

Follow good sampling procedure and sample all suspicious greens, tees and similar turf areas.

6. If nematodes are found which are known parasites on turf grasses, set up a spot test on a small section of infested area, applying available materials at company recommendation.
7. Base extensive control efforts on results of spot tests. Be sure to allow sufficient time for materials to react before making evaluations.
8. Following treatment, practice careful sanitation with top-dressing materials and equipment to avoid re-contamination of treated areas.
9. On newly constructed greens, tees, and fine turf areas *strongly consider* use of general plantbed sterilant before planting.
10. Keep in contact with USGA Green Section Directors, Turf Research Centers and commercial representatives for latest information on nematode problems and control recommendations.

References

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MOWING AND THE THATCH PROBLEM

FOR many years frequent topdressings of bent greens was considered necessary. In the past ten years topdressing has been used only when it was desired to smooth up the putting surface or change the soil structure. This change in maintenance practices has caused a new problem. An accumulation of stems and leaves, called thatch or mat, has built up on the surface of the greens, interfering with the circulation of air and water. As most of the fungi damaging to fine turfgrasses attack the grass above the soil line, we have an excellent breeding place in the thatch.

Overwatering, poor air circulation, high humidity and temperatures spell ruin for a heavily thatched green. Raking, brushing, aerifying and vertical cutting devices help control this thatch accumulation, but do not answer the problem completely. How does the design of our putting green mowers fit into the thatch picture?

Could the design of our present putting green mowers be one of the causes of thatch? We set the cutting height with a gauge or from a level surface. We do this very carefully and then go out to mow greens. All our careful adjusting goes for naught. With the cutting mechanism mounted between the guide points, (the front roller or caster and the rear roller)

Reprinted from the June, 1956, Turf News of the Heart of America Golf Course Superintendents Association; L. E. Lambert, Editor.

we cannot duplicate the conditions under which the height of cut was set. We have the front roller or caster riding on unmowed grass and the rear roller on mowed areas. Therefore, a mower set to cut at $\frac{1}{4}$ inch on the bench in the shop will not cut $\frac{1}{4}$ inch above the soil on the green. The cut will be higher in proportion to the amount of growth the front roller or caster rides on and raises the front of the mower.

Suppose, due to drastic methods of raking, verticutting or other means, we have a putting surface on our greens $\frac{1}{4}$ inch above the soil line on April 15th. We mow greens on April 16th and the front roller or caster is riding on one day's growth. The thickness of a blade of bentgrass is about .004 and the diameter of a stem is about .020 of an inch. Suppose that this amount of one day's growth raises the cutting edge .005 of an inch above the $\frac{1}{4}$ inch above the soil line achieved the day before. There are 168 days between April 15th and October 1st. If we gain .005 of an inch per day we will find our cutting edge 1.09 inches above the soil line on September 30th. (168 x .005 plus .250)

In past years frequent topdressings raised the soil line and counteracted a great part of the above condition, as long as we were careful to avoid layers of grass and soil. Now we use other methods to combat the accumulation of leaves and stems, but, from personal experience and observation, success is questionable.

What are we trying to do when we mow greens? Are we trying to maintain a definite amount of grass between the soil line and the putting surface or are we trying to remove a definite amount of grass from the green? If we are trying to maintain a definite height above the soil line, perhaps we need a mower to establish that height of cut and another mower designed with the cutting unit out in front of the mower and the machine supported by the predetermined mowed surface. If we are trying to remove a definite amount of

COMING EVENTS

1956

September 5-6

(Wednesday afternoon and Thursday Morning)

Penn State Field Days
 Pennsylvania State University
 University Park, Pa.

Prof. H. B. Musser

September 17-18

Midwest Turf Field Days
 Purdue University
 Lafayette, Indiana

Dr. William H. Daniel

September 25-26-27

Florida Turf Conference
 University of Florida
 Gainesville, Fla.

Dr. Gene C. Nutter

September 25:

St. Louis District Golf Assn. Field Day
 St. Louis, Mo.

September 26-27:

Northwest Turfgrass Conference
 Washington State College
 Pullman, Washington

Prof. A. G. Law

September 28-29:

Utah Turfgrass Conference
 Utah Copper Golf Course
 Magna, Utah

J. W. Richardson

October 1-2:

Rocky Mountain Turfgrass Conference
 Colorado A & M College
 Fort Collins, Colo.

Prof. G. A. Beach

October 4-5:

New Mexico Turfgrass Conference
 New Mexico College of Agriculture & Mechanic Arts

State College, N. M.

Prof. C. E. Watson

November 12-16:

American Society of Agronomy Meetings
 Cincinnati, Ohio

grass from the green, it appears we should have a mower designed with the cutting unit in the rear, set to cut the amount of grass we want to remove and the mower supported on the unmowed grass.

Water Storage In a Cubic Foot of Soil

These figures can guide you in the correct application of water. To be sure, use a soil probe and find out how deeply you are watering and how wet the soil is.

Type of Soil	Gallons
Fine sand5
Sandy loam9
Loam	1.1
Silt loam	1.3
Silty clay	1.35