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Lawn Care

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SOLVING THE SHADE PROBLEM

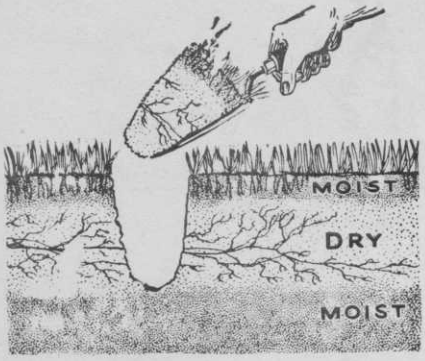
BRIGHT green vigorous grass in the shade zone is possible in most places and without too much effort. The answer is simply in furnishing adequate amounts of the basic needs of all growing things: food and water. This need is more critical for grass under trees because the tree roots have first call on the available soil nourishment and water.

Dense tree foliage filters out sunshine, but this is the least important factor. Lack of direct sunlight alone does not keep grass from growing. Grass thrives in the jungles but there it has plenty of water as well as food from decaying vegetation. Most weak, thin and scraggly patches of shade tortured grass can be transformed by carrying out the right feeding program. It is to be assumed that the correct seed was used so the grass plants are mainly shade-tolerant varieties that can thrive in absence of direct sunlight.

Some shaded lawns can never be perfect because of difficult soil conditions. Even so, many can be kept in a state of respectability by a program along the following lines:

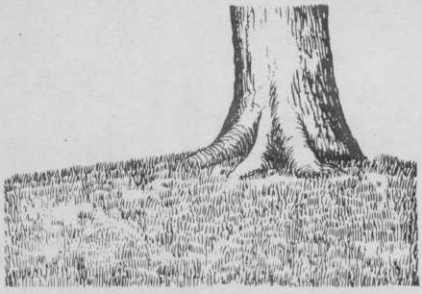
Choose the right seed. If the area gets 3 or 4 hours of sunshine a day, special shade seed is not needed. If less sunshine, then seed for dense shade is required. These must be varieties endowed by Nature to tolerate reduced sunlight. In either case, frequent seeding is needed because grasses growing in such adverse conditions will have restricted root development and be relatively short-lived.

Feed, feed, and feed again, because the trees take so much nourishment from the soil. Feed at least three times a year and under bad conditions a half dose as often as once a month April through October. This is no chore now that modern spreaders are avail-



Tree roots are apt to withdraw moisture severely a few inches under the surface, causing a dry zone. Grass roots suffer for want of water even though the soil surface may appear moist. Avoid this condition by sampling the soil for moisture occasionally and replace before deficiency becomes too serious.

A thicker growth of grass from frequent feeding and higher cutting will prevent severe erosion caused by coarse drops of water falling from large tree limbs.



It's a good idea to have a gentle slope of grass immediately adjacent to the tree trunk. This prevents accumulation of water which may drown out the grass.

able. It's really only a matter of minutes to wheel the machine out of the garage, set the feeding rate, fill the hopper with special lawn food and walk over the lawn.

Watch soil moisture under trees. Because protection from the sun reduces evaporation, the upper inch or so of soil may remain relatively moist while the under soil may be dried severely by the feeding roots of trees.

A good size tree takes up as much as 125 gallons of water in a 24 hour period. Aside from that, the lawn under the trees does not get as much benefit from summer showers. Nature has endowed most trees with a leaf arrangement that sheds the rain to the outer edge. Thus it falls into the perimeter of the soil area where most of the water-absorbing roots are located.

It is difficult to prescribe an exact irrigation schedule for all shaded lawns because of variations in soil, exposure and rainfall. Personal observation, as suggested in another part of this article is the answer. Try to spray so the water is immediately absorbed and does not form in puddles over the lawn. Further suggestions are contained in the LAWN CARE bulletin on Watering Lawns.

There are some locations where grass does not thrive because of excess moisture, especially in the early spring and late fall. Such a situation calls for re-grading or installation of tile lines.

Cut high. Of almost equal importance to seed—food—water, is the matter of mowing. Higher cutting is a good practice on all but Bentgrass lawns. It returns extra satisfaction in the shade by an even greater contribution to lawn beauty and vigor. The reason is that in the green leaves, Nature combines air, light and soil nutrients in the growth process, developing roots as well as stems and leaves. If the grass is frequently scalped, there will

not be as much actual growth as if 2 or 3 inches of leaf surface is left for this important growing process. In hot weather this problem is aggravated and the cutting height should be around 3 inches if possible, and even then mowing should be infrequent.

Higher cutting is especially important in places that are protected from the sun in the early part of the day, but subjected to direct rays during the hot mid-day hours. In such cases the broiling sun wilts the grass because the breathing pores cannot close quickly enough to avoid excessive transpiration. The leaves give off moisture faster than it can be taken up by the roots.

Sometimes thick growths of shrubs interfere with air circulation across lawns. Usually they can be trimmed enough to let in air without harming the landscaping effect.

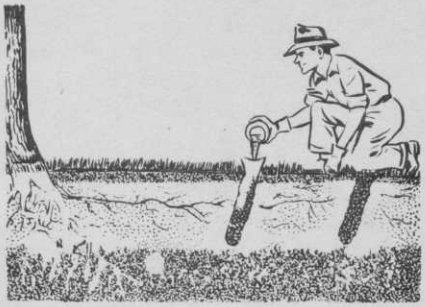
Toxic Substances

It is sometimes said that tree leaves exude a sap that washes into the ground making the soil toxic to grass. There are instances where Nature has presumably endowed some plants with the power to excrete poisons to discourage other vegetation in the vicinity. However, there is no evidence to indict lawn trees with this toxic action. Lawns are grown successfully under practically every species of tree in North America.

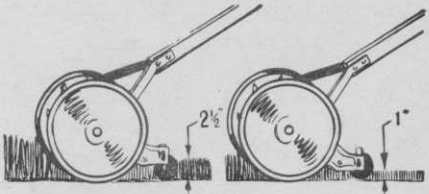
True, it is difficult to have thriving grass under such varieties as Norway Maples but this is due to the mass of feeding roots that grow right up to the surface and take practically all moisture and plant food from the soil.

Liming

Occasional applications of lime may benefit shaded lawns. In natural limestone country, where there is lime in the irrigation water, it may never be necessary to add lime. In the East most lawns could well be limed every three

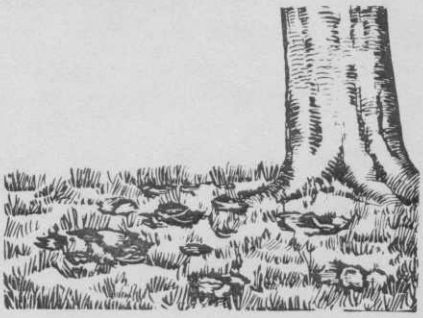


One of the best ways to help grass under trees is to feed the tree root system. Use a good Lawn Food and place 12 to 18 inches deep in the root zone, which is just under the outer drip of the branches. For a fuller discussion on tree feeding, see the Lawn Care bulletin on that subject.



Shaded grass needs extra high growth to encourage deeper rooting. Bentgrass lawns in full sun and light shade do better with rather close cutting. Check your mowing height against figures shown.

It is better to remove clippings, especially if heavy and matted, with consequent possibility of smothering patches of grass.



A pockmarked stand of grass resulting from leaves lodging in the grass and smothering some plants. Avoid this by raking regularly, especially late in the fall before rains beat the leaves against the ground. If they become lodged and later freeze, needed air is excluded from grass roots.

or four years. Raw ground limestone is the best form to use at the rate of 50 to 75 pounds per 1000 square feet, applied whenever convenient. Frozen ground affords an opportune time.

Pruning the Trees

Judicious trimming and thinning of trees by one schooled in the art will be good for the tree. It will also help the grass by letting in extra sunlight. Removal of low hanging branches may improve air circulation under the tree and that is good for grass health.

If you don't know whether your lawn needs regular *seed* or that for dense shade, use both. Not double seeding, but half of each.

If grass fails between buildings it's probably due to packed, puddled *soil* more than shade. Open up with deep perforations made with spading fork; try to work in better soil.

A well fed plant requires less moisture. Another potent argument for regular feeding of lawns.

There are some shaded spots where grass just won't grow. In such cases shade tolerant ground *cover plants* may be used.

Low growing evergreen types include: Japanese Spurge (Pachysandra terminalis), English Ivy (Hedera helix) and Myrtle (Vinca minor). Some prefer Baltic Ivy (Hedera helix baltica) to the English variety because it spreads mode rapidly and is more hardy.

It's a good idea to consult local nurserymen on such problems. In some localities they may suggest Partridge Berry (Michella repens) or Pipsissewa or Prince's Pine (Chimaphila umbellata). The latter is said to be one of very few plants successful under pines.

Do not make drastic changes in soil *grade* around trees without consulting an experienced tree man. Either cutting away or filling in may kill the tree, by disturbing normal root functions.

Weed Killers Don't Make Lawns

Weed control is only one part of a good lawn program. With the weeds out, grass needs to be stimulated to thicker, faster growth by proper feeding. Good seed should be planted to fill in the bare area. Otherwise crabgrass or other weeds will again take possession.

The answer is in the easy but complete program—Weed, Feed and Seed.

Lawn Care Binder

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