This column features questions from readers submitted via the website. To submit a question to Small Acre Sam, visit BarnyardsandBackyards.com. If your question is featured, you will receive a free one-year subscription to *Barnyards & Backyards*!

## sak Sam

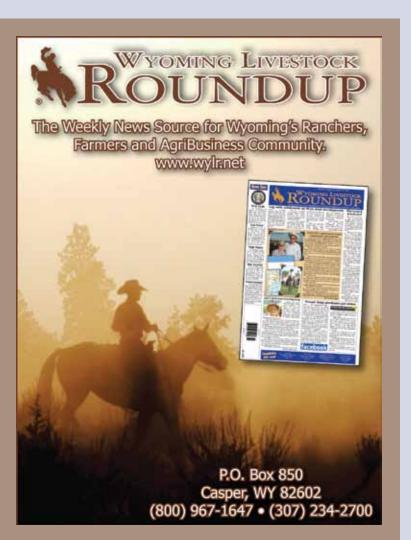
## Dear Sam, estion

Why are the needles near the center of our pine trees turning an orange-reddish color and falling off? We have inspected the trunks of the trees, and there is no apparent sign of pine beetles attacking them. Could you please help us identify the issues that may be affecting our pine trees?

## — Martin, Glenrock

## Dear Martin,

I am asked this question by many panicked tree owners every year in late summer and early fall. The first reaction is the tree has a disease or insect problem, but what you are likely seeing is a natural occurrence and should not be cause for alarm. Autumn brings a beautiful array



of leaf color on deciduous trees, shrubs, and vines. Likewise, needles on evergreen trees, such as pine, spruce, and fir, do not stay green forever. In the fall, the needles in the interior part of the tree will turn color or fade and fall off the tree.

Evergreens can have many years of needles on the branches. As the tree grows, the interior needles become shaded and no longer manufacture food for the branch and tree. Each species of evergreen tends to keep its needles for a defined length of time. Pine trees can hold their needles five years or more depending on the species. Spruce trees generally hold onto their needles longer than pine trees do – approximately five to seven years.

Yellowing, or the orange-reddish needles you mention on the interior limbs of pines, spruces, and firs, are normal in early fall. This can also occur in late summer and is more noticeable in drought conditions. Because the condition is triggered by weather, many evergreens are likely to show symptoms at the same time. The yellowing is more visible on pines since they have longer needles than spruce or fir. The dead inner needles will remain on pines for a couple of weeks before dropping to the ground.

That needle drop is a seasonal occurrence, and the symptoms distributed throughout the interior part of the tree helps distinguish natural needle drop from other problems. Natural needle drop occurs only on the inner needles; if entire branches or needles at the tips of branches are dying, then something else is happening to the pines.