



Protect your soil from 'Mariah'

By Dallas Mount

"They Call the Wind Mariah" – a famous line from the equally famous musical *"Paint Your Wagon"* set in the West. Perhaps the song writing team of Alan Lerner and Frederick Loewe was traveling across Wyoming when they wrote that line.

We are blessed – or cursed – in many parts of the West with frequent and often ferocious winds. These winds can rob landowners of one of their most valuable resources – topsoil. The topsoil catches precipitation, provides nutrients to plants, and is the foundation for the processes that keep land productive and healthy. Soil forms through geologic and other natural processes that can take decades – if not thousands of years – to occur. Loss of topsoil can happen quickly with poor land management. Landowners through management can either protect or expose soil to wind erosion.

Fortunately, Mother Nature has devised a system to help us reduce soil erosion. By managing for the health of the native plants on land and grazing moderately to leave behind adequate plant material, soil can be protected from harsh Western winds.

A few keys to managing plants on your land to protect soil include:

- Never letting animals graze native or introduced grasses below 4 inches tall. Additional grazing will expose more soil to wind erosion and potentially damage the crown of the plants resulting in plant mortality, which leads to additional bare ground and more wind erosion.
- Avoiding repeated grazing during spring months – the most critical months for grass vigor. For additional information, see "Race for the Green," under Spring 2005, by former University of Wyoming Cooperative Extension Service (UW CES) educator Paul Meiman, available at <http://barnyardstobackyards.com/Articles/2005.htm>, and "Broccoli and Ice Cream: Grazing Management" by me at <http://barnyardstobackyards.com/Articles/Special.htm>.

- Making sacrifice areas (corrals) as small as practical for livestock. Make a corral for your horse large enough the horse can comfortably walk around and have space for feed and water but not so large you are wasting pasture space. More animals mean bigger corrals.
- Reducing the amount of soil disturbance by vehicles, implements, and construction or other sources. Especially in sandy soils, these seemingly simple acts can result in exposing soil to wind erosion resulting in channels forming that washout during storms. Keeping roads to a minimum and using good road base can reduce these occurrences. Mulching in flowerbeds and around trees with either pea gravel or wood mulch is an excellent way to stop erosion and help with water conservation. A standard rule is 2 inches of rock mulch or 4 to 6 inches of wood mulch.
- Knowing the type of soil you have. Soil testing information sheets can be obtained at any UW CES county office (contact information is at <http://ces.uwyo.edu/Counties.asp>) or online at <http://ces.uwyo.edu/PUBS/MP6.2.pdf>. There is a \$20 fee for the standard test at the UW Soil Testing Laboratory, which includes pH, salts, organic matter, phosphate-phosphorus, nitrate-nitrogen, lime, and texture. There is a \$4 fee for additional tests. The lab is in the College of Agriculture, and the director, Kelli Belden, can be reached at (307) 766-2135. Sandy soils are more prone to wind erosion than clay soils and may require special management. For information, contact a local UW CES office, Natural Resources Conservation Service office (<http://offices.sc.egov.usda.gov/locator/app>), or the Wyoming Association of Conservation Districts (www.conservewy.com/wacd/district_map.html).

Following these simple practices will help you be a good steward of the land. Remember, we never really own the land forever; we just have the opportunity to manage it for a while. Choose to make land management something that will improve and maintain the natural beauty and productivity of the land.

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