

## Purple Paint, Not Just Backwoods Graffiti

Have you ever been traveling down a country road and see trees and/or fence posts with purple paint sprayed on them? Is this paint some sort of backwoods graffiti or even a sign of the landowners favorite sports team? Well not exactly, this paint marks property boundaries and tells the public “No trespassing.”

While some landowners still use the traditional "No Trespassing" signs, the Purple Paint Statute allows landowners to mark trees or posts with purple paint as a warning to would-be trespassers. Just like the "No Trespassing" sign or actual communication to individuals that no trespassing is allowed, the purple paint marks are considered to be adequate notice to the public that no trespassing is allowed on the property.



The purple paint law began in Arkansas in 1989 and Missouri enacted the same law during its legislative session in 1993. These statutes were enacted to provide landowners with an economical and easy way to keep out unwanted trespassers. The law does not require that property marked with the purple paint also be fenced, thus making it an economical alternative for landowners who do not otherwise need to fence their property. Additionally, it prevents problems encountered when using "No Trespassing" signs as purple paint marks can't be taken down, destroyed, or even stolen.

Under the Missouri Law, the paint marks must be at least 8 inches long, the bottom edge must be three to five feet off the ground and cannot be more than one hundred feet apart. Following these restrictions set forth by the statute should make the paint marks readily visible to any person approaching the property.

The statute states that any person trespassing onto a property marked by purple paint can be found guilty of first-degree trespassing. Any unauthorized entry onto property marked with the purple paint marks is considered a trespass. First-degree trespassing is a Class B Misdemeanor, with potential punishment of a maximum \$500 fine and/or a maximum of 6 months in jail.

Other violations which would subject a trespasser to first-degree trespass are: (1) entering a property posted with “No Trespassing” signs; (2) refusing to leave a property once to do so; and (3) coming onto land fenced against intruders.

Landowners can purchase purple boundary posting paint at most hardware stores across the state for little cost. So while summer is in full swing, fall is knocking on the back door waiting to start as is the most important time of year, deer hunting season. Get your “No Trespassing” indicators posted well in advance to give would-be trespassers a heads up.

While this information is for you to consider, do not rely on the information for legal advice. It is best to see an attorney for legal counseling tailored to your specific situation. For more information on purple paint laws and trespass laws, visit [extension.missouri.edu](http://extension.missouri.edu) or contact your local MU Extension Center.

*Source: Nathaniel Cahill, Agricultural Business Specialist*

## Straw bale gardening offers options for gardeners

You can't grow turkey in the straw. However, you can grow side dishes and floral centerpieces for a turkey dinner in the straw. Straw bale gardens are becoming popular with growers who are plagued with poor soil or limited garden space. Straw bale gardening combines container gardening and raised-bed gardening into one green-thumb package.

You can grow many vegetables, fruits and flowers in a straw bale garden. Cool-season varieties can be planted as early as mid-March if you cover plants with protective materials such as clear plastic or floating row cover.

Use bales of straw, not hay, for gardening. Hay contains weed seeds and usually is too dense for best results. Choose bales held together tightly with twine. Farmers and local farm supply stores are good sources for straw. Avoid bales made from wheat or oats treated with an herbicide during production.

To assemble a straw bale garden, first choose a location that gets at least six to eight hours of direct sun. Once bales are watered, they become heavy and hard to move. If you place bales on the ground, it is suggested to put them on a base of thick layers of newspaper to control weeds. Set bales so that twine is on the outside and cut ends face up. Place bales in single rows to allow best access, air circulation and sun exposure.

Successful straw bale gardening begins with conditioning the bales. This involves adding water and nitrogen to help bales partially decompose. This helps prevent nutrient tie-up once plants are added.

Nitrogen deficiency is common in straw bale gardening. This happens when the soil microbes take nitrogen away from garden plants as they break down the organic matter in straw. If leaves turn yellow, you need to add more nitrogen.

To condition bales, soak them with water daily for 12 days. On days one, three and five, add ½ cup of a high-nitrogen fertilizer such as urea, ammonium nitrate or a lawn fertilizer to each bale. If you use lawn fertilizer, make sure it is not the "weed and feed" type, which contains herbicides that would harm garden plants.

Continue to water to activate the microbes and break down the straw. On days seven and nine, add only ¼ cup high-nitrogen fertilizer. On the 11th day, add 1 cup of a general-purpose fertilizer such as a 12-12-12 mix to each bale. After the 12th day, touch the bale to check for heat. If it is cool to touch, you can plant.



shutterstock · 81940666

To plant, dig small pockets or holes into the straw and set plants into the holes. Fill the holes with soilless medium and cover the plant's roots. Water the base of the plant to settle the medium around the root system. If planting seeds, put a layer of sterile potting media on top of the bale and tamp it down into the bale. Plant seeds according to package instructions.

Straw contains few nutrients, so feed the plants with a water-soluble, liquid fertilizer solution on a regular basis. However, do not over fertilize plants growing in straw bales. Otherwise, you end up with plants lush with abundant vegetative growth and little fruit. Too much nitrogen causes pollen abortion and flowers fall off. Be especially careful not to over fertilize vining crops such as cucumbers and melons. For sweeter-tasting melons, cut back on water when the fruits begin to size.

Continue to keep bales adequately watered during the growing season. Drip lines or soaker hoses may be helpful and eliminate hand watering. Straw bales provide conditions for good root growth, especially for tomatoes. You will see few weeds, but mushrooms may appear. Discard them. Earthworms like the nutrient-enriched bales and help plants thrive. You should see fewer pests than in conventional gardening.

Salad greens are a perfect choice for straw bale gardening. You can enjoy greens up to frost, and even after frost with protection. Tomatoes, peppers, and eggplant also grow well in straw.

Although space in a straw bale garden is limited, avoid the temptation to crowd plants. Space them as you would if growing in soil. Unfortunately, straw bales last only one growing season. However, used bales make excellent compost.

**Source:** Dr. David Trinklein, State Horticulture Specialist

## Proper pre-breeding heifer development and management will improve lifetime cow productivity

Yearling heifers that conceive early in their first breeding season will have increased lifetime production and efficiency resulting in more profit potential. Proper management and development prior to the breeding season is key to increasing the likelihood that they will conceive early in their first breeding season. Manipulation of key factors in the onset of puberty, which we will discuss, can positively influence cyclicity prior to the breeding season leading to improved heifer conception early in their first breeding season.

First, the heifer needs to be old enough and heavy enough prior to the breeding season to have estrous cyclicity. The age part is dependent on breed. British and continental breed cattle should have estrous cyclicity such that they have their first calf at approximately 2 years of age. However, Brahman influenced cattle may have delayed estrous cyclicity resulting in having their first calves at approximately 2.5 to 3 years of age. Cattle producers and researchers have observed a high percentage of heifers cycling at 65% of their mature weight, which should be your target body weight prior to the breeding season. Based on the target heifers from 1200 -pound mother will need to weigh 780 lbs. prior to the breeding season.

Confirmation of estrous cyclicity is needed prior to the breeding season, which is done through a pelvic exam. A veterinarian does the exam approximately 30 to 60 days prior to the breeding season and it determines if the reproductive tract is sound in function and ready to conceive a calf. The scoring system is 1 to 5 with one being immature or non-cycling and five being cycling with a palpable corpus luteum. Heifers that score a three are on the verge of cycling while heifers that score a four are presumed to be cycling. Based on this knowledge if you have heifers that score one or two they are probably heifers that need to be culled while three, four or five heifers would be good candidates to enter the breeding season.

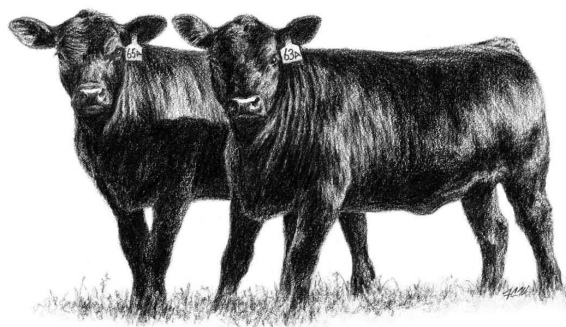
Another useful and important piece of information that we receive from pelvic exams is pelvic area. During the exam, the heifers should measure a pelvic area of at least 150 cm<sup>2</sup>, which is calculated by multiplying the width and height of the pelvis measured through palpation with a pelvimeter. If heifers have a pelvic area less than 150 cm<sup>2</sup> then they will be less likely to have a calf with ease and therefore should be consider to be culled.

Quality of nutrition plays a role in whether the heifer reaches her weight target or not. You need to know the weight at weaning and compare that to the target breeding weight and determine the number days to breeding to identify how much daily gain those heifers need to reach their target weight. Once you have determined the gain needed to meet that requirement then determine a nutrition program to meet that gain. In addition, you want to watch body condition score and make sure the heifers are not

getting to fat and manage the heifers to a body condition score of six prior to the breeding season. A body condition score of six is characterizes as:

- good smooth appearance throughout
- some fat over tail head and in the brisket
- rounded back and can palpate fat over the ribs

If heifers get to fat during the development process, they may have reduced milking ability as cows. Moreover, if you are supplementing them and they are too fat it is a waste of money. In addition, one additive that you might incorporate into the heifer diet is an ionophore, which are commonly known as Rumensin and Bovatec. Heifer daily ionophore consumption of 200 milligrams per head per day can hasten the onset of puberty and improve daily gain by 0.1 to 0.2 lbs. These results are beneficial in getting heifers ready for the breeding season. If you plan to use an ionophore, make sure that you follow the label instructions when feeding it to the heifers daily.



One final thing that influences the onset of puberty in replacement heifers is the environment they are managed in prior to the breeding season. The portion of the environment that is manageable by cattle producers is feeding management and the health status of the heifer. Replacement heifers need to be feed and managed separately from the rest of the cowherd because they have higher nutritional demands. Furthermore, visit with a veterinarian and make sure that your heifers are up to date on all immunizations as well as dewormed regularly. By controlling this portion of the environment, your heifers will be healthier, consume the proper nutrition that is needed and be more likely to meet pre-breeding targets for cycling prior to the breeding season.

**Source:** Patrick Davis, Livestock Specialist

### Available Soil and Hay Testing Equipment

You may not be aware that your local extension centers offer a variety of soil and hay testing equipment and other items that you can check out. It is best to call before you stop by to make sure the item you want is available. Using a soil or hay probe provides you with a more representative sample. Why should you test your soil? Without a soil test, you are just guessing you what you need to apply. If apply nitrogen only and your phosphorus and potassium are low, you do not get the full benefit from your nitrogen. If you do not test your hay, you do not know how to supplement. Supplementing too much is a waste of money and not enough affects conception rate. So be sure to take advantage of our equipment!

Equipment	Bates	Benton	Camden	Cass	Cedar	Cooper	Dallas	Henry	Hickory	Johnson	Laclede	Morgan/ Moniteau	Pettis	St. Clair	Vernon
Soil probe	x	x		x	x	x	x	x	x	x	x	x	x	x	x
Soil auger		x	x		x			x				x			
Hay probe	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Hay moisture & temp probes		x		x		x	x		x			x			x
Soil compaction probe				x		x		x							
Soil and grain thermometer															x
Compost temp probe									x						x
Portable electronic livestock scales				x											
Large animal portable coral panels									x						