

golf course maintenance. There will be an educational program, starting Tuesday afternoon, the 18th, and continuing through Friday morning. There will be various business meetings of the association. There will be tours of golf courses in the St. Louis area. And there will be numerous social activities. Among these are an annual banquet, a get-acquainted hour and a program for the ladies' entertainment.

The educational program will be another outstanding affair and among the speakers will be many well-known authorities on golf course maintenance. Topics for discussions will be: Club Relations, Business Management, Turfgrass Management in the North, Turfgrass Management in the South and Plant Nutrition. Speakers on these programs will include practical men, representatives of colleges and universities, the USGA Green Section and representatives of industry.

"Practical information that will produce a profit is the result of attendance to the National Turfgrass Conference and Shows," says Norman C. Johnson, golf course superintendent at San Jose Country Club, Jacksonville, Fla., and President of the Golf Course Superintendents Association, which annually sponsors this national event.

"From the inspection of equipment, materials and supplies to the reports of research and of practical golf course application, these meetings provide one of the best sources of up-to-date information for the golf course superintendent and others concerned with fine turfgrass care. Please accept my cordial invitation to attend."

The Mississippi Valley Golf Course Superintendents Association committees are looking forward to a capacity crowd. General Chairman is M. M. Parsons, Algonquin Country Club, Webster Groves. Assisting him will be the following committee chairmen: Publicity, Fred W. Maschmidt, Normandie Golf Club, St. Louis; Educational, Al Linkogel, Link's Nursery, Clayton; Transportation, Ralph Guyer, Westborough Country Club, Webster Groves; District Show Sales, Thomas V. Hayes, Meadow Brook Country Club, Overland; Entertainment, Mr. and Mrs. Alfred Longheinrich, Sunset Country Club, Sappington; Ways and Means, Clarence Plein, Lakeside Golf Club, Overland; Reception, Vertus Mitchell, Forest Park Golf Course, St. Louis.

Travel facilities to St. Louis from all sections of the country are excellent. Your club will be rewarded by having your superintendent attend this meeting.

## WINTER ENEMIES OF PUTTING GREEN TURF

**E**ACH YEAR a considerable amount of turf is lost due to winter injury. In most cases, winterkill or winter injury of turf is the result of drying out of the turf because of a lack of snow cover and the occurrences of dry winds that take the moisture out of the soil and out of the storage organs of the plant. This drying out of the soil and the grass is called "desiccation" by the plant physiologists but is usually called merely "winterkill" by the golf course superintendent.

Winterkill of this type may be avoided by using a mulch over putting greens that are exposed and that cannot be watered during the winter months. This mulch may take the form of straw, manure containing

large amounts of straw, pine branches or any number of mulching materials. Its purpose is to prevent the movement of wind near the soil so that the soil is not dried out so rapidly. A good cover of snow will accomplish the same purpose, but the covering of snow cannot be relied upon.

### *Danger of Snowmold*

There is one danger in providing a mulch or a snow cover on putting green turf during the winter. That danger lies in the encouragement of snowmold, which is caused by fungus organisms. Snowmold develops on putting green turf when there is a sufficient covering to slow down the movement of air near the soil so that the

humidity remains at a rather high level.

Snowmold ordinarily is noticed in the spring when the snow cover begins to go off of the grass. Hence its name. It is not necessary, however, to have snow in order to have snowmold. Any covering of material which allows conditions of high humidity to exist and so that the soil can warm up sufficiently for these fungus organisms to grow may create conditions favorable for this disease. Therefore, when precautions, such as mulching with various materials, are taken to prevent drying out and desiccation of the grass, it is wise to take some preventive action so that snowmold will not damage putting green turf.

There are several materials that have been effective: the phenyl mercury products, applied according to the manufacturer's directions, have been successful, and mixtures of calmel and corrosive sublimate are old standbys in preventing snowmold. Such mixtures should be applied at the rate of about three ounces to 1,000 square feet. Still other superintendents have reported good results from the use of Tersan, applied at rather heavy rates in the fall, before the mulching is done or before you are likely to have snow. Winter injury to turf can be minimized a great deal if these two enemies, snowmold and desiccation, are warded off by wise treatment in the fall.

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