Establishing Lawns by Sodding

R.A. McNeilan



Establishing a lawn by using sod has certain advantages over the conventional seeding methods. Sodding provides you an "instant" lawn that can control erosion, compete with weed seedlings, and give a usable 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 a 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

As turfgrass breeders develop varieties with qualities such as better disease resistance, growers incorporate these new grasses into their sod production plans. Furthermore, as experience is gained about the use of grasses adapted to Northwest conditions, the types of grass that are used in growing sod are changed to fit specific conditions.

Kentucky bluegrass varieties form dense mats and establish quickly into strong turf if planted in the right environmental situation. Turf-type perennial ryegrass is a vigorous grass that establishes quickly, will tolerate hard use, and will need extra fertilizer to maintain the vigor and wear tolerance. Fescue grasses mixed in with either Kentucky bluegrass or turf-type perennial ryegrass, or both, give a fineness to the finished texture of the sod and lend some drought and shade tolerance. All these grass varieties are used in growing Oregon sod; and all

have soil, light, and care requirements that you must meet for success.

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 laid directly on subsoil or wornout 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 agent 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 1,000 square feet. Apply fertilizers evenly to the area to be sodded.

Lime needs should also be determined by soil tests. Generally, where soils are extremely acid or heavy clay types, distribute a minimum of 100 pounds per 1,000 square feet evenly over the area.

Mix fertilizer and lime uniformly into the top 4 inches of soil by disking,

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 ¾ to 1 inch 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 you lay the first several strips, 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

Ray A. McNeilan, Extension agent (home and urban horticulture), Multnomah County, Oregon State University.



OREGON STATE UNIVERSITY EXTENSION SERVICE

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 1,000 square feet 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.

Care and maintenance

Lawns planted with sod require the same type of care as those started by seed. Bluegrass 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 1.000 square feet of area.

Make one application of fertilizer 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. You can make additional applications 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 are 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 1,000 square feet 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. Apply lime 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 of water per week during dry summer weather. Applications should be infrequent but heavy

enough to penetrate 6 to 8 inches into the root zone area.

Do not mow for 7 to 10 days, or until the sod is firmly rooted. Currently available varieties should be mowed at 1½ to 2 inches in height.

Problems of using sod

Sod is like a blanket. It can be used to cover up your problems—but those problems are still there to give you trouble later. Most often, sod is blamed for the failure of a sodded lawn, when the actual reason for failure was the user's poor judgment. Success with any grass, whether seed or sod, begins with a survey of the conditions of your locale.

Grass needs sunlight, a deep and reasonably fertile soil, good soil drainage, ventilation, and a lot of continuing maintenance. The more carefully you provide the needs of the grass, the less demanding your maintenance requirements will be.

Specifically:

- 1. Don't plant Kentucky bluegrass sod in shady areas.
- 2. Don't plant sod on soils that are poor, rocky, or shallow, unless you plan frequent, continual care.
- 3. Do prepare the soil for planting sod as carefully as for seeding.
- 4. Do plant sod on properly prepared soil as soon as possible after receiving it from the seller.

Extension Service, Oregon State University, Corvallis, O. E. Smith, director. This publication was produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. Extension work is a cooperative program of Oregon State University, the U.S. Department of Agriculture, and Oregon counties.



Oregon State University Extension Service offers educational programs, activities, and materials without regard to race, color, national origin, sex, age, or disability as required by Title VI of the Civil Rights Act of 1964, Title 1X of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. Oregon State University Extension Service is an Equal Opportunity Employer.