

SELECT PASTURE & SPECIAL PURPOSE GRASSES

(Irrigated and Non-Irrigated Varieties)

PASTURE SEED PLANTING INSTRUCTIONS

Take soil samples of the field and have them tested to determine fertilizer and lime requirements.

Apply fertilizer according to the results of the soil tests.

Cultivate the soil to a depth of at least six inches by plowing, discing or rotovating. Prepare a good seed bed; level, with relatively fine soil particles. Consider the use of a No-Till Drill to minimize soil disturbance.

Generally speaking, sow 20 to 25 pounds per acre if drilling and 40 pounds per acre if broadcasting. Drill the seed to a depth of 1/4 inches, or if broadcast, cover the seed to this depth. Firm the seed bed to insure good contact of seeds and soil. Straw mulching at this point would be a plus.

Irrigate as needed to maintain soil moisture. The new seeding should not be allowed to dry until the seedlings are well rooted. Even one day of dryness will have a major impact on your young seedlings.

Do not graze the pasture until the plants have become established.

. . . and remember the 'Phases of Growth' you learned about in our class.

Follow these steps and you will be off to a great start in truly making the grass greener on your side of the fence.



Private Consultations, Plans & Classes:

Ponds ~ Pastures ~ Irrigation ~ Wildlife

GreenAcres101.com

Keith Crabtree, Michael Parrish & Paul Weir

Orchardgrass (*Dactylis glomerata*) cool-season, tall, long-lived, rapidly growing bunchgrass. It is adapted to well-drained soils, and has the ability to stand relatively poor soils – so long as they are well drained. Develops rapidly in spring. If adequately fertilized, production is distributed well through the growing season. Withstands both heat and drought, depending on cultivar, and is shade tolerant. Prefers neutral to higher pH, needs lime on acid soils. It is suited for hay, pasture and erosion control. Adapted to areas from eastern Great Plains to New England, and to irrigated areas and high-rainfall mountains of the Pacific Northwest. Responds well to nitrogen fertilizer. Becomes very competitive when nutrients are available. Generally needs a minimum of 16 inches of annual effective precipitation.

Common Cultivars: Latar, Pauite, Potomac, Profile

Seed Count: 420,000 to 590,000 per pound

Seeding Rate: 18 to 25 lbs/acre

Seeding Time: March 1 to May 15 and Sept 1 to Nov 1

Germination: 10 to 21 days

Mature Height: 28 to 50 inches

Effective annual precipitation needed: 16-20 inches

Palatability ☆☆☆☆☆

Density ☆☆☆

Clay Soils? Only if well drained

Shade Tolerant? Yes

Perennial Ryegrass (*Lolium perenne*) An important cool-season bunchgrass well adapted in the Pacific Northwest. Relatively short-lived perennial grass often used on lowlands, soils with poor drainage, and on acid soils. Adapted to a wide range of soil conditions west of the Cascades and Sierras. Can be grown under irrigation or on dryland areas with a minimum of 15 inches effective annual precipitation. Does best in cool-moist regions with mild winters; grows well on heavy soils; tolerates heavy grazing. Widely used in mixtures for pasture, hay, erosion control and for rough lawns. Tends to go dormant in summer months. Nutritious and palatable. Germinates very rapidly. Newly seeded pastures may be grazed within two months of seeding. Yield, protein and digestible organic matter improve with nitrogen applications of 25 to 100 lbs per acre.

Common Cultivars: Linn, various Diploid and Tetraploid Cultivars (Tetraploid is usually preferred)

Seed Count: 210,000 to 250,000 per pound

Seeding Rate: 20 to 25 lbs/acre

Seeding Time: March 1 to June 15 and Sept 15 to Nov 1

Germination: 7 to 14 days (less with optimum conditions)

Effective annual precipitation needed: 15 inches

Palatability ☆☆☆☆☆

Density ☆☆☆

Clay Soils? Yes

Shade Tolerant? Somewhat

TALL FESCUE (*Festuca arundinacea*): cool season, deep rooted, long lived perennial bunchgrass. Thick stands will produce a tough sod if mowed or grazed. Vigorous, grows well on wet and dry soils, does best on heavy soils. Tolerant of poor drainage and clay, is also drought resistant; tolerant of both strongly acid and strongly alkaline soils. Excellent for summer pasture and hay, also for erosion control. Yields well in areas of at least 18 inches of annual effective precipitation. Produces abundantly with irrigation and high fertility. Best seeded with legume for added palatability and nutrition levels. Some palatability loss as plants mature and become more coarse. While a vigorous plant, new seedlings are somewhat slow to establish. Should not be grazed too soon, and not the first winter. Adapted to wide range of climatic conditions. Widely used in South eastern U.S, Western Oregon, California and Washington, and in irrigated areas of most other states. Responds readily to high rates of nitrogen. In mixtures with legumes, liming phosphate and potash applications are recommended.

Common Cultivars: Bull, Martin II, Barolex, Bariance (do not use KY-31 as it is not Endophyte free)

Seed count: 200,000 to 230,000

Seeding rate: 20 to 25 pounds per acre

Seeding time: Sept 15 to Nov 1 and March 15 to May 15

Germination: 7 to 14 days

Mature height: 30 to 72 inches

Effective annual precipitation needed: 18 inches

Palatability ★★☆☆

Density ★★☆☆☆☆

Clay Soils? Yes (heavy clay ok)

Shade Tolerant? No

* Remember to only use Endophyte Free Seed

SHEEPS FESCUE (*Festuca ovina*): Durable turf grass on sandy soils, used for erosion control. Cool season bunchgrass, cold and drought tolerant. More drought tolerant than other fine leaved fescues. Succeeds on sandy, gravelly soils. Not for wet areas. Not widely used for pastures. Clumpy, dense tufted grower, heavy root system. Adapted to dry sites and high altitudes.

Common Cultivars: Covar

Seed count: 670,000 to 690,000 seeds per pound

Seeding rate: 6 to 8 pounds per acre

Seeding time: April 15 to May 15

Germination: 7 to 14 days

Mature height: 8 to 16 inches.

Effective annual precipitation needed: 10-14 inches

Palatability ★

Density ★★☆☆

Clay Soils? Only if well drained

Shade Tolerant? No

PASTURE BERMUDA GRASS (*Cynodon dactylon*): A warm-season grass native to southeast Africa, is widely grown throughout the south and southeastern United States and is gaining popularity north through USDA Zone 7. It is a deep-rooted, sod-forming grass that spreads mainly by means of stolons and rhizomes and grows to a height of 15 to 24 inches. Perhaps its greatest advantage is that it is productive during the months of June, July and August when the quantity and quality of cool-season grasses such as tall fescue (*Festuca arundinacea*) and orchardgrass (*Dactylis glomerata*) can be poor. Bermudagrass produces a large quantity of dry matter for either grazing or hay production when soil moisture is not limiting. Although bermudagrass can be extremely drought tolerant, it does not produce much forage under arid conditions. Bermudagrass will not tolerate waterlogged conditions. Like most grasses, it does best at a pH of 5.5 or above and is highly responsive to the application of nitrogen fertilizer; potassium (potash) is also important for forage growth and winter hardiness. Typically, bermudagrass is established between April 1 and June 1. Later plantings are successful only if adequate moisture is available. For best success, bermudagrass should be planted into a well-tilled, level and firm seedbed, but may also be planted with a No-Till Drill. May be planted by 'sprig' or seed. Seeded varieties can be either broadcast or drilled. The desired seeding depth is 1/4 inch max. Seeding should only be done when soil temperatures are above 65 degrees at a 4 inch depth and it is important that seed beds remain moist for 2-3 weeks to get established

Common Cultivars: Mohawk, Cheyenne II, Wrangler

Seed count: 550,000 to 600,000 seeds per pound

Seeding rate: 15 pounds per acre

Seeding time: April 1 to June 15

Germination: about 10-14 days

Mature height: 12 to 24 inches

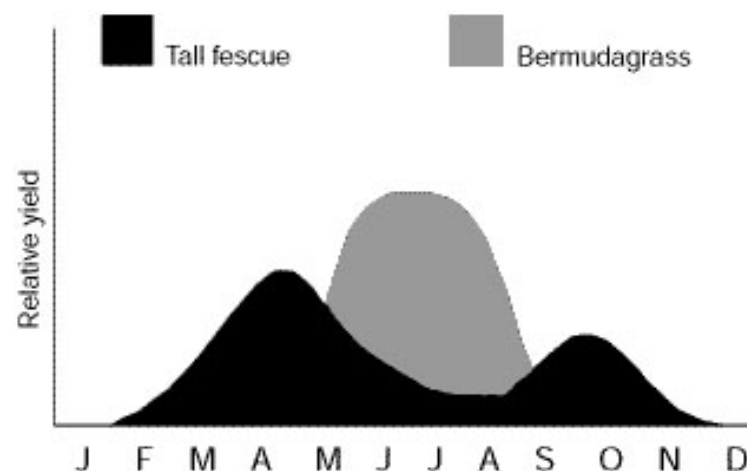
Effective annual precipitation needed: 20 inches

Palatability ☆☆☆☆

Density ☆☆☆☆

Clay Soils? Only if well drained

Shade Tolerant? No



TALL WHEATGRASS (*Agropyron elongatum*): A tall, coarse, long lived, late maturing bunchgrass used for hay and pasture primarily in the northern Great Plains and the intermountain region. Can be grown on wet, alkaline and saline soils; is used extensively for reclamation of these soils; has good seedling vigor. Not as drought resistant as crested wheatgrass. Produces high yields, but not as palatable as most Wheatgrasses. Makes fair hay, can be used for silage. Does not withstand close grazing. Seedlings may require one full year of protection before grazing. Makes excellent wildlife cover, food and nesting habitat. Established fields can even withstand extended periods of flooding.

Common Cultivars: Alkar, Largo, Jose, Platte and Hercules (a new improved high palatable variety)

Seed count: 65,000 to 79,000 seeds per pound

Seeding rate: 14 to 15 pounds per acre

Seeding times: March 15 to May 15

Germination: 12 to 18 days, can be slow to start.

Mature height: 30 to 60 inches

Effective annual precipitation needed: 12 to 14 inches

Palatability ★
Density ★★☆☆
Clay Soils? Yes
Shade Tolerant? No

PUBESCENT WHEATGRASS (*Agropyron trichophorum*): cool season sod forming perennial grass closely related to intermediate wheatgrass. The two are similar in growth habit, period of growth, and most characteristics, differing in that the heads and seeds of pubescent wheatgrass are covered with short, stiff hairs which suggest the name "Stiff hair wheatgrass." Pubescent wheatgrass is often more drought tolerant than intermediate wheatgrass. Used for permanent seedings on rangeland. Needs a minimum of 12 inches of rainfall below 3,500 feet elevation.

Common Cultivars: Luna, Greenleaf, Manska, Greenar

Seed count: 80,000 to 100,000 seeds per pound

Seeding rate: 12 to 15 pounds per acre

Seeding time: March 15 to May 15

Germination: about 14 days

Mature height: 28 to 50 inches

Effective annual precipitation needed: 12 inches

Palatability ★★★★★
Density ★★★★★
Clay Soils? Yes
Shade Tolerant? No

INTERMEDIATE WHEATGRASS (*Agropyron intermedium*): An important cool season sod forming, late maturing perennial grass imported successfully in 1932 from the Caucasus region of Russia. Used for pasture and hay in the northern Great Plains, west to Washington, south to Colorado and Kansas. Adapted to areas of 15 or more inches of annual precipitation; has grown in elevations up to 10,000 feet. Good persistence drought tolerance and winter hardiness. Produces good hay yields, grows well with alfalfa, suitable for erosion control. On well drained, fertile soils with ample moisture will grow to 6 feet. Hay yields are high, makes excellent pasture from early spring to late summer. Easily established, grows rapidly. Not as winter hardy as crested wheatgrass. Difficult to maintain stands more than 6 years. Often best above 3,500ft elevation, on north slopes, or in cooler microclimate areas.

Common Cultivars: Oahe, Rush, Reliant, Manifest

Seed count: 83,000 to 95,000 seeds per pound

Seeding rate: 12 to 15 pounds per acre

Seeding time: March 15 to May 15

Germination: about 14 days

Mature height: 30 to 60 inches

Effective annual precipitation needed: 15 inches

Palatability ★★★★★

Density ★★★

Clay Soils? Only if well drained

Shade Tolerant? No