Aerify, Dethatch, Wet, Turf Areas for Dry Spot Control

Dry spots on old turf are thought to be caused by excessive thatch. Other reasons, less understood, may explain why turf will not accept water in certain spots. To test conditions of dry spot development and cultural control methods, farm advisors set up experiments on a green at the Arrowhead Country Club in San Bernadino, Calif. Results of these 1963 tests are described by F. W. Dorman, C. L. Helmstreet, and T. M. Little in the August 1964 issue of *California Agriculture*.

Testers selected a 34-year-old Seaside bentgrass green for their methods experiments. "The old green had developed severe compaction in the center and traffic areas. Four to 6 inches of the surface soil was stratified by regular top dressing with sand and accumulated thatch. Disease control was often a problem," the report discloses.

Test methods included vertical mowing to remove thatch, aerification with ¼-inch spoons to permit water and air entry to subsod areas, and watering with a commercial wetting agent to make the water "wetter."

The green was treated in strips, some running north-south, others running east-west. Treatments were alternated, every other strip, so that the resulting squares (grid) would each have different combinations of treatment and the differences between squares could be evaluated.

Overall irrigation was adjusted so that the turf would be water-stressed and dry spots would tend to develop. As dry spots appeared they were plotted on a grid map illustrating each of the 100 squares. Hand watering of dry spots became necessary to avoid green injury.

Five vertical mowings were conducted at monthly intervals throughout the summer. Five aerifications at monthly intervals were also performed. The aerifier holes were not backfilled.

The wetting agent was applied at 4 gallons per acre in 120 gallons of water and watered in with a very high amount of irrigation water; this was carried out only once in late summer.

Weekly treatment of a commercial fungicide could not prevent loss of some grass to *Helminthosporium* because of the water stress.

At the conclusion of the experiment, the test plots were marked off with string and each plot was labelled with a coded tag. Twenty judges, consisting of players, agronomists, and superintendents, were asked to score the appearance of each plot from 1 to 10.

Dry spots were eliminated with monthly aerifying. Scores on aerified plots were higher than on nonaerified plots.

Vertical mowing did not reduce the number of dry spots until late in the experiment. There was a minimum of thatch when the experiment began, and only late in the test when thatch in other plots began to develop were vertical mowing results observed. Vertically mowed plot scores were lower than those not vertically mowed because the treatment in the summer heat physically damaged the Seaside bentgrass.

Although the wetting agent treatments did prevent dry spot, overall in this one test the wetting agents were detrimental to turf appearance.

Whirling cleaver action of the heavy-duty 410 Rotary Cutter completely splinters thick brush, trees, and growth that can be bowled over by the tractor equipped with front bumper bar, McCormick International reports. Cleavers are pivot mounted and free swinging.

Int'l. Harvester Introduces Three New Rotary Cutters

Said to be used for the first time in rotary cutters, heavy cleavers of special design, made of extra-tough alloy steel, are principal features in two of three new rotary cutters recently introduced by International Harvester Co.

The McCormick International rotary cutters are available in three-point, trailing, and fast-hitch models. Models 310 and 410 are equipped with whirling cleavers for cutting and shredding any growth from wiry grasses and stalks to heavy brush.

The third model, the 210, is an economy-priced, hitch-mounted cutter. All machines are ruggedly built with heavy-duty housings and precision-made, enclosed, bevel-gear drives for long service, the company says.

A slotted top-link hitch point in the three-point hitch protects the units against damage. Cutters are free to float upwards to absorb shocks which would be damaging if hitched solid. Units can be locked solid during travel.

Housings are heavily constructed, to resist pounding. The rotary cutters can be furnished with either a spring-loaded, dry-disc slip-clutch, or shear bolt for protection.

Details are available from the company at 180 North Michigan Ave., Chicago 1, Ill.