

# Root Systems

## Tight Turf Treated at Ozaukee

Windburn damage was bad on high spots in the greens at Ozaukee CC, Milwaukee, Wis., in the spring of 1948. The weather was dry and windy. The grass started to turn green, then it withered and turned brown on the elevated parts of the greens. Examinations showed a matted condition at the surface and very shallow roots.

It was decided to drill the greens with a Turferator. Two men were used, one to operate the Turferator and the other to remove the loose soil around the holes with a home-made dandelion-type rake. The men exchanged places every half hour. With the large size greens on this course, from 1½ to 2 greens were drilled each day.

There was good recovery in the wind-burned spots by mid-June without any re-seeding. The holes were left open and greens were not top-dressed. Examination showed deep roots four to five inches long in each hole. They started to develop within a week after drilling.

The Turferator was used periodically during the summer along the outside edge of the green to offset the compacting effect of power mowing.

The turf went through the summer in fine shape and maintenance was easier than the year before, according to Arno Weasel, the man in charge. This seemed like an unusual statement since others found 1948 a bad and trying year.

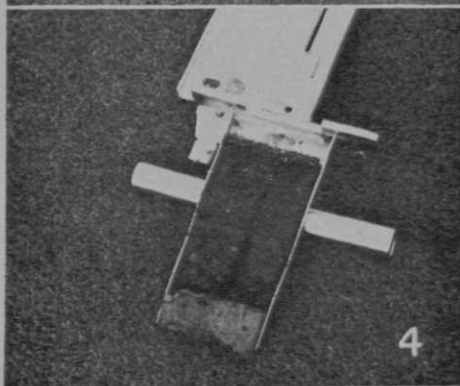
1. Operating the Turferator along the edge of the green at Ozaukee CC. 2. Surface immediately after Turferating. 3. Removing the loose soil around the drill holes after Turferating. 4. Soil profile from green at Ozaukee a week after drilling. Note fine white roots several inches long. They developed after Turferating.

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## Hill Tells NY-Conn. Supts. of Oregon Seed

Twenty-five years ago Highland, Astoria and Seaside bents started the grass seed industry of Oregon—so Dr. D. D. Hill, Agronomist of Oregon State College told greenkeepers at the N.Y.-Conn. turf meeting in March. Dr. Hill is at Rutgers University as an exchange professor until June 1951. He and Dr. Gil Ahlgren of Rutgers have switched jobs for the past year.

A. H. Maslin, Treas. the N.Y.-Conn. Assn. presided at the meeting attended by 53 members and guests. Maslin was ably assisted by Doug L. Ranklin, Westchester CC, and Edward P. Brady, N. Y. City Park Department. President A. R.



# Get Air-Treated

## Aerifying at Shaker Heights

Colin Smith of Shaker Heights CC, Cleveland, O., tried the new G-L Aerifier on the practice green at Shaker Heights. The half-inch spoons were equipped with flexi-springs.

A workman was at hand to pole the green when plugs were dry enough to crumble easily. The green was poled once and then places where the plugs did not disintegrate completely were poled again. The green was then mowed.

The surface was surprisingly good after aerifying, and putted almost as good as before. The flexi-spring prevented serious tearing of the turf by the spoons.

A soil profile was removed from a green just seven days after the aerifier had been used. Many new white roots were present in the cultivated soil area, attesting to the benefit of cultivation.

Colin Smith expressed the view that something should be done in the way of cultivation to overcome the compacting effect of heavy play and power equipment. Otherwise he believes root systems are bound to become shallower, and then maintenance is difficult or impossible in times of hot, windy weather.

5. Mal McLaren observes the Aerifier as workman starts to pole the aerified part of the green. 6. Colin Smith of Shaker and Mal McLaren of Oakwood measure depth of hole made by the spoons on the Aerifier. 7. View of poled part of green after using the Aerifier. The flexi-spring on the spoons prevents the development of a rough surface. 8. New roots in cultivated area a week after using Aerifier with half-inch spoon equipped with the flexi-spring.

Twombly was absent because of ill health. Returning from the sick list was Sam Camberato, Supt., Vernon Hills GC.

Dr. Hill told the association of the expanded acreage in Oregon of Merion bluegrass, Chewing's and Red fescue seed fields. 130,000 tons of all type seeds were produced last year in Oregon. Over 12 million pounds of Alta Fescue seed alone was harvested in 1950. He spoke of the Oregon seed testing laboratory, employing 38 people and testing over 25,000 samples of seed per year. Through this laboratory passes the certified seed of Oregon State. With the major seed markets thousands of miles away, Dr. Hill said the Oregon farmers and seed producers want to know what kind of seed consumers want, and how they can improve seed now produced.

