

Seeding for Erosion Control
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So, you have a new home at the top of a slope or you have just graded an area to build a new barn and now your bare soil is open to erosion. Erosion occurs when water cascades uncontrolled down long or steep slopes where the soil has been disturbed. Not only does erosion cause mud to flow onto landscaped or paved areas and into storm drains, it also can create serious gullies and washouts and increase the incidence of mud slides. The latter conditions can be very costly to repair. One of the best ways to reduce erosion is to grow plants that completely cover the soil surface. In critical locations, you may also have to mechanically divert water away from slopes and provide temporary mulches to prevent soil movement until plant cover can be grown.

Providing vegetation cover allows the rainfall to enter the soil rather than run down the slopes by interrupting and reducing the speed of water movement. Plants also help to absorb the impact of raindrops and bind soil particles together through root growth. Plant cover, however, will only be effective as long as the slope is geologically stable and not too steep. The slope ideally should fall no more than one foot for every two feet of horizontal distance. Slopes that are greater than 20 feet in length should be broken up by flat benches or small ditches.

Now is the perfect time to plant grasses for erosion control. It is important that fall seeding be late enough that rains will not germinate the seed before any snowfall, particularly in elevations above 4000 ft. If irrigation is available, grass can be planted any time the site is accessible. Grasses are used most often because they are fast growing. They are grouped as either bunch or sod-forming grasses and it is important to

plant some of each. Bunch grasses are small seeded grasses that establish quickly and some of the most important species include orchardgrass, Sherman big bluegrass, and Nordan crested wheatgrass. There is also a short growing Durar hard fescue. This grass should be planted alone where you want an even textured appearance.

The sod forming grasses are slower to establish, but they are desirable because of their ability to spread roots from rhizomes and increase the percent cover. Good sod formers include Topar pubescent wheatgrass and Luna pubescent wheatgrass. These have a fairly short top growth and good root growth. The short top growth helps to reduce fuel loads where wildfire conditions are of concern. You should seed at a rate of about 50 pounds per acre or 1 pound per 1000 square feet. The usual ratio is two parts bunch grass and three parts sod forming grasses. Fertilize at planting with about six pounds of ammonium phosphate per 1000 square feet. Make sure there is good seed/soil contact by either dragging the area with a piece of chain link fencing or raking.

If your soil has been heavily disturbed you may need to mulch the area with an organic material. Grain straw is commonly used and should be spread at about 100 pounds per 1000 square feet. Do not chop it up, but rather using a flat, long-bladed shovel, punch the uncut straw into the soil. It should look like the tufts of a toothbrush when you are done. You could also cover the area with fiber, plastic or jute netting or you could have your seed hydroseeded on along with the fiber mulch.

The following spring you may need to reseed areas that did not germinate well. Consider also planting some native trees and shrubs as permanent plantings for erosion control. These plants will extend roots over a greater area, provide a more permanent habitat for wildlife, and will require less replanting over time.