

the Villager Nursery Planting Lawn by Seed in Truckee

(Preparation is the same for sod and remember: "Sod looks good because it was grown from seed".)

Location:

Lawns do best in 1/2 to full sun and deep, rich, well-drained soils. If there are many trees, trim up the lower branches to let in more light. If it is a truly dark spot, lawn is probably not the best ground cover. There are several hardy perennial groundcovers that grow in deep shade, some of which will tolerate mowing.

When to plant:

Successful lawns are planted each year from April through October depending on the weather, however, spring / early summer (June) is often the easiest time ... warm but not yet hot. When weather is too hot, watering is more challenging and when it is too cold, seeds are slow to germinate. It is possible to seed a lawn in the late fall or late winter, but there is a chance of loss.

Soil preparation:

Whether planting seed or sod, soil preparation is the same. **This is the most important piece of any mountain lawn installation.** Time you spend now preparing the soil will be repaid many-many-times over in the life of the lawn ("good soil is money in the bank, a healthy lawn is the interest"). **Have your soil tested.** At least test the pH and makeup. Most of us have slightly acidic, infertile, soil with poor structure. Our soils are acidic rocks in some stage of decomposition, with little or no organic component. Heavy snow, and wet conditions compress native soils, squeeze out air spaces and inhibit healthy lawn growth. A healthy lawn must have deep, rich, well-drained, resilient soil. Mature ("finished") organic composts (Gromulch or Amend) and manures incorporated into the existing soils solve many problems. **Humus**, the completely composted organic material that one finds as a part of compost piles and meadow soils, improves the nutrient and moisture holding capacities of the soil while creating structure that allows for better root growth. **Mature composts** also add and support beneficial micro-flora and fauna to the soil that aid in disease suppression. **Dr. Earth Lawn Fertilizer** will inoculate your soil with millions of microbes, which will essentially increase the grass' root systems many times over.

If you are planting over an old, dead or abandoned lawn that is less than 40% bad, you *might* first try thatching heavily, aerating aggressively, top-dressing with rich compost (**Topper**) and over-seeding in order to revive it. Usually it's better to remove the old sod and start over.

Improving MOST Truckee soils

The hard part. Spread 4-6" of mature compost - either from your own piles or from bags (**Kellogg's organic composts can be delivered in bulk**). **Aged (2 years) horse manure** is an excellent and inexpensive compost. Add lime for Bluegrass lawns and if your soil pH test indicates acidity to bring your soil pH to near 6.5. Rototill your soil to a depth of 8-10" and thoroughly blend the organics with the existing soil. The deeper the soil is prepared the better. After tilling, rake smooth and grade. Take care to slope it away from your house and walkways. Continually remove rocks and sticks as they surface. Roll the area with a full (of water) roller, then rake and roll again to fill in depressions and smooth bumps. Repeat. Repeat again as necessary. If you like the idea of a rolling lawn, remember that water will run off of steep slopes and pool in low areas, creating watering problems and winter ice damage. Keep changes in slope gradual and consider ease of mowing on hills and in corners.

Notes: If you are planting in "topsoil" or "humus" delivered to your yard, be aware that many manufactured "topsoils" consist of sawmill leavings mixed with dirt or road sand and may be infertile and even detrimental to plant growth. The dump has decent "topsoil" but it lacks enough organic material.

It is essential that you blend the transition area between the native soil and the "topsoil" to avoid a sharp interface that would discourage water movement and deep root growth. Avoid layering different soil types.

Well-aged horse manure is the best local bulk soil amendment and it may be obtained from nearly anyone with horses if you are willing to pick it up. Horse manure can contain weeds.

Pre-seeding Weed Prevention:

If you have the time, after preparing the soil, water and lightly fertilize your prepared soil for 2 weeks to bring up whatever weed seeds are present in the soil. (You can do this several times for more complete eradication.) Kill the weeds with your preferred method (plucking, hoeing or "solarization"). One advantage of sod is that you may avoid this step because the sod will smother any weeds.

Sod

Sod from the east side of the Sierras looks good for 2 (sometimes 3) years without trouble. To have a sod lawn that lasts longer, don't cheat yourself on soil prep. Use organic fertilizers, aerate 1-2 times a year and top-dress each spring after aerating with Topper. **Topdressing is essential.**

Seeding

Apply a good slow-release organic fertilizer with ample nitrogen and phosphorous before planting. **Biosol** and **Dr. Earth Super Natural Lawn Food** are best for a lush lawn.

Measure your lawn area and choose the varieties of seed you are going to sow (the amount of seed you need will vary with different varieties). Use a broadcast spreader. If you spread by hand, mix the seed well in bucket with **Topper** compost and cast that mixture. It's best to go over the area 2 - 3 times in opposite directions for more even coverage and to avoid running out of seed.

Lightly cover the seed with 1/16"-1/8" of fine finished compost; **Kellogg's Topper** is made for this. You can use a cage roller for even distribution. Use a half-full water roller to press the seed into the soil as seed to soil contact is essential. Half of the seed should be barely visible.

Watering at the Start

Never let the seed or seedlings become dry. The soil must be kept damp but not wet at all times during the germination period (2 to 4 weeks). **Any lapse in watering that results in dry soil will kill tiny grass seedlings** or at the very least, weaken them. Alternately, the seedlings should never be under water for more than a few minutes if puddling occurs. Several light waterings a day may be required, (3-5 times each day in midsummer is not unusual). Water more on windy or very hot days.

Mowing

When the grass is more than 3" high, you can begin mowing it. Make sure your mower blades are sharp and that the ground is not so wet that the mower wheels will make ruts. Set the mower height at no less than 3" (3 1/2 is better) and never mow more than 1/3 of the grass blade length at one time. In shade, mowing may change with the seasons. More frequent mowing at greater height is best. Use a mulching mower and leave the clippings (soil microbes will eat them). Topdressing with finished compost at least once and preferably twice each year also helps compost the trimmings into the soil more quickly.

Fertilizing

After 3 mowings (8 weeks or so) you can re-apply **Biosol** or **Dr. Earth**. **Organic fertilizers** are the best for the long-term health of your lawn. **Dr. Earth** inoculates the soil with living beneficial microbes and gives roots long lasting nutrition. *Do not use "weed and feed" type fertilizers* (for the first 3 months and avoid their use forever). A healthy lawn in good soil may only need one or two fertilizations a year. You may reduce the amount of fertilizer used with each application and fertilize more often.

Autumn Care for All Lawns

Keep your lawn clear of pine needles, sticks and pine cones as much as possible going into winter. Add lime to bluegrass in the fall if necessary every year or two. Fertilize with **Biosol** as late as possible. Top-dress with **Topper** compost every year for reduced thatch, reduced disease, reduced watering, and improved health and vigor of the lawn. Mow one last time to 2" and bag the clippings. A number of our clients have had success deterring voles by aerating their lawns in late fall. Aerating, then applying **Biosol** and **Topper** topdressing would be very beneficial to the lawn's health as well.

Spring Care

New lawns often need a light reseeded after their first winter. When the snow has melted and the soil has drained, rake the straw out of the lawn, mow to 2" and allow in air and light. This first year add seed to your *annual spring top-dressing of compost* (2 cu.ft. / 200 sq.ft.). Top-dress every fall for additional benefit. Don't mow again until the lawn is green and needs it.

Diseases

Almost all of the major turf diseases are caused by fungi (in hot humid climates). There are some 100+ turf disease causing fungi and in any sample of soil you are likely to find several potential pathogens. We seldom have disease problems in healthy mountain lawns in our cool dry climate. The beneficial soil micro-flora and fauna compete with the bad-guys for space and resources (real estate) and keep the pathogens in check. Topdressing with mature compost smothers their spores. Compost and Dr. Earth will introduce armies of beneficial microorganisms into the soil. **Maxicrop seaweed** provides natural disease prevention as well. Along with micronutrients for the lawn, seaweed's hormones stimulate root growth and inhibit pathogenic fungi. Seaweed fertilization is a good idea on any plant. Disease affected turf may be de-thatched and immediately top-dressed with a mature compost to boost the populations of beneficial microorganisms and help fight the disease.

Stresses on the lawn or soil will disrupt the balances of power and the pathogens may get the upper hand. Chemical fertilizers, herbicides and fungicides often enhance disease attacks by destroying the beneficial competitors. Mowing too close, chemical fertilizers, over-watering or under-watering stresses the plant itself and opens it up for potential attack.

Typhula blight (grey snow mold) is our only really common lawn disease. It occurs in spring under warm melting snow. Topdressing with mature compost every fall without chemical fertilization and mowing slightly shorter while bagging the clippings in the fall will help prevent the disease. Fairy ring is occasionally found when poor quality, sawmill "topsoils" are used.

Animal Pests

Birds, raccoons, ground squirrels, Douglas tree squirrels, porcupines, pocket gophers, rabbits, moles and mice all may occasionally show up to disturb areas of your lawn. The most common problem is caused by voles (meadow mice). Voles look like hamsters or small gophers and they eat plants and insects. In winter they tunnel under the snow and above the ground, grazing on everything in their path including lawns, perennials, trees and shrubs. There are several possible deterrents. Some seem to work fairly well. (*Lawn owners who use Biosol organic fertilizer have regularly reported drastically reduced winter vole damage*) Trapping the voles with mouse-traps and peanut butter bait before winter helps reduce the local population temporarily.

Insect pests

We have few insect pests of serious concern in our mountain lawns. Again, deep rich soil that encourages a healthy stress-free lawn, is less hospitable to many of the serious lawn pests. Aeration of overly dense turf combined with top-dressing with a mature compost often helps. Some pests like leafhoppers are more annoying than harmful. Proper watering often solves insect problems. If you find you have a serious problem here are a few natural controls: pyrethrum for leafhoppers, neem for grubs, sabadilla for cinch bugs, Serenade (bacterial extract) for a wide variety of insects, Bacillus thuringiensis for cutworms and sod webworms, Bacillus subtilis and seaweed for mildew.

Watering Mature Lawns

Water wisely. Automatic irrigation systems help reduce waste while keeping the lawn as healthy as possible. Water as infrequently as possible but water deeply when you do irrigate. If your soil is slow to infiltrate or if you have slopes, we recommend three waterings to accomplish one. That is: if your lawn requires 30 minutes to obtain one inch of water, run the sprinkler for 10 minutes, 3 times, consecutively. The first, wets the soil, the second gets the water into the soil and the third pushes the water deeper. DO NOT run it 10 in the morning, 10 at noon and 10 at night; that encourages shallow weak roots. During the hottest days of the summer on a sunny lawn, a very brief, 2-3 minute spritz of the lawn cools the turf and increases humidity and actually reduces moisture loss.

Arguments for a small lawn:

*Act as a natural filter, it reduces pollutions by purifying water passing through the root zone and it collects dust and other airborne pollutants.

*Eight front lawns have the cooling effect of a 70 ton air conditioner.

*2500 sq. ft. of turf grass releases enough oxygen for a family of 4, every day.

*On a hot day, turf areas will be 15-30 degrees cooler than decks, patios, shrub beds and walkways.

*Bluegrass, in properly prepared soil and irrigated

correctly and fertilized organically, can be one of the most xeric plants in your landscape. No other single plant can provide as many environmental benefits and increase property values as dramatically. *On the other hand...*

*According to US Water Resources Council, lawn watering, swimming pools and automobile washing activities combined account for 27.5% of household total water usage.

Seed Selection

Kentucky Bluegrass (3-5#/1000 sq ft) is perhaps the most consistently attractive lawn grass in this area. Given healthy soil, bluegrass will choke-out most weeds and tolerate a variety of growing conditions including some shade. The color is good and the texture is fine.

Perennial Rye (5-7#/1000) has been much improved in recent years and it compliments bluegrass well by germinating quickly and shading the soil while the slower germinating bluegrass sprouts. Many varieties of Perennial Rye actually produce toxins that kill pathogenic fungi and deter insects. We carry a 50:50 mix of Kentucky Blue and Perennial Rye called "80/20" (80% Rye/ 20% Blue by wt.)

Turf-Type Tall Fescue (10#/1000) has also been improved in recent years to have finer texture and good color. Turf-Type Tall Fescue is slightly drought tolerant, requires little fertilizer and tolerates acid soils. It does not mix as well with other grasses.

Fine Fescues (see below) have fine texture but are very tough plants. Good addition in shade or may be used together to create a tough, low maintenance meadow.

Red Fescue (7-10#/1000) grows well in acidic and poor soil and tolerates shade. It does not grow well in wet conditions. It spreads by rhizomes and will form thin sod.

Chewings Fescue (7-10#/1000) is a red fescue without as much spread but it is more shade tolerant. Chewings fescue is often mixed with bluegrass in shade lawn mixes.

Hard Fescue (7-10#/1000) is a non-spreading clumping grass with good color, drought tolerance and minimal fertilizer requirements. Hard fescue is often used in turf mixes and for low maintenance "lawns". (I've used it 50:50 with clover... when mowed it makes a low maintenance lawn). "Fine Fescue Meadow Blend" is a good combo.

White Dutch Clover (2-4#/1000) adds quick greening in the spring and improves the soil for the grasses as it grows (recommended rate of 1/4# / 1000sq.ft. with grass seed). Clover lawns were once a symbol of wealth and are beautiful. They may require lime in acid soils. They should be occasionally mowed to promote lateral growth and to keep a tidy appearance.

White Yarrow (4oz./1000 sq ft) is a native wildflower which forms dense feathery mats, requires very little water or fertilizer and grows well in poor soil. It is very aggressive.