



Your local link to MU for ag extension and research information

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Controlling Pasture and Hayfield Weeds

Weeds in pastures and hayfields can reduce forage yield and quality, and some may be poisonous to livestock or people. Some weeds may be controlled by mowing, others by improving soil fertility and some are most effectively controlled with herbicides. Always read and follow all label directions when making herbicide applications.

Improving soil pH and levels of phosphorus and potassium, is one strategy for reducing weed infestations as well as increasing forage yield. Dr. Kevin Bradley, MU Weed Scientist, found in a pasture weed survey, that a one unit increase in soil pH corresponded to approximately 4100 fewer weeds per acre. Each 0.2 pound per acre increase in soil test phosphorus level corresponded to 162 fewer weeds per acre. Each 0.2 pound per acre increase in soil test potassium level corresponded to 12 fewer weeds per acre.

During periods of drought, or when a pasture is overgrazed leaving the ground bare, weed seeds have an opportunity to germinate. Maintaining adequate soil pH and fertility, as well as a proper grazing height, can be effective in maintaining desirable forages in pastures and hay fields.

Sericea lespedeza is a perennial legume once used as a forage crop, but has become an invasive weed in pastures, hayfields, CRP (Conservation Reserve Program) fields and roadsides. It has an upright growth pattern compared to annual lespedeza and can reach a height of five feet. It becomes unpalatable to cattle after it grows four to six inches tall. Goats will graze sericea lespedeza when it becomes mature. Grazing has shown to reduce growth and seed production, but not plant density. Mowing sericea lespedeza each time it reaches 15 to 18 inches in height will reduce stem density and seed production, but mowing only one or two times a year will increase stem density. Prescribed burning can stimulate seed germination and has little effect on stand density. Herbicides containing metsulfuron or triclopyr provide the most effective control of sericea lespedeza.

Common ragweed is an annual weed that germinates from early spring through late summer. It is a prolific seed producer. Mowing can reduce seed production but must be done before the seed becomes viable. Most broadleaf weed herbicides labeled for pasture and hayland are effective at controlling common ragweed when applied to plants less than eight inches tall.

Spiny amaranth is an annual in the pigweed family commonly found in pastures near hay feeding areas and water tanks. It has spines on the stem making it unpalatable to most livestock. It is a prolific seed producer, so control methods which reduce seed production can reduce future infestations. Herbicides containing metsulfuron plus aminopyralid, or triclopyr provide the most effective control when applied to plants less than eight inches in height.

Perilla mint is an annual weed that emits a distinctive minty odor, especially when the plant is mature. All parts of the perilla mint plant are very toxic to cattle, sheep, and horses whether it is grazed fresh in a pasture or consumed dry in a bale of hay. Most broadleaf herbicides labeled for pasture and hayland provide effective control when applied to plants less than eight inches in height. Control is much less effective when plants grow taller than eight inches.

Eastern red cedar trees are often found in fencerows and CRP fields. Mechanical removal is only effective if all the root stock is removed. Cutting eastern red cedar trees, especially smaller trees, very close to the ground removing all green foliage, can be an effective control method. They will not resprout from a stump cut very near the soil surface. Prescribed fire can be effective on trees less than six feet tall. Applications of the herbicide picloram to individual trees will provide control.

Ironweeds are perennial weeds with a bitter taste causing most livestock to refuse them. Because it is difficult to remove all the roots, mechanical control is generally not effective. Mowing two to three times per season may reduce the population. Several herbicides provide good to excellent control including those with triclopyr plus 2, 4-D ester or products containing aminopyralids or picloram.

Poison hemlock can be toxic to both animals and humans. It is often found in pastures and along roadsides. Poison hemlock is a biennial, taking two growing seasons to complete its life cycle. The first year the plants form a rosette. The second year, stems elongate, and plants can grow up to 10 feet tall. Chemical control is more effective during the first growing season while the plant is in the rosette stage, than the second year when the plants bolt, and stems have elongated. Herbicides containing triclopyr plus 2,4-D ester or those containing picloram most effectively control poison hemlock.

Multiflora rose is a bush which can form large thickets in pastures and fencerows. Mechanical control of multiflora rose is difficult because all roots must be removed. Repeated mowing, four to six times per year, for two to four years can reduce the infestation. Goats and sheep are not deterred by the thorns and will graze multiflora rose, reducing the infestation. Herbicides containing metsulfuron or triclopyr will control multiflora rose. Read the label to determine the treatment method and application timing.

For more information contact a University of Missouri Extension Field Specialist in Agronomy or refer to MU Guide <https://extension.missouri.edu/publications/ipm1031>.

Source: *Valerie Tate, agronomy specialist*



In and Around the Yard & Garden

Ornamentals

Irises are a beautiful spring flower, but often have problems. Check iris rhizomes for borers. Dark streaks, water-soaked areas and ragged leaf edges are symptoms of larvae feeding. Larvae feeding move down into the rhizome and continue feeding, causing soft rot, yellowing of the leaves and a foul-smelling odor. Dig irises after bloom, cut off infected areas, then replant. Insecticides are available for iris borer if the problem is severe. Some years fungal leaf spot is bad on iris foliage. To prevent, choose a

fungicide that contains copper, chlorothalonil, myclobutanil or mancozeb and apply to the foliage following label directions. Remove dead foliage and flower stalks in the fall or early spring. Prune spring flowering shrubs like lilac, forsythia and mock orange after flowering. Chrysanthemum and aster plants should be pinched back until July 4, to create a rounded, compact plant which prevents tall and leggy plants.

Vegetables

Place three inches of straw around tomato plants to hold in moisture and to control weeds and disease. Plant basil around the plants to repel tomato hornworms and fruit worms. If rabbits are a problem in the garden, mesh wire fencing may need to be used, or an animal repellent. Most repellents are made from natural ingredients like egg yolks, garlic and hot pepper. Harvest garlic when the tops start to turn yellow. Do not wait until the tops are totally yellow or brown, or the garlic bulbs may rot or have brown spots on the cloves that will need to be cut out. Keep plants watered during periods of dry weather.

Fruits

Botrytis blight, also known as gray mold, is a problem in strawberries. Remove rotten berries immediately to prevent the spread of the fungus. Beating the birds to the mulberries which ripen in June, is often a challenge. Ripe mulberries can be eaten fresh or made into jam or used as a topping for ice cream. Volunteer mulberry saplings can become a weed, so remove them in areas such as flower beds or fence lines. Cherry trees can be a challenge to grow in Missouri because they do not like clay soil that often holds too much water and causes root rot. They need to be planted in a well-drained area. Cherries are a treat, but in rainy years the fruit can get Brown rot, a fungal disease that rots the fruit and can ruin an entire crop, and also be devoured by birds. If possible, cover trees with netting to prevent birds from feasting on cherries. Small worms may also be found in cherries. Sprays should have started after bloom to avoid these problems. Raspberries ripen in mid to late June. 'Jewel' black raspberry and 'Heritage' red raspberry are common varieties for home gardeners. Be on the lookout for the Spotted Wing Drosophila, *Drosophila suzukii*. They are very small, 1/12-1/8 of an inch long fruit flies. The males have clear wings and a brown spot at the tip of each wing. Soft, mushy berries are an indication that they may have infected the berries. Look for tiny, white larvae feeding inside the berry. Discard or feed chickens infected berries.

Diseases/Insects

Monitor for aphids on young, tender foliage of plants. They cause leaves to curl, pucker and turn yellow. Spray plants with water to knock off aphids. Insecticidal soap can also be used for control. Beneficial insects such as green lacewings and ladybugs feed on aphids. If seen, do not use chemical sprays because even organic sprays will kill beneficial insects. Peach trees with curled, puckered, and reddish colored leaves at this time, are suffering from Peach Leaf Curl. A fungicide containing chlorothalonil must be applied in late fall or late winter while the tree is still dormant. Applying sprays now will not be effective. If rose foliage

has black spots, use a fungicide spray to keep it under control. Sanitation is important. Pick up fallen leaves below rose bushes.

For more information refer to MU Guides:
Growing Home Garden Tomatoes <https://extension.missouri.edu/publications/g6461>,
Flowering Perennials: Characteristics and Culture <https://extension.missouri.edu/publications/g6650>
Fall is a good time to plant garlic <https://extension.missouri.edu/news/fall-is-a-good-time-to-plant-garlic-2873>
Aphids, Scales and Mites on Home Garden and Landscapes <https://extension.missouri.edu/publications/g7274>

Source: *Jennifer Schutter, horticulture specialist*

Organization: The First and Last Step in Estate Planning

While most farm and small businesses agree that estate and succession planning are important, it can seem like an overwhelming process. A critical component often underutilized is organization. Organization of relevant items can lead to a better plan, save on attorney fees, and make the transition less stressful on heirs. The following tables will help start the estate and succession planning process.

Table 1 contains information to help identify the location of important assets and documents. The timeline for records retention can reduce storage and shorten search time.

Table 2, on the next page, includes an updated and detailed contact list which can save time once completed and a good way to share information.

Source: *Darla Campbell, ag business specialist*

Documents	Location of Original	Timeline for Keeping Documents			
		While in Use	During Ownership	3 - 6 Years	Permanent
Adoption Papers					X
Automobile Documentation			X		
Bank Statements				X	
Birth Certificates					X
Business Agreements					X
Canceled Checks				X	
Citizenship Papers					X
Credit Card Statements		X			
Death Certificates					X
Deeds to Property					X
Divorce Papers					X
Educational Transcripts					X
Employee Benefit Documentation		X			
Health Records					X
Funeral Instructions					X
Income Records					X
Income Tax Returns					X
Insurance Policies		X			
Marriage Certificates					X
Military Service Records					X
Mortgage Papers			X		
Passports		X			
Pension Plan Records		X			
Receipts			X		
Religious Documents					X
Securities			X		
Social Security Card					X
Stock Certificates / Bonds			X		
Warranties			X		
Wills / Estate Plan					X
Misc.					

Table 2.

Contacts	Name / Phone #
Accountant	
Attorney	
Auto Insurance Agent	
Banker	
Charitable Giving	
Clergy Minister	
Doctor	
Employee Benefits Contact	
Estate Executor	
Financial Advisor	
Health Care Proxy	
Home Health Care Provider	

Home Insurance Agent	
Home Warranty	
Life Insurance Agent	
Medical Insurance Agency	
Pension Fund	
Pharmacy	
Power of Attorney	
Stockbroker	
Tax Preparer	
Veterinarian	
Other	
Other	
Other	

Return Service Requested



Northeast Missouri
Ag Connection
In This Issue:

- ⇒ Controlling Pasture and Hayfield Weeds
- ⇒ In and Around the Yard & Garden
- ⇒ Organization: The First and Last Step in Estate Planning