WASHINGTON STATE UNIVERSITY
WALLA WALLA COUNTY EXTENSION

Grass Seeding Tips

The successful establishment of grasses requires careful planning. In the Pacific Northwest, the most common causes of grass seeding failures are poor or inadequate seedbed preparation, seeding too deeply, and seeding too late in the spring or too early in the fall.

Poor seedbed preparation leads to loose soil, dryness near the surface, excessive weed competition, and seeding depth problems. When seedbed preparation begins too late, seeding ends up too late.

A firm, weed-free seedbed is of primary importance for successful establishment of the small seeds of grasses. A firm seedbed holds the moisture near the surface, helps control the depth of seeding, and provides anchorage for young seedling roots. Incorporate surface residue, then disk or harrow until the seedbed is fine. Rolling or cultipacking will develop the firmness necessary for a solid seedbed. When walking on a prepared seedbed, your footprints should be no more than one inch deep. The goal is for the soil surrounding the seed to be moist.

Weed competition can be controlled with a final cultivation before seeding. A herbicide treatment a few weeks before plowing may be necessary to limit weed competition. In no-till or minimum-till seedings, weed control with herbicides and suppression of existing forage by heavy grazing are critical.

There are three basic methods of seeding: conventional with a drill, minimum till or no-til, and broadcast. Drills distribute the seed uniformly and ensure proper soil coverage. Drills with depth regulators and press wheels give the best results. Sometimes the drill seed tubes can be disconnected to drop the seed directly on the soil surface to be followed by a seed covering operation. Cultipacking, flex harrowing (with the teeth pointed back), or dragging with a section of cyclone fence will help with seed covering if press wheels are not available. Cultipacking in wet soils can result in soil crusting, which prevents emergence through the soil surface. Broadcast seeding should be done in two crossing directions of split seeding rate to ensure a uniform distribution of seeds. Broadcast seedings should use 150% to about twice the recommended drill seeding rate. The chainlink fence idea is ideal for covering broadcast seedings.

Specialized seeders are normally required with minimum-till or no-till systems. These planters have tools for moving crop debris and cutting a furrow for seed placement. For most grass seeds and soil conditions, seeding depth should be between ¼ and ½ inch. Research has shown that larger seeded varieties, such as the wheatgrasses,

bromegrasses, and wildryes, establish well when seeded up to one inch deep. The key to successful establishment is getting the seeds into moist soil that will stay moist, without putting it deeper than it has energy reserves to grow through.

In dryland situations, grass can be seeded in the spring or the late fall. Spring seedings have a very narrow window for cultivation and seeding between soil being too wet and too dry. Fall dormant seeding can be done anytime after the soil temperature has lowered enough so that germination won't take place. This is usually when the soil temperature is below 42° F. The advantage of fall dormant seeding is that the grass gets an earlier start to compete against weeds. The best timing for a fall dormant seeding is the day before it snows. This timing also allows for better seed soil contact as a result of frost-crack soil movement.

By John Fouts, WSU Extension faculty

Good references for grass seeding include WSU Extension publication EB1516 *Hay Production Guide for Northeastern Washington*, and U of I Bulletin No. 547 *Idaho Forage Handbook*.

For more information, contact WSU Extension Walla Walla County at (509) 524-2685.

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