of grass and an over-abundance of weeds, especially crabgrass. Mowing regularly is necessary to maintain a good lawn.

GRASS CLIPPINGS

Grass clippings, especially those over ½ inch in length should not be allowed to collect in the lawn but a grass catcher should be attached to the lawn mower or the clippings should be raked and removed from the site. Accumulated grass clippings create a "thatch" which is often the cause of many lawn problems. Thatch compacts on the soil's surface, cutting off air circulation in the soil and preventing moisture and nutrients from reaching the roots. Thatch also provides a haven for diseases and insects. Large lawn areas, where it is impractical to remove grass clippings, should be mowed more frequently than other lawns to keep the clippings less than ½ inch in length.

Thatch or accumulated lawn clippings may be removed from the lawn with a verti-cut machine, sometimes called a "de-thatcher". This machine has knife blades which cut into the sod, removing the thatch. This operation should be done about twice a year, in the spring and in the fall, when the grass is actively growing.

WATERING

Lawns should be watered only when necessary, then a sufficient amount should be applied to penetrate the soil to a minimum depth of 6 inches. This is equivalent to about 1 inch of rain. Watering to this depth will discourage surface roots and the grasses will be better able to withstand heat and drought.

To determine if a sufficient amount of water has been applied, place a coffee can under the sprinkler and when the water is 1 inch deep in the can, move the sprinkler to a new location. The frequency of watering will be determined by the soil condition and variety of grass. Sandy soils will require more frequent waterings than soils rich in organic matter.

Lawns may be watered almost any time of day except in the evenings. Generally, lawns should not be watered after 4 PM because the grass does not have sufficient time to dry properly before nightfall. When water is applied artificially, it should be applied slowly, allowing it to penetrate the soil and not run off. A perforated hose or soaker is recommended for use on slopes.

ROLLING THE LAWN

Rolling the lawn is an overrated practice which can result in serious lawn damage. This operation is intended to firm the grass crowns and roots of the plants to the soil. Spring rains will usually do this naturally, because alternate freezing and thawing does not heave grass sod in the same manner as it does individual perennial plants.

AERATING THE SOILS

Compacted soil creates very unfavorable growing conditions for turf because it reduces air circulations within the soil and prevents moisture penetration to the root zone. Aeration, especially of heavy clay soils, is an important practice because these soils compact readily.

The lawn area should first be watered well and then rolled with a hollow-tined aerator. The tines should be ¼ inch in diameter. The aerator should be rolled over the area several times and in different directions for better coverage. Spading forks or spiked aerators may be used but they are not as effective because they compact the soil in the immediate area around the hole that is punched in the soil. A hollow-tined aerator removes small plugs of sod which affords more growing space for turf.

Some experts fertilize and topdress the lawn with a compost immediately after aerating. The fertilizer and compost will enter the holes left by the aerator and encourage a deeper root growth.