24th Year

LawnCare

T.M. REG

No. 118

PUBLISHED FIVE TIMES YEARLY FOR LAWNTHUSIASTS

GROWING GRASS ON SLOPES

Developing a good lawn on a steep slope has been a real challenge to many lawn owners. However, it can be done and is worth doing well to preserve the property from erosion and to enhance the beauty of the landscaping around the home. To achieve the desired result, several factors need to be understood:

1. At the time of seeding a slope, the surface soil and seed may be washed away unless protective measures are taken.

2. Too much or too little moisture may be the plague of some terraces. Usually this is shy, because rain or irrigation water runs off and does not soak in as it should.

Excessive moisture may come from drainage from higher ground, resulting in seepage water which emerges from the surface of the slope. The result is soggy soil which not only prevents root growth and encourages moss, but also compacts like concrete in dry weather.

3. Slopes facing south or west, or toward prevailing wind dry out more rapidly than level areas.

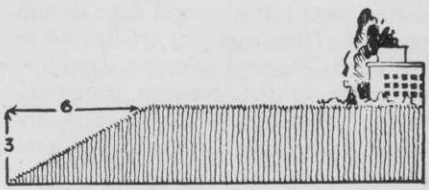
4. Too often the poorest soil is found on slopes because the good topsoil was scalped away in grading operations.

A good stand of grass can be maintained on a 25% grade, that is where the drop is not more than one foot in a distance of 4 feet. As the grade becomes steeper, the problem gets worse. The practical limit for a lawn is a 50% grade; that is, 1 foot of fall in a distance of 2 feet. More severe drops need special handling such as the use of retaining walls or ground covers.

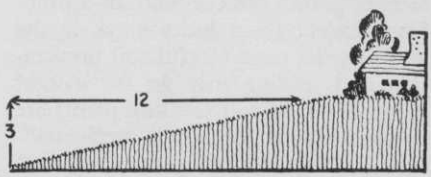
Success in growing grass on slopes will depend upon the relative severity of the natural difficulties and the maintenance program. These extra pains in the construction and seeding of the sloping areas will be well rewarded.

Grading and Seeding

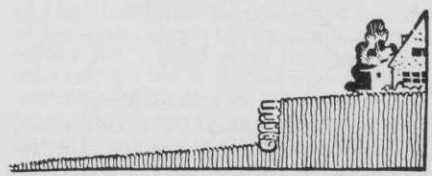
Of prime importance are gentle slopes at top and bottom of the grade. These are more easily achieved by working from the lower level upward when constructing the lawn. The bottom should be concave and the top convex so a mower is easily pushed up



Grade 1 ft. to 2 ft. (50%) This slope will be difficult to maintain.



Grade 1 ft. to 4 ft. (25%) Pleasing to the eye. Easy to mow, minimum erosion.



Dry walls and terracing solve a severe change in elevation from house to street.

and down, that is with the fall of the slope and not crosswise to it. Sharp angles result either in scalping or in uncut grass.

Insofar as feasible the soil should be of good physical condition. Stiff sticky clay, gravel or sand are definitely not good for level lawns and they are impossible for slopes.

Fertilize Liberally. This is important in preparation for any lawn seeding, an absolute must where turf will be struggling against severe erosion. A generous supply of lawn food is needed starting at the surface to a depth of four inches. If there is a possibility of the soil being acid or deficient in calcium, incorporate lime as suggested in *Lawn Care No. 114.*

Seeding. Some have the idea that the terrace problem is solved by planting a brand grass seed mixture indicating its special adaptation for slopes. The claims are made that the grasses are deeper rooted, thicker and more drouth resistant. These qualities are desired in any lawn. The seed selection should be according to the growing condition, that is, whether considered extra dry or wet, in full sun, light shade or dense shade.

Protecting Seed. Even gentle slopes may be subject to wash and erosion. Steeper grades present more of a problem. Except for a lucky break in the weather, the most careful soil preparation and seeding may go for naught unless the seed and seedling plants are protected until rooting is well established. There are many materials that are helpful if properly used.

EROSIONET is the trade name of an open mesh material such as used for shipping oranges and onions. This fabric is sold by many seed and garden supply stores and by the major mail order houses. For smaller areas it may be feasible to sew together open mesh bags to use as a protective covering.

COARSE CHEESE CLOTH is often used, also muslin and mosquito netting. The material may be removed after the grass has started but on steep slopes it is better to keep the protection and allow the fabric to rot on the ground. *See Digest chapter 12.*

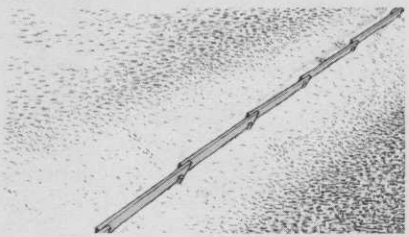
BURLAP of the lightest weight obtainable offers good protection. It must be removed before the grass is ready for its first cutting because of smothering effect of burlap.

ANCHORING the fabrics is a necessity. Large nails are often used but unless they are all removed, injury to the lawn mower may result. Probably the safest thing is to use notched wooden pegs to engage the material.

STRAW may be used as mulch. A couple of inches is usually enough, the loose surplus being removed as the grass gets started. It is best to use pegs and interlaced cords to hold the straw in place.

Any of these coverings will have a secondary benefit of helping to retain moisture.

Using Sod. Very steep slopes are often sodded but many times the results are not good because of poor sod or careless laying. The soil preparation for sod should be as thorough as for seeding. A generous amount of lawn food (and lime in acid soils) under the sod, hastens rooting and anchoring. It is well to use wooden stakes to hold the sod in place. On long grades, one foot strips of sod may be laid horizontally along the slope at three or four foot intervals to help break up the flow of water. The soil between the strips should be seeded in the usual way.



Boards placed cross-wise of the slope of a newly seeded lawn.

Extensive New Seedings. Sometimes the area involved makes the cost of mulching or sodding prohibitive. In such cases the run-off water may be controlled to reduce erosion damage by standing 1 x 3 lumber on edge to intercept the flow of water. These are staggered crosswise of the slope and inclined slightly downward to carry off the water before the volume and speed of flow reach damaging proportions.

Maintaining Slopes

A firm rolling or tamping is advised after seeding. If facilities are available, follow with an immediate watering with a fine spray controlled to forestall washing. Try to keep surface constantly moist until grass is well rooted.

The most difficult feature of maintenance is proper mowing. Most terraces are scalped at the crown because they are cut cross-wise instead of up and down. Higher cutting is doubly important to partially offset the unfavorable growing conditions of most sloping terraces.

It is advisable to feed steep slopes at least three times a year (early and late spring, also early fall) because so much nutrient material is washed out by the surface water.

In hot weather, many soils tend to become hard and compact. This prevents proper root development because the soil sheds water and there is a lack of oxygen in the soil. This condition is alleviated by what is known as "aerating." This consists of making sizeable perforations into the soil, 3 or 4 inches deep and at 6 or 8 inch intervals. Quite a few hand tools for perforating and aerating are now on the market. Some of them make possible the actual removal of cores of soil.

A spading fork may be used and will probably help if it is driven in deep enough and worked back and forth to make a good size opening. Few tools can be forced into a heavy soil if the drying has been severe. Quite a number of power aerifiers have been developed. These are too costly for the typical home lawn but in time landscape contractors will probably have them and offer regular aerifying service. It is advisable to feed and water generously after making the openings in the soil.

It is difficult to get good results by sowing seed on thin or bare places of slopes. Aerifiers' holes provide a lodging place for seed though some may be buried too deep. Another aid is to use a spiker or disc to make holes or slits on the surface where the seed may lodge. Thus protected the seed is in better position to receive moisture needed for germination and seedling growth.

New Use for Turf Builder

Those living in the Midwest easily recall last winter as being about as rugged and old fashioned as they ever come. Slippery highways, driveways and walks were so commonplace that salt and sand actually got scarce.

One LAWN CARE reader reported being up against it one morning because he could not get his car up the slippery incline from his garage. He had used his supply of rock salt and no ashes were available because neither he nor his neighbors burned coal.

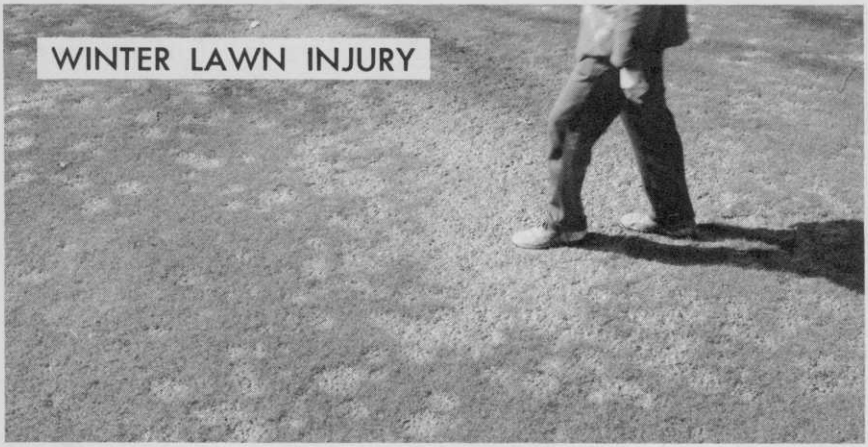
Glancing around his garage, he spied a partly full sack of Turf Builder, and nearby, his Scotts Spreader. He had the sudden inspiration to put the Turf Builder on the driveway with the Spreader. It worked —a little slower than salt but he soon had a rough surface on the ice and drove away.

Through the years, folks have been writing in as to what to do about injury to grass because of salt applications on driveways and walks. The advice is now obvious—Use Turf Builder which will help the grass, not hurt it.

Ground Covers

If it is necessary to seek plants other than grass for steep slopes, a local nurseryman can best advise as to selection. It makes a difference whether or not an evergreen covering is desired. In the latter case, Myrtle (Vinca minor), English Ivy (Hedera helix), Japanese spurge (Pachysandra terminalis) or some of the dwarf evergreen Veronicas can be employed.

If a coarser foliage is acceptable, Hall's Japanese Honeysuckle may be used but this plant is hard to keep in bounds and it becomes an ugly brown in cold weather.



Bleached out patches of grass after a severe attack of Snowmold.

Snowmold is apt to develop when a heavy snow falls on a saturated turf before the weather has been cold enough to cause the grass to become dormant. The soft green grass is the favored host for the causal fungus which grows most actively at temperatures slightly above freezing and in presence of abundant moisture.

If this condition exists long enough, grass in the attacked patches will be killed. The remedy then is to wait until spring, rake or brush out the affected patches and reseed.

Where Snowmold is anticipated, some precautionary steps may be taken. For one thing, it's better if the grass is not too tall as it goes into the winter. Good surface drainage reduces chances for injury but not much can be done about that except in grading. Preventive fungicidal applications may help. Golf courses have long used mercury successfully. Possibly the easiest way to get this on areas where Snowmold may develop is to apply SCUTL. A normal rate application is suggested in late November or early December—waiting as late as possible but trying to get it on before the first deep snow.

Jap Beetles are still active in the East, laying their eggs in moist sod-covered soils. The larvae or grubs hatching from these eggs get their main sustenance from grass roots. If the larvae are present in large numbers, their activities may result in killed grass because of severing the sod from its roots.

In the extensive areas of Jap and Asiatic Beetle, it is well to grub-proof the soil to avoid this lawn injury. In general the territory extends along the Atlantic seaboard from Virginia to Boston, inland from fifty to two hundred miles. Chlordane or other chlorinated hydrocarbons are recommended where grub control is needed.

LAWN CARE *reader reported this sign in effective use last winter at St. Petersburg:*