

Irrigation Stressed

Midwest Regional Turf Conference



Sod is loaded on trailer trucks for installation by Cloverdale crew at landscaping site.

to preparation and sodding. It includes details on soil preparation, fertilizer applications, installation, and maintenance of the new lawn.

Potential customers were varied. They included apartment house owners, motels, commercial first, and homeowners. A number of parents with small children were interested in sodding only a small portion of their lawns.

Borbonus reports that it is difficult to evaluate immediate sales effect of the fair booth promotion. But he feels that potential sales for a number of months following the exhibit are reasonable. He believes the promotion well worth the cost as an advertising medium.

The farm is operated by Hans Georg Borbonus Landscaping, Inc. Hans Georg is president and his brother, Gerhard, vice-president. They handle 80 acres.

Coming in the
May
WEEDS TREES AND TURF
New Airboat Sprayer
Invert Spray System



Irrigation specialists on conference program are, left to right: Charles Watson, Toro; John Dunlap, Oakwood Country Club, Cleveland; Walter Wilke, March Irrigation; A. J. Miller, Miller Sprinkling Systems; and Thomas Kramer, Kirchdorfer Irrigation.

The Midwest Regional Turf Conference held every year at Purdue University offers a most intensive study of the industry. A round-up of current information is available on practically every subject which ties into the turf picture.

Program participants are specialists in their many fields as well as their own companies or educational institutions. Organization is superb, thanks largely to William H. Daniel, executive-secretary of the Midwest Regional Turf Foundation and Purdue agronomist, and the extensive facilities and faculty at Purdue.

Attendance for the 24th meeting this last month reached a new high of 741 by the beginning of the second day's program. A few sod growers and others registered after this to increase this figure slightly. Golf course superintendents accounted for the major segment of the group. Probably the most sophisticated program series this year featured irrigation. Specialists from a number of companies and golf course superintendents discussed

the current types of systems in detail.

Miller Irrigation

President of Miller, Sprinkling Systems, Royal Oak, Mich., Austin J. Miller, told turf personnel that today they can have every switch, knob, fuse, clock and push button in the golf superintendents office, pumphouse or clubhouse. The other extreme is also possible and controllers can be scattered around the course in 20 or more locations.

The superintendents operating automatic systems are in the best position to give direction in establishing the happy medium, he said. No one solution is right for every course. Most superintendents recommend four to six satellite controller locations. This keeps the wire or tube runs reasonable and allows the operator to see the sprinkler he is turning on when manually operating the controller.

At the satellite locations, Miller pointed out, there should be separate controllers for greens, tees and fairways. Some superin-

tendents are even suggesting separate controllers for the sprinklers at the approach to the greens.

These satellite controllers should have no more than one automatic valve per station and must be capable of automatic, semi-automatic or manual operation independent of the central program. Miller said that by providing each satellite with a 24-hour starting clock, it can function fully automatic in case of a central program failure from fire, lightning or wire break. Each satellite controller should have a lightning arrestor on the primary electrical supply and a copper ground rod connected to the cabinet. Controller cabinets need to be on a 42" concrete base to prevent frost heave and resulting misalignment in later years. A concrete pad in front to stand on and at least a 12" concrete apron on the other three sides will permit mowing around the controllers and eliminate hand trimming. He pointed out that by supplying the satellite locations from the closest electrical source, wire size and distance is reduced. This usually means two or three sources of power, Miller said, thus reducing reliance on a single source.

Miller raised the question of central control. Central control or central programming, he believes, should be reserved for those functions the superintendent wants done from the office. This can be as simple as a Yes—No switch. Yes—I want water tonight, or No—I don't want water tonight. It can be as complete as remoting every function available at the satellite.

It is generally felt, Miller said, that central control should let the operator start irrigation program for greens, tees and fairways independent of one another. Syringing of greens, tees and fairways should also be independent and the syringe time should be variable.

Miller pointed out that it is

New officer slate, left to right: Theodore Woehle, vice-president; Robert Meier, Jr., president; and Dr. W. H. Daniel, executive - secretary.



possible to also have an on-off switch for each controller on the course so that parts of the program can be omitted. Appropriate lights on the panel will indicate switch position or the function in operation.

Of utmost importance, he said, is an emergency switch for turning off the program during operation. A sudden shower or call from the clubhouse that a sprinkler is running can make this

switch useful. An adjustable rain switch which will shut down the program after two tenths inches or more of rain might save a two a.m. drive to the course during a thunder shower, Miller stated. The controllers should automatically re-set to off after the above switches go off. Control of these remoted functions can be in a panel box mounted in the maintenance building or superintendent's office.

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Lee Schmidt, left, and Joe Williamson each received a \$300 golf course superintendent scholarship. Making the presentation is Norman Kramer, right, vice-president of the Golf Course Superintendents Association of America, Benton Harbour, Mich.

Most automatic systems, Miller pointed out, will cost over \$100,000 and when spending this amount of money the program deserves the services of a Professional Engineer with considerable experience in golf course irrigation. He cautioned against depending on a free plan from a material supplier or contractor.

March Irrigation

Walter Wilkie, March Irrigation and Supply Company, Muskegon, Mich., stated that most people blindly look upon any form of an automatic underground sprinkler system as a universal panacea to all of their watering needs. However, he pointed out, this is not the case. While many operators are appreciative of their system, they are somewhat disillusioned at the demands of the work load that they have fallen heir to as they try and implement the automatic system.

Wilkie said that installation on any given golf course will require from 18 to 36 controllers, depending upon the size and the

geography of the course. These are normally located in three or four controller areas. Management and operation of these controllers dictates success or failure with the system.

Award Program

Two Purdue University seniors majoring in turf studies received scholarship awards at the annual banquet.

They were Joe Williamson, Highland, Ind., and Lee Schmidt, Carmel, Ind. Each received a \$300 golf course superintendents' scholarship.

Also recognized were two January, 1969, Purdue graduates, each a recipient of a \$200 Mueller scholarship. They were David A. McManama, Carmel, and Dan Brier, Williamsport, Ind.

Newly elected officers of the Foundation for 1969-70 are Robert Meier, Jr., 6319 Wiche Road, Cincinnati, O., president; Theodore Woehrle, Birmingham, Mich., vice president, and W. H. Daniel, Purdue turf specialist, re-elected as executive secretary.

Witnesses Help Kill Proposed DDT Bill In Washington State

Washington State legislators at a joint hearing of both houses recently killed a proposed bill to ban DDT and other chlorinated hydrocarbon pesticides.

Jack Daniels, well-known veteran pesticide applicator and past-president of the Northwest Spraymen Association, appeared as a witness in opposition to the bill. Daniels' testimony along with other qualified witnesses proved sufficient to convince legislators of the need for a go-slow policy regarding outright bans.

Daniels said in his statement regarding DDT to the group that he had "lived with it, breathed it, practically bathed in it, and never had any ill effects." He also stated that "there is no case on record of a death from DDT. It would be a tragedy to be deprived of it. The loss of these materials far outweighs the loss of a few fish and birds."

Washington State agricultural chemist, Richard Maxwell, said that "to the best of our knowledge, pesticides do not pose a danger to public health." He further stated that the effect on wildlife is not so certain and needs more research.

Backers of the bill to ban the pesticides used the popular line that pesticides concentrate in the fatty tissues of the bodies of fish, who eat the plankton that absorb the poisons. Fish, according to these statements, if they are not killed, are eaten by birds whose eggs fail to hatch.

Appearing in favor of the ban were housewives, University personnel, and a member of the Seattle Audubon Society. Fighting the bill were forestry association personnel, farm operators, entomologists, and commercial spraymen.