

GRASSES FOR UNWATERED 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 5 (-20°F.) 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, unmowed 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.

GRASSES

Listed below are several grasses that will grow in Inland Northwest sites. Select ones with characteristics that fit your needs or call the seed suppliers listed at the end of this paper 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’
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’

Average annual rainfall data for areas in eastern Washington

Colfax	19"	Pullman	22.6"
Colville	20"	Ritzville	12.2"
Davenport	14.2"	Rockford	21.6"
Deer Park	25.2"	Spokane	17.2"
Newport	25.7"	Wilbur	13.7"

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.

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 shortcut 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 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 ones require different treatments. If you don't know what weeds are on your property, get help from your county Extension office or Weed Board.

Digging or Cultivating: In some areas it may be practical to cultivate with a tractor or rototiller, or even to dig weeds by hand. However, cultivating and digging brings weed seeds closer to the surface, so watching for new weeds and re-cultivation may be necessary before planting grass seed. Canada thistle and quackgrass that get cut up into pieces during cultivation will resprout from each piece so cultivating is not an option. If Canada thistle or quackgrass are present, refer to chemical controls below.

Chemical Control: In some cases herbicides may be the best option. Again, it is necessary to know which weeds you are controlling before you choose an herbicide product. Some herbicides require a Pesticide Applicators License to purchase and use them. For information on licensing, contact your county Extension office.

Products that do **not** require a license for purchase or application are:

Roundup: This herbicide kills both broadleaf and grassy weeds, but will not prevent weed seeds from germinating. Spray growing weeds according to label directions. Wait at least three weeks to see if new weeds germinate and re-spray if necessary. You can usually plant seeds within two weeks of the last Roundup application but check the product label.

2,4-D Products: Herbicides containing 2,4-D are broadleaf herbicides. They kill all plants except grass type plants. 2,4-D is often combined with other herbicides such as MCPP or dicamba for increased effectiveness. Re-treatment may be necessary. CAUTION!!! It may be necessary to wait up to 4 months after application before planting new seeds, depending on the ingredients of the product you use. Read the label first!

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/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 getting seed into the ground 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.

In **hydroseeding** a 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 in the yellow pages of the phone book.

Although not always practical, a 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 (with Roundup) 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.

SEED COMPANIES

The following seed companies are wholesale suppliers of seeds. They may distribute to landowners with large areas or they may steer you to their retail distributors.

Autumn Seeds
Spokane WA
220-0231

Cascade Seed Wholesale Co
Spokane, WA
534-9431

Grassland West
Spokane and Clarkston, WA
800 582- 2070 or 888 456-7712

L&H Seeds
Connell, WA
509 234-4433

Rainier Seeds
Davenport WA
800 828-8873

Native Seed Foundation
Moyie Springs, ID
208-267-7938

Sun Mountain Native Seeds
Spokane, WA
509-835-4967