

Abandoned Herringbone Design

Charley Danner, the pioneer bent green custodian in the South, told of his dissatisfaction with the herringbone system of drainage used on the first six greens that were converted at Richland CC in 1952. Channelling excess water into a narrow area, such as is done with the herringbone arrangement, Danner said, caused sloppy conditions in front of the greens during rainy weather and made these areas potential disease breeding spots.

When the remaining 12 greens were converted to bent in 1953 and 1954, the Nashville supt. said, a square U tile arrangement was installed so that the drainage became diffused. This, combined with the fact that the last 12 greens were built with perhaps more attention to improved surface drainage, has resulted in these latter putting surfaces giving much less trouble to the Richland CC maintenance dept. than the six that were originally converted.

Suggestions for Improvements

Fred Grau prefaced the Question and Answer period by commenting on some of the things that he thinks should be done to improve both construction and maintenance. His observations: Newly built

Golfdom Holds Luncheon

The third annual luncheon for fathers, sons, and sons-in-law who are supts., sponsored by GOLFDOM, was held during the GCSA convention. About 70 persons attended the affair. Hosts were Joe Graffis, Sr., publisher of the magazine, and Herb Graffis, editor.

courses should be given more time to settle; Proper soil mix and depth of mix often are neglected; maintenance buildings, at a majority of clubs, are located in too inaccessible spots; course communication systems are behind the times; many times the interval between new seeding and watering is too long — it shouldn't exceed 48 hours; there probably is not enough use of fertilizers when tees and greens are overseeded.

The questions that followed were directed, for the most part, at architects and dealt entirely with the adoption of standardized building specifications by the men who design the country's courses. George Cobb, the only architect present, emphasized that he did not speak for the designers as a group, but only for himself. He maintained that he always has built tees,



James A. Reid



George Cobb

greens, traps, etc. to what generally are accepted as reliable agronomical and physical specifications, but he doubted if these can always lend themselves to an exact formula. If nothing else, he said, the wide variances in building budgets prevent this. Architects, he also conceded, have very definite likes and dislikes and these don't lend themselves to standardization.

"Green Construction at East Lake," the Milwaukee Sewerage Commission film that concluded the morning's program, traced the entire operation from the leveling of the site to soil sterilization and seeding. One of the interesting sidelights of the film was the showing of how soil is tested for texture qualities in the laboratory of Leon Howard of College Station, Tex.

Fifth Session

The Practical Side — From Wetting Agents to Mower Maintenance

James E. Reid, supt., Suburban CC, Baltimore, led off the Wednesday afternoon meeting with a talk on wetting agents. He was followed by James R. Watson, Jr., Toro agronomist, who spoke on water management. Morris E. Bloodworth of Texas A & M then discussed soil mixtures. After him came J. W. MacQueen, also of A & M, who pointed out some principles to be followed in landscaping. Purdy Carson of Jacobsen-Worthington, concluded the program with tips on equipment care.

Explains Use of Wetting Agents

Jim Reid declared all his experiences with the use of wetting agents have turned out to be very favorable. In one instance, he applied 6 gals. of Aqua-Gro per acre to 10 acres at a 10 to 1 dilution rate and got exceptional results. Reid cautioned that the agent should be watered in immediately after application. If not, there is danger that the turf will be burnt. When the dilution is at a rate of 100 to 1 or 200 to 1, followup watering probably is not necessary.

As explained by Reid, wetting agents reduce surface tension and thus gives better water distribution through the soil. As a consequence, nutrients penetrate the root zone more readily. Tests have shown, he said, that where wetting agents are used, root penetration may go to 10 or 12 ins. as compared to 6 ins. without. With deeper rooted turf, resistance to disease and wilt is greatly increased. The Baltimore supt. concluded by saying that there is some evidence that watering can be reduced by from 50 to 60 per cent when wetting agents are regularly used.

Long and Short Range Watering

Jim Watson of Toro said that the more a person thinks about water management, the more he comes to the realization that it is a pretty scientific undertaking. "You just don't set out the sprinklers when you're in the mood and give the ground a good soaking," Watson declared. "That is, if you are interested in getting the most favorable watering results."

The 'how often, how much, how to apply' equation, Watson said, is determined by several long and short range considerations. For the long range program, the thinking man is looking to the kind of turf he must water, the condition of his drainage system, climatic environment, texture and structure of the soil and its condition in regard to compaction. Immediate watering needs are determined by capacity of the system, availability of help to apply water, amount of play, temperature, degree of windiness over a period of say two or three days and, possibly, intensity of sunlight during a similar period.

Soil Investigation Described

Soil investigation work carried on at Texas A & M was described by Morris E. Bloodworth. Many variations of the sand, clay, silt-organic mix have been tested there for permeability, infiltration, root penetration and absence of compaction and A & M agronomists have concluded that the best turf growing mixtures are found in approximately these proportions:



O. J. Noer Elmer Border

Among tributes to O. J., the GCSA Merit Award. Georgia Turf Association also gave Noer a plaque.

80 per cent sand (dia. of .5 to 1 mm); 10 per cent clay and 10 per cent organic (peat). Where 10 per cent silt has been used, compaction has been a problem. Topsoil depths should range from 12 to 16 ins.

Bloodworth also showed an interesting water penetration chart covering the soil range from loamy sand through sandy loam, loam, clay loam and clay. When three ins. of water is applied to each of these soils, loamy sand is penetrated to a depth of three ft., but there is a gradual decrease in the others (in the order listed) with penetration falling off to 16 or 17 ins. in clay. This chart was supplemented by another showing the degree of water flow through soils of various textures.

Bloodworth summed up his remarks by saying that putting mixtures as a rule, lose their structures much more quickly than agricultural soils. So far as the mixtures for greens are concerned, much research and practical work remain to be done in compounding soils that will not break down and will be resistant to a compaction.

Eight Landscaping Hints

If the supt. is called upon to double as a landscaper at his club, J. W. MacQueen recommended that he keep these points in mind:

1. Use trees and shrubs to enhance but not hide a building;
2. If the lines of a building are harsh and unpleasing to the eye, landscape to soften them;
3. Try to work out designs that frame

interesting views;

4. Scale before you plant; i.e., take into consideration the width of walks before surrounding them with shrubs, and the height and breadth of buildings before ringing them with trees;

5. Don't block out windows or block entrance ways with tall shrubs;

6. When planting flowers don't select colors that will clash with the colors of your buildings;

7. You'll occasionally be pestered by well-intentioned members who want you to plant a certain type of shrub that may clash with the design of present plantings. If you can't dissuade them, you'll probably have to join them;

8. Check all plants, shrubs, etc. for disease before planting.

Preventive Maintenance Discussed

The final speaker on the Wednesday afternoon program, Purdy Carson, a Worthington Mower sales engineer, told the supts. how to use preventive maintenance methods to prolong the life of maintenance. He said that much of the malfunctioning of power equipment is due more to neglect of proper and simple tuneup and maintenance measures than to operating abuses. Carson cited these examples of poor maintenance: Air cooled engines cease to remain air cooled because vents are allowed to become clogged; Dirty grease, oil and gasoline too often are used in cleaning and lubrication work; Mower blades aren't properly sharpened, throwing an extra burden on the engine to rotate them and causing an early breakdown of the machine.

"The sad part of it is," Carson declared, "that the manufacturer is blamed for most of the trouble that results from nothing else but pure neglect or improper maintenance work."

The Worthington engineer then gave a demonstration of how to adjust and grind reel type mower blades. He showed how too tightly adjusted reels cause premature blade wear and how grass can be injured when the reels are set too loosely. When the blades are ground. Carson said that a good deal of care has to be taken in gauging to insure proper sharpening. The same holds true with bed knives, since if the grinding setting is more than 1/16 ins. off, stresses can be caused in the metal that eventually may cause serious damage.

In his concluding remarks. Carson said that many more miles could be gotten out of all types of equipment if course maintenance depts, religiously consulted their servicing records.

Sixth Session

You Haven't Lived Until You've Gotten Ready for an Open

The educational program was concluded on Thursday morning when three turf conditions in different parts of the country in 1959, and four supts., who had gone through the throes of preparing for National Open tournaments in the last 20 years, described some of their experiences. The USGA group was composed of Bill Bengyfield, representing the Far West, Alex Radko of the East, and John B. Moncrief of the Southwest. Supts. who went back and sweated through the months preceding the Big One included Elmer Border, then of the Olympic Culb in San Francisco, Sherwood Mocre of Winged Foot, Elmer J. Michael of Oak Hill in Rochester and Marshall Farnham formerly of Philadelphia CC.

The Woes of 1959

The verdict on the 1959 weather by the three green section men who spoke was summed up in one word — woeful. It was particularly poor in the east and northeast sections of country, according to Alex Radko.

He ticked off at least a half dozen ways in which the elements worked against the supt. last year. Among them: There were no warm spring rains to speak of and as late as mid-April, greens along the Buffalo-Boston line were still straw colored; Fairways were hard hit and didn't really come back all year; Knotweed thrived like it never thrived before; The sod webworm had a field day, and not the kind that's held at Rutgers; It wasn't a good season for poa and fall renovation was either delayed or had to be postponed entirely.

But, concluded Alex, the supt. learned a few things which will help to carry him through in the future if there is a play-back on the 1959 weather. He found, for example, that fungicide treatment and green fertilization has to be reduced in summers such as last year offered. New respect for pre-emergent treatment was impressed upon him. He had to use more hydrated lime to hold the fungicide that was being washed away by heavy summer rains, and perhaps, he rediscovered top-dressing.