

TEN years ago, few were aware of a "thatch" problem. Yet today, it is a much discussed topic in turf management circles. Recognized as a common culprit in most grasses and virtually every area, thatch condition is inviting more and more investigation.

Opinions differ in what thatch is, and why it exists. One authority defines thatch as "the accumulation of a dense felt of undecomposed dead roots and stems through which water cannot penetrate." This felt, or matting, forms between the soil surface and the visible green vegetation. Thickness may sometimes increase to one foot or more.

Few turf areas are immune. Many landscapers are astounded to find how far such a build-up can advance. Once thatch build-up begins, a cycle is started which feeds upon itself rather rapidly until grassed areas may become almost choked out.

A principal reason for the relatively recent emergence of this problem is the pressure for lush, ultra-green turf areas, whether in lawns, parks, institutions, roadsides, or wherever. New strains of grasses have been introduced which guarantee a quick, dense cover. High-potency fertilizers and chemicals are used in profusion to speed the growth. Mowing increases, as does the layer of thatch when clippings are returned to the soil. Clippings, of course, are hardly the only reason for thatch build-up. Yet the fact remains that thatch seems to thrive best in highly managed turf areas. By contrast, this problem seldom exists in poorly kept, thin lawn areas which receive minimal attention and few chemical aids.

Probably the most troublesome effect of thatch is build-up of a barrier to water penetration. More frequent watering in increasingly larger amounts become necessary to meet plant needs. Runoff becomes a problem. Fertilizers and chemicals

Turf Management

Thatch Removal

lose effectiveness because of difficulty in penetration to the soil. The cumulative result is a turf low in vitality and subject to disease. Further, the thatch barrier continues to build.

Though there is disagreement on cause and effect of thatch, most turf specialists agree on the need for removal by powered-rakes, introduced some years ago by several manufacturers. First real usage of this type of equipment came in the tool rental field. Residents of "suburbia" became alarmed when their lawns didn't measure up to the expected blue ribbon of beauty. Reading of the thatch problem, they rushed to their local rental store seeking a method to escape the back-breaking chore of removing thatch with a hand rake.

Several manufacturers responded as many as 10 years ago. They developed units to do the job mechanically. Today these are as varied as the opinions on why thatch exists in the first place. Different units comb, slice, pull, flail or cut the thatch out. Most do a fair job. Some are excellent. An important point to remember is that it does little good to remove one inch of a six-inch thatch mat. The unit used should employ a dependable height adjustment so all thatch may be removed. Equipment must be sturdy. Few turf jobs are as rugged as thatch removal. Another important consideration is the ability of equipment to get close-in to beds and other tight areas. Some units offer a variety of rotors, adaptable to various types of grasses and all areas.

When considering addition of power-raking equipment, a turf manager may do well to check with his local tool rental dealer. Rented tools are subjected to daily abuse. Such equipment gets

little care or consideration from the user. Few units are jolted and jarred more than a power-rake. Finding equipment which will hold up under years of thatch removal duties may well save both money and headaches.

When to Rake

The next question is when to rake. Early spring seems the most popular time likely because at this period turf care is on the agenda. The tendency is to rake, fertilizer, weed, and seed. However, there are drawbacks. In effectively removing a dense thatch barrier, it is often necessary to lower a rotor considerably. Resultant appearance of a turf area can be alarming. Though this condition is only temporary, fears of the operator sometimes result in less than the most thorough job.

Many authorities maintain that early fall is the ideal time for raking. Removal of thatch at this time, when lawns are receding into a dormant stage, results in no dramatically disappointing appearance. Further, winter moisture is allowed to penetrate.

Other management procedures are often recommended, depending on intensity of the problem. Aeration can help considerably, as can proper fertilization.

The thatch problem exists virtually everywhere. Any good management program should include power-raking, probably once each year. A plug cut from a particular turf area quickly spells out the extent of the problem. Various types of power units are designed to solve any particular situation. But the operator is to be reminded again that in attacking the problem, he should remove it properly and completely. An effective program can produce gratifying results.