



## GRASSES FOR UNIRRIGATED AREAS

This information is for property owners who want to establish grasses that will survive in the Inland Northwest without supplemental watering. Sometimes called “dryland grasses”, the grasses listed here are hardy to at least USDA zone 6 and can survive on 17 inches of annual precipitation or less. They survive these climatic conditions by going dormant (not dying) during winter and again during the hot dry months in summer. When dormant, grasses turn yellow or tan in color. Between times of dormancy they are green. Before their summer dormancy, un-mowed grasses will produce seeds on stalks that are taller than the grass blades.

Most dryland grasses are “bunch grasses”, meaning they grow in closely spaced clumps rather than spreading out into a sod-like cover. The resulting grassland will cover the ground but because of its clumpy nature will not be smooth like turfgrass lawns.

### Average annual rainfall data (in inches) for areas in eastern Washington

Colfax	20”	Pullman	21.8”
Colville	16.5”	Ritzville	15.2”
Davenport	15.2”	Spokane	17.5”
Deer Park	21.8”	Wilbur	15.2”
Newport	26-27.5”		

### WEED CONTROL PRIOR TO PLANTING

It is essential for dryland grasses to be planted in weed-free ground. Weeds are a problem because they aggressively compete for moisture and overtake newly planted areas. Once established, the grasses will out-compete weeds but until the grass seedlings mature, weeds will have the advantage. Do not take shortcuts with the weed control process prior to seeding. **If the area is very weedy, it may be best to delay the seeding process for a year and control weeds first.**

There are two main types of weeds:

1. Broadleaf weeds, such as thistle, dandelion and knapweed, are plants with round, oval or irregularly shaped weeds. Leaves can be of any size.
2. Grassy weeds, such as cheatgrass and quackgrass, are grass plants that overtake desired grass plantings.

Identify the weeds you are trying to eliminate because different weeds require different treatments. If you don't know what weeds are on your property, get help from your county Extension office or County Weed Board.

## WHEN TO PLANT

Even dryland grass seeds require moisture to germinate and grow so plant in early spring or late fall to take advantage of rainy weather. Fall-planted seeds will not actually germinate until spring. If planted too early in fall, they may germinate before winter and be killed by freezing weather. Save some of the seed for filling in bare spots in the first or second year.

## SEEDBED PREPARATION

After the area to be seeded is free of weeds till the soil to break up clods. Small areas may be done by hand. In larger areas use a disc, harrow or other cultivation equipment. Work in 20-40 pounds of slow-release nitrogen per acre (half to one pound of nitrogen per 1000 square feet) to increase seedling vigor. Finally, roll with a corrugated roller to firm the soil so it will hold moisture and provide a good germinating surface. These steps are necessary prior to all methods of seed application.

## SEED APPLICATION METHODS

The three ways of applying seed are broadcasting, drilling and hydroseeding. The amount of seed you use will depend on the seeding method, varieties used, and the relative amount of each in the mix. Your seed dealer can help you determine the seeding rate you need. Do not increase this rate. If the seeds are sown too densely, they will not get enough moisture and nutrients.

**Broadcasting** seed means casting the seed on top of the ground at the recommended number of pounds of seed per acre or square foot. Follow by raking over the seedbed lightly and/or rolling to ensure good seed-to-soil contact. If adequate moisture is sure to be available, the raking and rolling steps may be skipped.

If you are sure that the area you are seeding into is weed free you can broadcast seed on top of snow or frozen ground in late winter or early spring. Seeds will work themselves into the thawing ground and germinate when temperatures are favorable.

**Drilling** seed is done with a seed driller that deposits seed into the ground to a specific depth. Commercial seed growers and some dealers have seed drills.

**Hydroseeding** slurry of seed, water, and fertilizer is “sprayed” onto the ground. Seedbed preparation described above is still necessary prior to hydroseeding. Hydroseeding companies are listed online.

Although not always practical, light mulch applied after broadcasting or drilling seeds will help retain ground moisture and prevent surface erosion until the grass takes hold. Mulching is not necessary after hydroseeding.

Supplemental irrigation, if available, is beneficial during spring germination and early growth. Do not irrigate after grass has become established.

**WHAT TO EXPECT**

Dryland grasses may be slow to establish and in the first year, it may appear that they are losing the battle to newly emerging weeds. Don’t panic or despair. In the second year they will usually begin to out-compete the weeds. It is sometimes necessary to hand pull or spot spray noxious and other particularly aggressive broadleaf weeds in the first year to allow the grasses to establish. Areas that remain bare after the first year may need to be prepared for reseeding. Rake the area to loosen the soil crust and overseed with the same seed mix.

**GRASSES FOR THE INLAND NORTHWEST**

Listed below are several grasses that will grow in Inland Northwest sites. Select ones with characteristics that fit your needs or call a seed supplier and they can advise you about appropriate mixes for your area. Either way, you need to know how many inches of precipitation your site receives annually. Seed companies may also recommend other varieties for your site.

<u>Common name</u>	<u>Latin name</u>	<u>Min. precip./year</u>	<u>Height in feet</u>
Tall Fescue	<i>Festuca arundinacea</i>	16”	1-3’
Turf Type Tall Fescue	<i>F. elatior arundinacea</i>	16”	1-2’
Hard Fescue	<i>F. duriuscula</i>	14”	1-3’
Turf Type Hard Fescue	<i>F. longifolia</i>	14”	<2’
Idaho Fescue	<i>F. idahoensis</i>	10”	>2’
Sheep Fescue	<i>F. ovina</i>	10”	1-2’
Prairie Junegrass	<i>Koeleuia ccristata</i>	12”	1-2’
Big Bluegrass	<i>Poa ampla</i>	10”	>2’
Canby Bluegrass	<i>Poa canbyi</i>	10”	1-2’
Sandburg Bluegrass	<i>Poa sandbergii</i>	8”	1-2’
Bottlebrush Squirreltail	<i>Elymus elymiodes</i>	6”	1-4’
Columbia Needlegrass	<i>Stipa columbiana</i>	14”	<2’

C193 – Grasses for Unwatered Areas

Green Needlegrass	<i>Stipa viridula</i>	16"	1-3'
Crested Wheatgrass	<i>Agropyron cristatum</i>	10"	1-3'
Crested Wheatgrass hybrid	<i>A.cristatum x desertorum</i>	10"	1-3'
Std Crested Wheatgrass	<i>A. desertorum</i>	10"	1-4'
Streambank Wheatgrass	<i>Elymus lanceolatus</i>	8"	<2'
Siberian Wheatgrass	<i>Agropyron fragile</i>	6"	1-2'