



## TEN POINTERS ON KEEPING GOOD LAWNS

There are ten points to observe in keeping a lawn in good condition.

1. The lawn should be fertilized in the proper season - when the grass becomes thin or unthrifty. A commercial fertilizer of 5-10-5 (or similar) analysis is recommended. That means 5 percent nitrogen, 10 percent phosphoric acid, and 5 percent potash. A good standard is 20 pounds per 1,000 square feet. Because in some regions other types of fertilizers may be needed, it is wise to consult local and State authorities. In the cool humid regions, applications should be made in early fall and very early spring. In warm humid regions applications should be made in spring and early summer when the grass is growing actively. Fertilizer may be distributed by some of the fertilizer distributors on the market. Care must be used to prevent skipping and overlapping. Another good way is to broadcast the fertilizer by hand. If that method is used, the fertilizer should be divided into two lots. The first lot should be distributed while walking lengthwise of the area and the second lot should be broadcast while walking crosswise of the area, to insure a thorough and uniform coverage.

2. Soil tests are the basis upon which the need for lime should be determined. Generally speaking, soils in the eastern United States require lime.

Ground limestone is the cheapest form of lime. It is usually considered to be equal in value to other kinds.

Lime can be applied at any season - late fall or early spring are good times.

3. Frequent mowing with a sharp, properly adjusted mower will keep a lawn looking neat. Mowing also promotes tillering and spreading of the grass plants.

Height of mowing depends upon the species of lawn grass. Stoloniferous (creeping or spreading) grasses - Bermuda, Zoysia, centipede, St. Augustine - will withstand close mowing if they are kept fertilized. They may be kept mowed at 1/2 to 1 inch.

4. Watering is the maintenance practice that is most often done incorrectly. The few rules are simple enough.

Do soak the ground thoroughly at infrequent intervals when the grass begins to suffer from drought. Water just often enough to keep the plants alive.

Do not sprinkle lightly every day "just to cool things off". Light sprinkling encourages shallow root systems and helps crabgrass more than it does the permanent grasses. It does more harm than good.

Many of the grasses of the cool humid region go through a dormant period in midsummer. If they are forced into active growth, the plants may actually be injured.



5. Rolling the lawn in the spring helps to firm the soil that has been loosened by the heaving action of frost. The ground should be moist, but not wet enough to "puddle" from the rolling operation. For the same reason, the roller must not be too heavy, or the soil will be compacted too tightly.

6. To keep weeds out, grow good grass - that is, proper management of the turf is the most important phase in the growing of a weed-free lawn. A good, healthy turf will not allow weeds to encroach. Any weed-control measure must be accompanied by appropriate fertilizer practices, and reseeding where necessary to fill in bare spaces.

Broadleaf weeds generally can be controlled by 2,4-D, which is sold under many trade names and in a number of forms. Manufacturer's directions should be observed strictly to avoid injury to shrubs or trees. Sprayers and other containers should be cleaned thoroughly after they have been used to apply 2,4-D; otherwise, plants sprayed subsequently with the equipment may be injured by the 2,4-D residue. In fact, it is wise to have two sets of spraying equipment, one for 2,4-D and one for other purposes.

Experiments to date have established that 2,4-D is not harmful to persons or animals, a point to be considered by those who have children and pets that play on the lawn.

Experimental work in controlling weeds has been done with a great many other chemicals, arsenicals, chlorates, dinitro compounds, various petroleum fractions, and others. All have some value, but none of them (except lead arsenate) can be recommended without qualification. If they are to be used, workers at an experiment station or other authorities should be consulted. If used improperly the chemicals can be harmful to the grass and to the persons who handle them or come in contact with them.

Lead arsenate is a poisonous compound, but if one is careful he can use it with relative safety to himself, children, pets and plants. It is effective against chickweed, *Poa annua*, and crabgrass in the more acid soils. In heavier soils high in lime and phosphorus its effects have been variable and repeated applications may be necessary. Lead arsenate should be applied at the rate of 20 pounds per 1,000 square feet. It may be applied at any time of year - fall is as good a time as any. Lead arsenate also is effective against most insects that live in the soil.

7. Insects most troublesome in lawns are beetle grubs, cutworms, armyworms, sod webworms, ants, chinch bugs and mole crickets. Ticks and chiggers are not harmful to the lawn but they are a nuisance to the lawn owner and his children.

Most of the turf insects can be controlled by various DDT compounds. Ants, mole crickets, and chinch bugs are not readily controlled by DDT, but can be checked by the Chlordane products. These materials are sold under various trade names and in several forms. The manufacturers'



Page 3 - Ten Pointers on Keeping Good Lawns

directions should be followed. Advice about them can be had from county agents and State entomologists.

Lead arsenate at the rate of 20 pounds to 1,000 square feet is effective against grubs and other soil insects but it is not so economical as some of the newer insecticides.

8. Most of the diseases attacking turf grasses are not easily controlled. Some new strains of grasses being developed at State and Federal experiment stations are resistant to disease. Your experiment station will be the source of information regarding the development of any new strains or species that may be adapted to your area.

9. Densely shaded areas under trees often present problems in the growing of a good turf. There are several reasons: Competition for nutrients and moisture by tree roots, the shading effect of the foliage and the smothering of turf by fallen leaves.

There are ways to combat these difficulties. Deep placement of fertilizer around trees and heavy fertilizer applications on the turf may compensate for the scarcity of available plant food. The use of shade-tolerant species (the Zoysia grasses, centipede and St. Augustine) will overcome the shading effect. The prompt raking or sweeping of fallen leaves prevents any smothering effect which they might have. The grass should be forced into rapid growth during the period when the leaves are off the trees in order that strong turf will be established by the time trees begin growth in spring.

10. The growth of algae is a condition caused by standing water on the surface of the soil. Improving the drainage so that water may be removed from the soil and loosening the soil to provide conditions favorable for grass will eliminate the condition.

Slime molds are organisms that cause gray, unsightly patches in lawns during wet seasons. These primitive fungi are not harmful to the grass and may be brushed off the grass blades when it is dry. The fruiting bodies of the fungi may give off a "smoke" or "dust" of spores when disturbed.

NORDAN'S GRASS FARM

"Improved Lawn Grasses for the South"

Abbeville, Alabama

100