, trees, vines, shrubs, etc.) can be of high nutritive value. The availability of forage or browse is also important. Sheep and goats tend to decrease intake when there is less than 1000 to 1200 lbs. of dry matter (forage) per acre.

Grazing System

Sheep and goats can be used in either continuous or management intensive grazing (MIG) systems. Sheep and goats are most often maintained in the continuous (conventional) grazing system. In this system, the animals stay on the land continuously until all or most available nutrients are consumed. With MIG, the pasture is fenced in small paddocks, and animals are rotated often according to the availability of forage. They are rotated back onto a paddock as soon as the growth rate of the forage allows. MIG systems result in greater production per acre but require more management, labor, and fencing than continuous grazing systems. Animals that feed by rotational grazing can be examined more easily and frequently when they are moved. Also, surplus forage can be harvested as hay with both continuous or MIG systems.

Both continuous and MIG systems can be used with multi-species grazing. In general, sheep are better used in an MIG system than goats; data is mixed on improved gain per head for goats with intensive grazing. Parasite control is usually a more significant problem with continuous grazing systems and less of a problem for MIG systems. It is essential to establish a parasite control program for sheep and goats and adhere to it. Goats are generally more susceptible to internal parasites than sheep are, but both species can be severely affected. Compared to multi-species grazing with cattle, predator control also is of greater concern if only sheep and goats are grazed because the sheep and goats do not have a larger animal to deter predators unless a livestock guardian animal is used.

Rotational intensive grazing systems require more fencing than other systems. This fact is something to consider when choosing a grazing system. Rotational grazing also is more labor intensive, making it often more expensive than continuous grazing systems. However, yields and quality should be improved with rotational grazing.

Electric fences that are easy and quick to build have made subdividing pastures easier and cheaper. Many producers also use permanent or temporary high-tensile electric wire fencing. Electric fences will also keep predators from the sheep and goats. Exterior fencing is more extensive than interior fencing because more strands of wire are needed to keep predators away from sheep and goats than to keep sheep and goats in the field. Producers should consider woven wire for exterior fencing. The higher initial costs should be weighed against the decreased labor requirements later. Electric fencing requires daily maintenance as animals quickly learn if it is not on. Goats can require more fencing materials than sheep.

Pasture and Browsing Management

On irrigated pasture or in areas that receive sufficient rainfall, sheep and goats should be stocked at the rate of about six to eight per 0.4 acres of dry pasture, or 1200 to 1600 lbs. of dry matter per acre. In a woodland pasture, sheep can be stocked at the rate of one to two sheep per 0.4 acres of dry pasture, or 1600 to 2400 lbs. of dry matter per acre. Sheep and goats can complement calf or beef producers with. Forage systems can produce large amounts of energy-yielding crop residues that can improve feedlot efficiency. Forage and grass residues from field crops can be used to supply small ruminants with the energy and protein needs when they are first introduced to the field crop residues. Improvements in forage dynamics, milking ability, and other factors will improve efficiency of residue use by small ruminants.

Summary

Well-planned grazing systems can help reduce the costs of purchased feeds needed by sheep and goats. Forages are available in Missouri throughout most of the year. They can supply almost all the nutritional needs of sheep and goats, with minimal supplementation of grain or by-products. With grazing, sheep and goats can forage alone or with other species grazing or by themselves. Continuous grazing systems with only one species are used more frequently than either multi-species or management intensive grazing systems. The primary concerns of grazing small ruminants are parasite control, predation, and fencing to limit goat movement and keep predators from sheep and goats.
Pruning Erect Blackberries in the Home Garden
By: John Hobbs

Blackberries can make a nice addition to the home fruit garden. Gardeners can enjoy blackberries as fresh fruit, jam, or cobbler. Maintaining a neat, clean blackberry planting can be a considerable challenge. A good weed, fertility, and pest control program can promote plant growth and quality fruit.

Proper establishment of blackberry plants is important and one of the most important things is understanding how blackberries should be pruned. Thornless, erect varieties tend to be slower to fill in rows and overall are more manageable than thorny blackberries. Blackberry vegetation can be managed through effective pruning practices and still maintain good quality fruit production. Blackberries can become unmanageable if not pruned each year. Pruning can help you to maintain a fairly tangle-free blackberry patch and hopefully it will be a more enjoyable area in which to pick fruit. It is also important to keep the erect blackberries in a confined space in the garden. If allowed to do so, blackberries will send up new shoots out in other areas of the garden and yard.

Blackberries are considered to be biennial fruiting plants. Primocanes are actively growing vegetative shoots that are produced in the first year, and the floricanes are normally the fruit-producing canes. Primocanes, left un-tipped, can grow several feet in length. In the following year, primocanes mature into floricanes. Once the fruit has been harvested, the floricanes will eventually die. All spent floricanes should be removed from the blackberry planting. By removing the spent floricanes, more room will be available for new primocanes to grow the following year. The following steps will help you to keep your blackberry planting in good condition.

1. Take time to observe the planting and determine what canes need to be pruned.
2. During the growing season, tip back each developing primocane to 48 inches in July.
3. Lateral shoots will develop throughout the growing season.
4. Tip lateral shoots back to 18 inches in the spring of the following year to avoid winter injury.
5. Do not prune floricanes before the fruiting season unless damaged or diseased.
6. When the fruiting season is over, use loppers to cut out spent floricanes at the root crown.
7. Discard all pruned plant material.

Blackberries if tipped can produce more fruit for the next year. As each new cane reaches approximately 48 inches, they should be tipped back. By tipping the ends of the canes, apical dominance is removed and growth hormones in the canes are released. This process will stimulate new growth from the lateral buds. Lateral shoot growth that develops prior to fruit bud formation will increase the amount of plant surface area in which fruit can be produced. With more aggressive varieties it is possible that the lateral branches will need to be tipped as well to help restrict the overall plant growth.

Sharp tools will enable you to make smooth cuts and will cause less stress on the plants.

Learning to master the art and science of pruning blackberries takes time and practice. Contact your County Extension Center for updated information on pruning or go online at extension.missouri.edu and retrieve guide sheet G 6000 “Pruning Raspberries, Blackberries and Gooseberries” and make sure your blackberries are pruned each year to maintain the size and shape of the plants, maximize fruit production, and increase the overall fruit quality.

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Money Tips for College Students (and Their Parents)
By: Janet LaFon

Yes, it’s almost that time of year again! College students will soon be heading off to school. For many, it may be the first time they have been on their own. This can be a scary time for them and their parents, especially when it comes to money. Here are five tips that might make this transition a little easier:

1. College may be the first time many students have their own checking accounts. Teach them how to reconcile their bank statement each month; to understand the importance of writing down all checks. ATM withdrawals and debit card transactions; and help them to understand the difference between a debit card and a credit card.

2. For parents paying for part or all of their child’s education, it may be helpful to have a written agreement spelling out what college-related expenses the parents will and will not pay for.

3. College students can easily get in over their heads when it comes to using credit. To help protect them, begin by setting some strict guidelines regarding the use of credit cards. One card may be a convenience, but several cards are not a good idea. Remind them that with credit cards they are spending their future income. Also, help them understand that the overall cost of an item can become quite high if payments are made over a long period of time.

A Federal Reserve rule also helps protect many college students from falling victim to excessive credit card debt. Anyone under the age of 21 will have to be able to show that he or she can make the payments, or will need a cosigner, in order to open a credit card account. In addition, if he or she has a cosigner, the cosigner must agree in writing before the credit limit can be increased.

4. Quick loans, such as payday loans, may also target college students with offers to give cash as an advance for a student’s next paycheck. The downfall is that the annual interest rates on these types of loans can be extremely high.

5. Encourage college students to keep track of spending and do some planning each month. Then if financial problems occur, let them use the opportunity to learn an important lesson. It will be tough to stand back and not bail them out at the first sign of trouble. But, it is important to remember that this can be a valuable opportunity to teach financial responsibility.