Establishing Lawns by Sodding

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Establishing a lawn by using sod has certain advantages over the conventional seeding methods. Sodding provides you an “instant” lawn, which can control erosion, compete with weed seedlings, and give a useable surface much faster than seeding. Also, sodding can be done at times when seeding success would be poor, if not impossible.

The success of lawn establishment through sodding depends on selection of the right turf grass variety that is adaptable to your area, proper preparation of the site to be planted, and proper installation of the sod. Of course sodding must be followed by good management practices that will result in fast establishment and good growth of the turf.

Varieties

Most commercially-available Oregon sod is a blend of improved Kentucky bluegrass varieties and certain fine fescues. The Kentucky bluegrass varieties form dense mats and establish quickly into a strong turf. Fescue in the blend gives a fineness to the finished texture of the sod and lends some drought tolerance. Some blends also include perennial ryegrass. Perennial ryegrass is a vigorous grower and helps the turf establish quickly. However, the vigor of the ryegrass may tend to overshadow the other species of grass, since it grows so much faster. Commercial sod farms constantly evaluate new varieties and produce those most satisfactory for their market areas.

Site preparation

Soil preparation is essentially the same as that needed for seeding a lawn. The growth of the sod will depend to a large extent on the type and quality of soil being used. The best quality sod will not succeed if layed directly on subsoil or worn-out topsoil. When soil moisture conditions permit, plow, disk, spade, or rototill the soil so it can be worked. Prepare the grade or slope of the yard by raking or dragging so water will drain away from the house. If additional topsoil is needed, do the grading first, then add the topsoil to the final grade. Topsoil should be a loam material free of trash, plant roots, weed seeds, and chemical sterilants. Uniformly distribute topsoil over the area needing filling in such a manner that a minimum of grading will be required. Rototill again to lightly mix the added topsoil into the top inch or two of the underlying soil.

To determine the amount of fertilizer and lime needed in your soil, it is best to obtain a soil analysis. Your county Extension office can provide instructions. If time does not permit this, add fertilizer materials that will supply 2 pounds of actual element each of nitrogen, phosphorus, and potassium per thousand square feet. Fertilizers should be applied evenly to the area to be sodded (10 grams/square meter).

Lime needs should also be determined by soil tests. Generally, where soils are extremely acid or
heavy clay types, a minimum of 100 pounds per thousand square feet (50 grams/square meter) should be distributed evenly over the area.

Mix fertilizer and lime uniformly into the top 4 inches of soil by diskng, harrowing, or rototilling. Do the final light raking or dragging now to take out all undulations or irregularities of the surface before sodding. Clear the surface of all trash, debris, rocks, roots, and stakes. Make sure the edges of lawn to be sodded are ¼ to 1 inch (2 cm) below walks and driveways to assure level edges. Pack the surface lightly with a roller to make a firm surface for working and laying the sod. When ordering sod to be delivered, agree on the delivery date and have the soil completely prepared so the sod can be installed immediately.

Installation

Sometimes the supplier will contract to both furnish and lay the sod. If you lay it yourself, these hints may help.

After all unevenness in the surface has been corrected, lightly irrigate the soil, then allow it to dry down slightly before laying the sod. When laying sod, it is generally best to establish a straight line lengthwise through the area then lay the sod along this line. Lay the first row along the straight line and place subsequent rows parallel to and tightly against each other. Lay the sod pieces as you would lay bricks, fitting them together as tightly as possible and staggering the joining ends. After the first several strips are laid, place a broad board or piece of plywood on the sodded strip. Kneel on this board to lay the sod and move it forward as the job progresses. A sharpened concrete trowel is handy for cutting pieces, forcing the sod tight and leveling and filling small depressions in the soil surface. Do not stretch or overlap the sod. Butt all ends tight against each other to prevent voids and air drying of the roots. Hand water each newly laid section of lawn immediately after installation.

On sloping areas lay the sod with staggered joints and secure the sod by pegging or tamping. Lay the sod with the length of the pieces perpendicular to the slope.

After the sod is in place, roll it to insure firm contact with the soil. After installation, topdress the lawn with 1 pound of nitrogen per thousand square feet (5 grams/square meter) before watering. Water the newly laid sod sufficiently to moisten the sod and several inches of soil below the sod. Keep the sod moist until it has established itself in the soil. This may require two or three waterings daily during spring or summer. Do not mow until the sod is firmly rooted and secure in place, at least 7 to 10 days. Set the mower height so no more than 40 percent of the grass height is removed with the first mowing.

Care and maintenance

Lawns planted with sod require the same type of care as those started by seed. Bluegrass, which is the predominant kind of grass in Oregon’s commercial sods, responds to more intensive and careful management than is needed for fescues or ryegrasses.

Apply a turf fertilizer at least four times per year to supply a year’s total of 4 to 6 pounds actual nitrogen per thousand square feet of area (20 to 30 grams/square meter). One application of fertilizer should be made in early spring when the grass begins fast growth, another in early summer, a third in early September, and a final application in late October. Additional applications can be made through the growing season if necessary for vigor or color of the grass plants. Use a fertilizer with an analysis ratio of 3-1-2, such as from a 15-5-10, 12-4-6, 9-3-6, etc., commercial fertilizer. Sulfur and iron are important and needed in smaller amounts. At least once a year, preferably in the spring, apply a fertilizer containing sulfur.

Bluegrass grows best when the soil pH is between 6.3 and 6.7. Most soils in western Oregon are acid, with pH values below 6.3. Therefore, bluegrass lawns should receive 25 to 50 pounds of lime per thousand square feet (120 to 240 grams/square meter) per year either as agricultural limestone or dolomitic lime. It would be advisable in the first several years to have the soil analyzed to more closely determine the lime needs for your particular soil. Lime should be applied in late fall to allow the winter rains to carry the calcium into the root zone.

Water is needed on a regular basis during the dry periods of the growing season. A healthy lawn on most soils needs 1 to 1½ inch (2.5 to 4 cm) of water per week during dry summer weather. Applications should be infrequent but heavy enough to penetrate 6 to 8 inches (15 to 20 cm) into the root zone area.

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Mow with a sharp mower to avoid tearing the leaf blades and giving the lawn a ragged appearance. Mow often enough that not more than 40 percent of the leaf blade is removed at one time. Bluegrasses should be mowed at 1 to 1½ inches (2.5 to 4 cm) high.