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*For further information on this subject, check coupon.

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might have been made this winter, but uncooperative weather upset the control program. It is thought that it will probably take regular fungicidal treatment combined with improved fertilizing and more extensive thatch removal to finally solve the deadspot problem.

**Supt. Grows Own Wilt**

Along with supervising maintenance of the Yale University GC, Harry Meusel has devoted a good deal of time to studying the cause and effect of wilt. His conclusion is that the supt. grows his own wilt.

It comes about, said Meusel, on those bright days when turf is overwatered. The stomates, cell-like structures in the inner leaf blade, are extremely responsive to light. On a bright day they open up, so to speak, and if the turf is heavily watered, they are literally saturated. As a result, the plant's respiratory system is impaired and wilt sets in.

Muesel's studies show that heavy watering on cloudy days is not nearly so injurious to turf as it is on bright days. The conclusion is that the delicate stomates don't open up and thus aren't susceptible to drowning. Heat, he feels, has little to do in the wilt process or, at least, it is not nearly as significant as the degree or incidence of sunlight.

Turf should not be fertilized during the wilt season, the Yale supt. stated, and neither should lime be applied to it. If either fertilizer or lime is applied at this time, along with overdoses of water, the sensitive stomates are further impaired and the degree of wilt is intensified. The safest way to water in the wilt season, according to Meusel's observations, is to use wetting agents along with only a light amount of water. The wetting agents have no effect on the stomates and enable water to penetrate to its roots. When enough water is stored in the roots, excessive transpiration doesn't take place in the leaf blade.

**Disease Identification**

Mike Britton, last to appear on the program, showed a series of slides that gave a pictorial review of the common turfgrass diseases. Copies of the slides, incidentally, are available from the Dept. of Plant Pathology, University of Illinois.

While the films were being shown, Britton told when the various diseases are likely to show up, how to make the

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sometimes minute distinctions that distinguish one disease from another, and how to treat against them from both a preventative and curative standpoint. The Illinois University pathologist called particular attention to helminthosporium, saying that it is difficult to detect although it can be expected to appear in late August or in September. It is probably due to a root and crown blight, he said, and may stem from injured grass. It is generally prevalent where there is an abundance of poa annua. One of the first places to start looking for it is in cup locations.

Seeks Federal Aid
Topeka, Kansas is seeking 30 per cent of the anticipated cost of a new muny 18 from the Federal Housing and Home Financing agency.

Foundation Publication
The National Golf Foundation, 804 Merchandise Mart, Chicago 54, publishes five books that cover the planning, building and operation of golf facilities.

USGA Releases Revised "Golf Rules in Pictures"

"Golf Rules in Pictures," a publication of the USGA, is now available in a revised edition brought up to date with the 1964 changes in the rules. It is a 96-page book with many definitive illustrations of salient points.

Originally published in 1962, Golf Rules in Pictures has been translated into Italian, Dutch and Spanish. Editions in Japanese and Swedish are to be published this year. Some 65,000 copies of the original version were distributed.

Edited by Joe Dey

Golf Rules in Pictures is published by Grosset and Dunlap, New York, and was compiled and edited by Joseph C. Dey, Jr., USGA executive director, with the aid of P. J. Boatwright, Jr. and C. Edmund Miller. There is an introduction by Wm. Ward Foshay, chairman of the USGA rules of golf committee.

The book is available at $1.95 from the USGA and many pro shops and bookstores.
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fits. In return, he is guided by certain standards set by the professional organization and feels responsible for living up to them. The employer's interests are fully covered by these standards."

Elbin cautioned the course owners against hiring drifters and said that every PGA section in the country is equipped to advise an employer if the person he plans to hire is reliable or not.

$63,000 in Lights

Pete McEvoy, Jr., who with his father, opened the 9-hole lighted Tall Pines course in Sewell, N.J. last August, said that it cost $63,000 to install the 125 1,000 watt mercury floods that illuminate the course. Tall Pines, the country's first standard layout to be completely lighted, had a little more than two months of play after the floods were put in and McEvoy described the results as "very encouraging."

"We had heavy patronage during the week," McEvoy said, "although play dropped off on the weekends. In our final week of operation, we had more than 50 per cent more rounds at night than we did the first week after the lights were installed. It was a case of one fellow telling another about Tall Pines and giving a boost to our patronage as we went along."

McEvoy said that to amortize the cost of installing the lights and to cover the expense of operating them ($4 an hour), he and his father figure that they will have to have 21 18-hole rounds a night 150 nights a year over the next 10 years. Last fall Tall Pines hit a high of 92 rounds in one night. The lights operate on three circuits so that they can be turned on or off by sections.

Don't Push Them Out

The final speaker of the public course seminar, Arthur F. Loeben, an urban planner, emphasized that golf courses are needed in densely populated areas and shouldn't be sacrificed to apartment or residential developments as they so often are. "The few courses that are left along with the small parks within the city," Loeben observed, "are about the only pieces of greenery that are to be seen amid the jungle of concrete and brick-
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work. They are just as important in urban development as housing projects, and we shouldn't be leapfrogging them out beyond the city limits as we expand our metropolitan areas."

Loeben said the Montgomery county commission is convinced that golf courses are self-supporting and in a number of cases provide revenue for other municipal recreational undertakings. "The bond underwriters apparently haven't looked very far into the potential of the public golf courses or they wouldn't take the stand they do," he remarked. Loeben added that in some states the construction of public courses is being hamstrung because cities and counties can't go ahead with these projects without state approval. Enabling legislation is needed in such instances to give municipal and county officials the necessary home rule authority to expand recreational facilities.

Francis A. Heitkamper, Portland (Ore.) GC, is the new president of the Pacific Northwest GA, succeeding Lloyd B. Avery of Spokane. William T. Stockton, Sand Point CC, Seattle, is secretary-treasurer. Ernest A. Jonson continues as executive secretary.

Car Manufacturers' Meeting

(Continued from page 82)

cluded in the report of the meeting mailed to all the country's car manufacturers and suppliers.

Following Wright's review and comments and those of the officers and directors, the meeting was opened for a general discussion. Among points developed in the discussion were: No member will have an advantage over another; there should be both car manufacturing and supplier members; and the budget should be determined by program requirements of the organization. Statistics for marketing guidance also were among the subjects discussed. It was agreed that the Association should have sufficient funds at the beginning to properly perform all functions agreed upon.

Schedule Chicago Meetings

A luncheon meeting of golf car manufacturers will be held in Chicago at the Tavern Club at noon on Apr. 2 to complete organization details. Manufacturers not presently members of AGCMA are invited to attend.

At 6 p.m. on the same date, the manu-
Hillcrest C.C. found the surest way to guarantee healthy playing turf

“We’ve improved the growth and color of the turf on our greens here at Hillcrest by following the Agrico Program,” says George Ostler, superintendent of this beautiful country club in St. Paul, Minnesota.

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facturers will again meet at dinner in the Tavern Club in company with suppliers. The latter, at the meeting in Palm Beach Gardens, expressed willingness to participate in the ACCMA program.

Complete information about the Golf Car Manufacturers organization can be obtained from David Metcalf, secretary, c/o Versal, Inc., 1626 Werwinski st., South Bend, Ind.

Houghton Increases Sales

(Continued from page 58)

To handle all of the various bookkeeping tasks, Al originally had his records set up by an accountant. "Books set up in this manner are certain to include all the necessary figures used in year-end profit and loss statements and tax returns. It's simply good business to start off with an adequate record system," Al advises.

50 Years in Golf

Al's success at Prince Georges is based on 50 years in golf. Starting out as a caddy, he has moved up the line. During the 35 years he has been a member of the PGA, Houghton has served seven years as president of the Mid-Atlantic section and three years as national PGA vice-president. During the '20s and '30s, Al made a name for himself on the circuit and four times won the Maryland Open and twice took honors in the District of Columbia Open.

"Over the years, I've seen this business become more and more complicated," Al comments. "Today it takes more than ability on the teaching tee to break even as a home pro. It takes long hours and very few days off, service and plenty of it, plus skillful promotion, careful bookkeeping and sound business sense. It wasn't always this way. Sure, a lot of the glamour has disappeared but today a home pro can make a pretty decent living if he plays the game by the revised rules."

Heads Ladies Auxiliary

Mrs. Massie Miller, Howell, Mich., is the new president of the PGA Seniors Ladies Auxiliary. Other officers are Mrs. Todd Houck, Fort Knox, Ky., and Mrs. Clarence Doser, Gaithersburg, Md., vps and Mrs. Paul E. Erath, Ligonier, Pa., secretary-treasurer. Mrs. Miller succeeded Mrs. William Taylor, Hyde Park, Mass.