This column features questions from landowners submitted via the Web site. 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 and Backyards!



## Sam

## q uestion

How can I prevent overgrazing of my ranch when I run four horses on 40 acres of steep hills that consist mainly of a thin layer of topsoil and the rest is shale? — Bonnie, Sheridan

## Dear Bonnie,

I received the question you submitted on grazing to the BarnyardsandBackyards Web site.

Yours is a common problem, one that will require diligence in managing the grazing of your horses. Without being able to look at your property, estimating the amount of land necessary to support one horse is difficult. Unless the land is either irrigated, or highly productive, more than 10 acres is needed to support one horse. A seat-of-the-pants estimate, based on your description of steep hills, thin soils, and shale, may be that the entire 40 acres might only support one horse for the growing season with feeding hay during three or four months during the winter.

So now the question is: how do you limit grazing on the land to manage for healthy, productive resources and protect the thin soil you described? I've attached several articles from the *Barnyards&Backyards* magazine that will give an idea on what you need to do.

Here is a *Reader's Digest* summary:

First consider the season of grazing. The most detrimental time to graze the grasses are when they are in the early stages of producing a seed and in the process of elongating the seed stalk. This usually happens from spring to early summer (April to June) depending upon the climate and the specific grass specie. Grazing during this period can be done as long as the plants have an opportunity for regrowth. On a pasture-wide, season-long scale, forage removal should be no more than one-fourth to one-third of the current year's aboveground growth. There needs to be an adequate amount of green leaves present to maintain a healthy root system. Up to one half of the total forage can be removed, but if grazed to that degree, be careful not to graze it during the critical season described earlier.

To accomplish this, there are several options. All four horses can graze for a month, maybe two. Remove the horses when a fourth to no more than a third of the plant material has been grazed. Better yet, avoid use during the critical growth period for the cool-season grasses (wait till mid June), graze for a week, and then pen them to be fed two weeks before allowing them to graze another week. In this way, a grazing rotation is established, which will assure range plant health and diversity. It is important to reduce the time the horses are grazing the

property to a fraction of full-time or they will overgraze the property. Pay careful attention, and you will soon discover the proper balance of grazing pressure, site potential, and current year's productivity.

I encourage small-acreage landowners who have livestock to look at two articles that ran in previous issues of *Barnyards&Backyards* that are available on the Web site barnyardsandbackyards.com under the Archives link at the left. They are, from Summer 2005, "The Basics of Stocking Rate Calculations," and, from Spring 2005, "Race for the Green." Hopefully these two articles and this information will help small-acreage landowners better manage their properties to protect resources and meet other goals.

Contact a local University of Wyoming Cooperative Extension Service educator, Natural Resources Conservation Service, or conservation district office for specific recommendations regarding your situation.

Sam

