

MASTER GARDENER Q&A

Cultivating Your Yard and Garden Knowledge

by Toby Day

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Q I had a landscaper put in some balled-in-burlap (B&B) Colorado blue spruce a few years ago and I just found that they forgot to untie the twine around the trunk. Now they are almost dead. Is there anything I can do to save them? I don't want to replant.

– Gallatin County

A This is unfortunate news and it's not the first time I have encountered this type of situation. Most Colorado spruce planted by landscape companies are planted balled-in-burlap, or what we call in the industry as B&B. The trees are dug in the field and placed in a wire basket lined with burlap. The "ears" of the basket are tied to the trunk of the tree, holding the whole root ball together, wire and burlap included. The branches of the trees are low to the ground, and the needles are, for a lack of better term "pokey," and this can lead some landscape laborers to simply cut the twine to the trunk and not reach under the tree to cut and remove the twine wrapped around the trunk.

As the tree grows the twine can strangle the tree, a term we call "girdling." Girdling cuts off water, nutrients, and sap from moving through the trunk and, approximately seven or eight years after the tree is planted, it declines, just as your trees have. The only recommendation is to remove the twine and hope for the best. Unfortunately, the tree may never recover and would need to be replaced. If the tree does respond, it may take several years until the tree regains proper health.



Do you have Master Gardener questions?
Send them to bssa@montana.edu,
subject: Master Gardener.

Q I have really heavy soil and want to plant fruit trees. I was told to use "root snorkels" when I plant my trees so that the roots can breathe. I am skeptical. Do they work? – Lincoln County

A When I received this question, I had never heard of a "root snorkel" and had to look it up. Apparently, a root snorkel is a vertical perforated plastic pipe buried in the ground next to the tree to help the roots "breathe." Conceptually this makes some sense, as tree roots need oxygen and fruit trees are often known to be less vigorous in heavy soils (i.e., those soils with a high clay content). However, this practice is not recommended and will do very little, if anything, to help the roots. There is no scientific evidence supporting the practice of installing root snorkels to promote fruit tree root growth in heavy soils. It would be better to rely on the native soil and change your watering practice. Do not work the soil when wet and avoid compacting the soil with machinery or excessive foot traffic. Although many people do not like to hear this, the soil may not be conducive to growing fruit trees. Get your soil tested and take the results to your local MSU Extension agent, who can then make recommendations for amendments and nutrients. If you still want to use the "snorkels," please refer to a document written by Linda Chalker-Scott (<http://puyallup.wsu.edu/wp-content/uploads/sites/403/2015/03/root-snorkels.pdf>), Horticulturist and Associate Professor from Washington State University. Her findings concur with what I have explained here.

Q I have chickens and would like to use their litter in my garden. How much can I use without burning my plants? – Carbon County

A This is a difficult question to answer because it is nearly impossible to determine the amount of nitrogen, phosphorus, and potassium that is in the chicken litter. Also, it isn't reliable to test the litter as the amounts of each in

the litter can change daily. The best general N-P-K analysis of chicken litter I am aware of is around 3-5-2. Based on this general estimate, if you wanted to apply one pound of nitrogen per 1000 square feet of garden area (which is a common recommendation), you would need about 30 pounds of dry litter per 1000 square feet of garden. Again, the actual content of the litter is highly variable. You may want to start with 15 pounds per 1000 square feet and monitor the results. You can always add more later in the season. If the plants continue to look healthy, I don't recommend adding more. Keep in mind that the first step is to have your garden soil tested to determine what, if any, nutrients may be lacking for growing a garden.

Q I really want to plant shrub roses along the fence in my back yard. Is there a list of shrub roses that do well in Montana? – Toole County

A I really like shrub roses, but I don't think they are planted as much as they were in the past, which is unfortunate. Bush or shrub roses are dense and hardy shrubs that make great specimen plants (i.e., plants grown individually for their appeal) as well as shrub borders, and are very easy to care for. Shrub roses are often planted for their showy flowers, but they can have variable colored and textured foliage, and the rose hips add winter interest. Additionally, they can provide valuable winter habitat for songbirds.

There is a list of shrub rose cultivars and hybrids that do well in Montana in a MontGuide called "Growing Shrub Roses in Montana." This publication is a great guide for selection and it will help in all aspects of shrub rose planting and care. You can find a free download of this publication online at <http://store.msuextension.org/publications/YardandGarden/MT199603AG.pdf>. Also, check with your local nursery, they may have recommendations of shrub roses that do well in your area.

ASK STEWARD

Dear Steward,

My pasture is looking poor, what should I do?

– Poorly Pasture

Dear Poorly,

Poor looking pasture can result from low water and nutrient availability, improper grazing management, or herbicide effects.

Healthy soils are the foundation of a healthy pasture. They provide nutrients and water, and host a thriving underground community to benefit plants. Healthy soils benefit from a balance of nutrients and water and active grazing management (BSSA Fall 2009). The latter includes adequate plant recovery time after grazing (BSSA Spring 2010), leaving cover and standing material to buffer soil temperature changes and help store water (BSSA Fall 2010), and encouraging plant species diversity (BSSA Winter 2015).

In pastures that are grazed rather than hayed, with manure left or returned to the pasture from a 'drylot,' few nutrients are actually removed. The most likely nutrient lacking is nitrogen because it can be lost to air as gas, or to groundwater through leaching. An early spring soil sample is an easy way to determine whether the soil is nitrogen deficient (BSSA Spring 2010). Lab test results often include a recommended fertilization rate, if needed. Indiscriminant nitrogen fertilization can lead to groundwater nitrate contamination, as well as wasted money on fertilizer.

Broadcast nitrogen fertilizer should be incorporated into soil by a half-inch of water within a day after application to avoid nitrogen loss to the air. Interseeding legumes (alfalfa, clover, etc.), which add nitrogen in soil, can be a long-term solution to nitrogen deficiency.

Fertilization may be easier and more cost effective than reseeding (BSSA Summer 2011) to improve pasture health. However, fertilizing stands with more undesirable than desirable species may increase production of undesirable species. Timely weed control by grazing management or herbicides is worthy of consideration. Use caution with herbicides. Inappropriate use of herbicide can poison surface and groundwater, and harm or kill more than intended. Legumes are very sensitive to herbicides that target broadleaf weeds. ■

Have a question for *Ask Steward*? Please send it to bssa@montana.edu or bigskysmallacres@montana.edu.