



UI Extension Forestry Information Series

Forest Road Seeding

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Idahoans have long enjoyed the benefits of clear, forest streams. Forest roads are the primary source for siltation of these streams, especially during the first few years of roads' lives. Seeding grass and legumes on banks of maintained roads and beds of limited-use roads controls soil erosion, creates forage for livestock and wildlife, and helps control weeds. Successfully establishing this vegetation involves more than simply scattering the seed, however.

Before seeding, study specific areas in which the grass must establish. How deep are the soils? How steep is the site? What direction does it face? This helps you estimate the effective precipitation the site receives. A site may get 20" of rain per year, but on steep, thin soiled, south facing exposure(s) much of this will evaporate, leaving less for grass.

After studying the site, choose the grass species. Usually a mix of taller grasses shorter grasses and legumes is used. A typical seed mix for a wet site (over 25" effective precipitation) might include one or two varieties from each of the following categories:

Taller (>50% of mix)
Crested wheatgrass
Intermediate wheatgrass
Pubescent wheatgrass
Smooth brome
Meadow brome
Tall wheatgrass
Orchard grass

Shorter (<50% of mix)
Timothy
Hard fescue
Creeping red fescue
Canada bluegrass

Kentucky bluegrass
Tall fescue

Legumes
Birdsfoot Trefoil
White Dutch clover

A typical seed mix for a dry site (Under 25" effective precipitation) might include one or two varieties from each of the following categories:

Taller (>50% of mix)
Crested wheatgrass
Intermediate wheatgrass
Pubescent wheatgrass
Bluebunch wheatgrass
Tall wheatgrass
Tall fescue

Shorter (<50% of mix)
Streambank wheatgrass
Hard fescue
Big bluegrass
Sheep fescue
Orchard grass

Legumes
Lewis flax
Alfalfa
Yellow sweet clover
Small burnet

Seeding rates vary according to seed size, dryness of site, and method of dispersal. Large seeds, dry sites and broadcasting by hand or machine require more seed than small seeds, wet sites, and drilling. Grass seed usually contains small percentages of crop seed, weed seed and inert materials and not all that remains

germinates. Whatever varieties of seed you use, calculate seeding rates on the basis of pure live seed, which is a measure of seed lot purity and germination percentage. Generally, 100-150 pure live seeds per square foot is a sufficient seeding density. Contact your local UI Extension or Natural Resource Conservation Service for specific seeding recommendations.

Before seeding, make sure seeds will have contact with soil. It is best to seed just after road construction because there is freshly exposed soil. Try to leave a rough surface so seed will have a place to lodge. This is especially important on steep slopes – you may even want to create “mini-terraces” to get grass seeds started.

Seed may be spread by hand, broadcast mechanically (ex: “cyclone spreader”) or drilled (if you have a very level seeding surface). The first two methods place the seed on the surface. Drilling places seed at a controlled depth. You may also hire a professional who can use specialized equipment to seed in a mulch slurry (“hydromulch”) or using forced air (“air seed”). Regardless of technique used, seed either in the fall (six weeks before freeze date) or in the early spring.

Seeding over snow is not recommended.

It is good to fertilize sites while seeding, as many of these soils have had most of the topsoil removed, leaving relatively infertile subsoil. Generally, 250 lbs/acre of 16-20-0 fertilizer is adequate.

Consider sending samples in to the University of Idaho to determine precise nutrient requirements. Your local Extension Office can help you submit a soil sample. .

Mulching with excelsior, clean straw, slurried wood fiber or similar materials after spreading the seed provides a better environment for seedling growth and helps to control erosion until after the vegetation is established. Also, once you have established the seedlings, try to keep livestock off the site for at least a year so that the grass has a good opportunity to establish.

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