care of the thatch research now is trying to determine.

#### **Explains Plant Disease**

Dr. Wm. Klomparens, plant pathologist, The Upjohn Co., showed on the screen vastly enlarged slides of fungus growths that account for plant diseases.

Klomparens, who has conducted valuable grass disease clinics for several regional organizations of supts. told of elements of attacking fungus and parasitic growths and the principles of control measures.

He said that without moisture and certain temperatures plants cannot become diseased.

Prompt and accurate identification of the disease of the grass, shrub, tree or flower is a "must" in any control measure, Klomparens stressed. He described some methods of application of toxic materials and called attention to variable susceptibility and resistance to disease as complicating the fungus disease control problem with which supts. must contend.

#### New Turf, New Labor Practices Needed By A. M. LOCKE

Supt., Longmeadow (Mass.) CC

To satisfy the demands of golfers today for a well groomed golf course at all times -- with fairways cut at 1/2 in., greens mowed practically every day, rough cut and held at 2 in., with sand traps, tees, aprons and approaches in perfect condition at all times, having a constant run of tournaments through the complete season, (April through October) including the regular routine of play requires the constant attention of the maintenance staff during the plaving season. This work should not be interrupted with major construction operations such as, building traps, causeways, bridges, etc. Any major emergency construction during this period should be done by an outside contractor. The time for this type of work is after the playing season is over.

The demand for close cutting of fairways is creating a very serious condition on many of the older golf courses that were seeded with the old stand-bys, Kentucky bluegrass and the fescues. Regardless of constant attention, fertilization and aerification, close cutting is constantly killing these grasses off; consequently, the old menace poa annua is taking over. Fertilizer and aerifying does help the old grass to survive longer.

This is a problem that must be over-

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come by some method of replacing these grasses with the newer types of grass, such as, Merion blue or the bent grasses that will tolerate close cutting. Areas that are heavily infested with poa annua and weeds should be killed off with sodium arsenite, turned under and seeded.

If the committee will not tolerate the closing of fairways for this drastic operation then the next step would be to aerify severely and seed. This method would also apply to aprons and tees where poa annua has invaded these areas. Poa annua seeds twice a year and is carried onto the greens by equipment, wind and tracked on by players.

During the ten weeks of drought last summer in New England, with the temperature soaring in the upper nineties, poa annua took a terrible licking, especially on putting greens.

No doubt it would be advisable with greens heavily infested to start a nursery with better strains of grass such as, Arlington C-1, Congressional C-19, Collins C-27 or a mixture of these three; or a mixture of 50 per cent C-1 and 50 per cent of C-19, and resod the green or use a temporary green and plant to stolons or seed.

#### Key Men for 12 Months

One of the major problems today is labor. All golf courses do not operate with the same number of employees, as no two courses compare the same. On an 18-hole golf course there should be at least three key men on the pay roll the year round. There is work to be done during the winter months to keep these men busy, such as overhauling engines, grinding and lapping mowers; overhauling and painting equipment, markers, signs, O.O.B. stakes, flag staffs, etc.; construction, plowing snow, cutting brush inside bounds, trimming trees, sanding traps and numerous other jobs.

These key men are a tremendous aid in preparing the course for play in the spring and are necessary to teach and supervise the inexperienced men. Time is limited in the spring as some golfers think they should be playing as soon as the last snow has melted away.

Nearly all operations on a course today are done with power equipment. It requires men with some intelligence to operate this modern equipment — men who know the difference between the grass catcher and the spark plug. In order to obtain this type of men to prop-

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Order MH-40 or formulations containing MH from your local supplier today and cut your mowing costs.

#### Naugatuck Chemical

Division of United States Rubber Company ELM STREET, NAUGATUCK, CONNECTICUT producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap. erly operate an up-to-date golf course there has to be a better inducement offered. A large majority of golf course employees throughout the country are underpaid; this also includes the superintendents.

The time is here now when golf clubs have to compete with other industries in this respect. To carry out the maintenance problems on a golf course today, requires the full cooperation of everybody around the club from the president down to the caddy. And it is high time that some golfing members started to carry some of their own responsibilities; replacing divots, smoothing out tracks in sand traps and refraining from walking up the back of traps.

Without cooperation the superintendent and the green chairman get nowhere fast. There is nothing in any golf club that lessens the spirit or morale of officials, members and employees any quicker and deeper than a minority group of irate golfers in the locker room condemning the condition of the golf course and ridiculing the chairman and superintendent. This type of criticism should not be tolerated at any golf club; no chairman or superintendent objects to constructive criticism.

What the golfers frequently don't realize — although it is quite obvious is that the superintendent's actual boss is Mother Nature and she can be discouragingly fickle. But when she's good, she's very, very good, and we're grateful for that.

#### **1954 TURF CONFERENCES**

Apr. 5-6—SOUTHERN TURF ASSOCIA-TION ANNUAL MEETING, Jackson (Miss.) CC.

- Apr. 21-22-8th ANNUAL SOUTHEAST-ERN TURF CONFERENCE, Tifton, Gg.
- Aug. 5-6—UNIVERSITY OF FLORIDA TURF CONFERENCE AND FIELD DAY, Gainesville.
- Aug. 19-20—23rd ANNUAL RHODE ISLAND TURF CONFERENCE AND FIELD DAYS, University of Rhode Island, Kingston.

Oct. 4-5—SOUTHERN CALIFORNIA CON-FERENCE ON TURF CULTURE, University of California, Los Angeles.

Oct. 4—FIELD DAY, Oregon Experiment Station, Oregon State College, Corvallis.