

# HOW TO BUILD AND MAINTAIN YOUR LAWN

IT IS ESSENTIAL TO KNOW that a blade of grass is a living plant that requires air, water, and nutrients.

TO ESTABLISH a good lawn, you must plant good seed of suitable variety. The soil must be properly prepared.

A STRUCTURE CANNOT BE BETTER THAN ITS FOUNDATION. A lawn cannot be better than its seed bed. Maintenance of the turf, after it is established, is just as necessary as maintenance of the home. Unquestionably you will reap just what you sow.

HOW TO BUILD AND MAINTAIN YOUR LAWN is fully covered in the following pages. It should be remembered that soils, proposed uses, and climatic conditions determine to a large degree the type, or kind of seed you should plant. Your VOLKMAN dealer knows seeds. He can make proper recommendations. Be sure to consult him.

PREPARATION OF THE SOIL should be the first step in lawn building. Before starting the seed bed, remove old turf and weeds, if any. Do not turn under, as it takes a year or more to rot old turf and many weeds will return.

The soil should be heavy enough to retain moisture and yet not puddle. If the natural soil is sandy or light, add weed-free barnyard manure (very old and screened), certain grades of peat, and/or top loam or adobe soil. (Extremely sandy soil will not retain water and whatever plant food you might add will be washed beyond the reach of the plants).

If the natural soil is the heavy or adobe type, add gypsum or lime; then break up the solid particles and work in manure and sand. Gypsum is advised for extremely alkaline soils, and lime for the acid soils. About 150 pounds per one thousand square feet of either should be enough to break down the soil.

DRAIN OR SPRINKLER SYSTEM should now be installed, if included in your plans.

LEVELING, ROLLING AND RAKING the seed bed is now in order. The seed bed should be at least 6 inches deep. As soon as the rough level is obtained, the seed bed should be watered, raked and rolled. Allow time for natural settling. This process may be hastened by frequent and thorough watering. The heavy watering to aid settling of the soil should bring up most of the weeds which may be dormant in the soil. The weeds should be removed. In the final surfacing process, add commercial fertilizer, which should be raked into the soil to the depth of about two inches. After the final raking, before seeding, a light rolling should show up depressions, which should then be raked even. The entire surface should be lightly scratched before seeding.

SELECTION OF SEED: In the selection of seed, one should keep in mind soils, climatic conditions, and the purpose for which the lawn is to be used. Fine leaved lawns for show purposes require Bents, fine leaved Fescues, or Bluegrass. For service lawns use Highland Bent, Red Top, or Perennial Ryegrass. For extremely hard service in warm climates use Bermuda Grass. For shady lawns use Poa Trivialis, Chewings Fescue, one of the Creeping Red Fescues or combinations of these grasses.

When using mixtures of seed, care should be taken to select grasses that are similar in adaptation, color, texture and rate of growth.

THE HIGHEST QUALITY SEED IS THE MOST SATISFACTORY AND LEAST EXPENSIVE IN THE FINAL ANALYSIS. In the selection of seeds, one should look for maximum purity, weed-free or low weed seed content, high germination, and trueness to strain or variety.

Very cheap or inferior grass seeds are offered for sale. They are usually sold by people who do not know the difference between high quality and low quality. If you know the difference, do not care.

The lawn seeds supplied to your dealer by C. M. VOLKMAN & CO. have been carefully selected from the best the market affords, for their purity, germination, and low weed content.

SEEDING: Early morning or late afternoon is preferable for this operation. Do not attempt to seed when a strong wind is blowing. Since even distribution of seed is essential, broadcast one-half the seed in one direction, and the remainder at right angles, allowing the seed to drop at least three feet to insure proper spread.

It is advisable for novice seeders to divide the seed and the total area into at least four sections and seed each one separately. This is done so that the amount of seed at hand will cover the area involved.

The seed should then be raked into the soil and rolled with a light weight roller. Cover to a depth of about one-quarter inch with either pulverized manure or fine peat moss.

WATERING: Water should be applied evenly and carefully with a fine spray. Coarse streams wash away both seed and top dressing and do not permit the even absorption of water. Once a newly seeded lawn is watered, it must be kept continually moist until the young grass is well established. A single day's neglect may mean the drying, hardening or crusting of the soil's surface, resulting in the loss of many of the tiny grass plants. It is not advisable to water during the heat of the day.

MAINTENANCE: If the grass comes up unevenly, appears weak, and is a yellowish green color, it indicates the need of a plant food. Plant food or fertilizer should be applied in frequent small quantities to avoid burning the young grass. Uniform application of fertilizer is essential otherwise uneven growth will result.

MOWING: Commence mowing when grass is two inches high. The mower should be sharp and set to cut an inch and a half from the ground for the first two cuttings. For subsequent cuttings, for such fine lawns as Bents, Fescues and Bluegrass, the mower should be set three-quarters of an inch from the ground. Do not leave cuttings on the lawn, as they not only spoil the appearance of a young lawn, but are likely to smother and kill the tender grass. During hot weather, mowing should be done frequently, but do not mow as closely as usual.

FERTILIZATION: Established lawns should be spiked, fertilized and top dressed at least once a year, or more frequently if needed. Commercial fertilizer and top dressing should be mixed and applied to the lawn, raked in and thoroughly watered. If the soil is light and sandy, mix fertilizer with loam or fine peat moss. If soil is heavy and colloidal, mix fertilizer with sharp sand.

WEEDING: Eradication of weeds from the modern lawn is no longer a back-breaking chore. Hand weeding can practically be eliminated through the use of selective weed killers. These preparations are inexpensive and easy to apply.

When evidence of disease or insect troubles appear, arrangements should be made for immediate control. Consult your VOLKMAN dealer who will recommend an effective remedy of which there are a number available.

Building a lawn is not a difficult operation, but every step should be given careful consideration. Your lawn is the very foundation of your home garden. Nearly all plantings of flowers, trees, and shrubbery are planned to coincide with, and compliment this lawn. Give it the attention needed to preserve and help its natural will to grow, and you will have that enduring, pleasant-to-behold garden treasure, a beautiful lawn.

# LAWN SEED CHART

## And Guide for Building Lawns

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By

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NAME OF GRASS	ADAPTATION			SQUARE FEET per Pound of Seed	Uses	GENERAL INFORMATION
	SOIL MOISTURE RANGE	SOIL TOLERANCE RANGE	WEATHER RANGE			
ASTORIA BENT COLONIAL BENT <i>Agrostis tenuis</i>	Moist and semi dry	Neutral, acid, lime	Resistant to cold. Does not do well in extreme heat	250	Golf greens, bowling greens, fairways, lawns, and athletic fields	Very fine leaved upright growth, dark green color. Partial underground creeper.
SEASIDE BENT <i>Agrostis palustris</i>	Moist	Neutral, acid	Moderate heat and resistant to cold	300	Golf greens, lawns and fairways	Very fine leaved, vigorous top creeper, light green color. Must be raked and closely cut to prevent so-called "grain on turf" and matting.
HIGHLAND BENT <i>Agrostis tenuis</i>	Moist and Moderate Dry	Neutral, acid	Moderate heat and resistant to cold	250	Service lawns, athletic fields, airports, golf greens, polo fields	Fine leaved, upright growth, moderately light green color. Strong underground creeping root stocks.
VELVET BENT <i>Agrostis canina</i>	Moist	Neutral or lime, tolerant of slight acidity	Temperate to cold	500	Putting greens, lawns	Finest leaved of all lawn grasses, upright growth, inclined to lay. Bright green color. Good for shady spots.
BERMUDA GRASS <i>Cynodon dactylon</i>	Moist, tolerant of dry	Neutral, lime, alkali. Some salt if area is well drained	Hot weather only. Dormant during cold weather	Lawns, 150 Athletic and polo fields, 400	Polo fields, athletic fields, fairways and airports, lawns in hot climates	Fine leaved, creeps above and below ground, dull green color. Becomes a pest if not confined. Requires regular irrigation for satisfactory growth. Deep rooted. Should be planted during spring or summer. Turns brown in winter when subjected to frost, requires heat to grow.
KENTUCKY BLUE <i>Poa pratensis</i>	Moist	Neutral, slightly of acid, very of lime	Resistant to cold but not extreme hot weather	150	Lawns, fairways, athletic fields and airports	Moderately fine leaved, upright growth from creeping root stocks, bright bluish green color. Withstands winter freezing. Responds to lime treatments where acidity is excessive.
CHEWINGS FESCUE <i>Festuca rubra</i> (Var. <i>commutata</i> )	Moist, tolerant of dry	Neutral, acid, lime	Fairly tolerant of heat and resists cold	100	Lawns, golf greens and fairways	Fine wiry leaves, upright growth, dark green color. Also good for shady spots. Spiking necessary to perforate root mats, especially in heavy soil; very hardy.
CREEPING RED FESCUE <i>Festuca rubra</i> var. <i>genuina</i>	Average moisture	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	100	Lawns, fairways and athletic fields	Fine leaved, upright growth, dark green color, creeping root stocks. Also good for shady spots.
ILLAHEE CREEPING RED FESCUE <i>Festuca rubra</i> var. <i>illahee</i>	Average moisture	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	100	Lawns, fairways, and athletic fields	A selection of Creeping Red Fescue, darker green than Creeping Red Fescue; slow creeping root stocks. Good for shady spots.
RAINIER CREEPING RED FESCUE <i>Festuca rubra</i>	Average moisture	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	100	Lawns, fairways, and athletic fields	An improved and more uniform selection of Creeping Red Fescue. Fine leaved; darker green and more vigorous underground creeper than other fescues. Also good for shady spots.
MEADOW FESCUE <i>Festuca elatior</i>	Average moisture	Neutral, acid, lime	Temperate	100	Athletic fields, fairways, and airports	Coarse leaved, upright growth, dark green color.
TALL (ALTA) FESCUE <i>Festuca arundinacea</i>	Moist, tolerant of dry	Neutral, acid, lime	Fairly tolerant of heat and resists cold	75	Athletic fields, fairways, and airports	Coarse leaved, upright growth, dark green color. Can be used where durability outranks appearance.
ROUGH STALK MEADOW GRASS <i>Poa trivialis</i>	Moist	Neutral, acid if rich and well-drained	Resistant to cold but not hot weather	150	Shady lawns and fairways	Fine leaved, upright growth, bluish green color. Requires spiking to prevent bunching. Also good for shady spots.
RED TOP <i>Agrostis alba</i>	Wet	Neutral, acid, lime	Resistant to cold, fairly tolerant of heat	250	Fairways, service lawns, athletic fields, airports	Leaves become coarse, sprawling growth, light dull green color. Seed similar in appearance to bent grass seed.
PERENNIAL RYEGRASS, AUSTRALIAN, ENGLISH <i>Lolium perenne</i>	Moist, tolerant of dry	Neutral, acid, lime	Cold, not tolerant of excessive heat	75	Service lawns, playgrounds, athletic fields, fairways, and airports	Coarse leaved, upright growth, bright shiny green color. Frequent mowing is advisable to prevent development of coarse seed stalks. Has tendency to bunch in time.
COMMON RYEGRASS, DOMESTIC, ITALIAN <i>Lolium multiflorum</i>	Moist, tolerant of dry	Neutral, acid, lime	Cold, not tolerant of excessive heat	75	Playgrounds, temporary lawns and airports	Coarse leaved, upright growth, bright shiny green color. A short-lived grass, inclined to bunch. Sometimes referred to as Pacific rye grass.
WHITE CLOVER <i>Trifolium repens</i>	Moist	Neutral, lime	Moderate heat and tolerant of cold	200	Lawns	Round leaved, spreading growth, bright green color. Especially good with bluegrass. Use sparingly in mixtures. Sometimes referred to as White Dutch lawn clover.

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