Finale Accents Avoiding Trouble
Sheldon R. Betterly, superintendent, Chantilly National G&CC, Centreville, Va., got them up for the seventh inning of the educational program, Friday morning, starting with the talk on turf problems caused by minerals in irrigation waters. Arch Smith, president, Green-A-Matic Corp., division of Smith Equipment & Supply Co., said that all federal and state water surveys forecast that "all irrigated soils will in time have a soluble salts problem. Smith's slides illustrated the golf course problem of inability to introduce chemical amendments deeply into the soil as the farmer can. He noted that bicarbonates destroy soil oxygen, precipitated carbonates of calcium and magnesium clog fine soil pores and sodium cements the soil. With oxygen restricted, the bacteria decrease and thatch is formed. Dissolved mineral salts in the soil reduce the amount of moisture the grass plants can absorb, hence cause wilt. Smith made a good case for undesirable minerals being the root of a great deal of turf trouble and told (with slides) of treating irrigation water to eliminate unwanted minerals.

Dr. William Klomparens of the Upjohn Co. presented a brief refresher course on fungus and its prevention and control by fungicides. He emphasized that the superintendent must carefully consider identification, planning, execution and evaluation in fungus treatment.

Roger A. Larson, superintendent, Spyglass Hill GC, Pebble Beach, Calif., reported on his findings of effects of minor element deficiencies in soils and turf-grasses as determined in his research on a O. J. Noer Foundation grant. He listed deficiency symptoms of boron, copper, iron, manganese, molybdenum and zinc and warned that there is a narrow range between deficiency and toxicity with the minor elements.

Dr. John C. Harper, Pennsylvania State University, outlined a planned program of fertilization, weighing the factors of grass species, soil conditions, usage and management, climatic conditions, soil testing and materials in the fertilizers. The basic program must be altered in accord with the season, he reminded.
view GC, Vandoff, Ont., spoke on the economy aspect ever present in the superintendent's planning and told of his money-saving on a tree care program, on foresight in scheduling use of equipment and use of growth inhibitors on the rough. He said he tries more to save on the small regular jobs than on the once-in-a-while jobs.

Fred Grau, veteran of countless turf conferences and valued advisor to hundreds of superintendents, wrapped up the conference with a summation in which he put across the main idea that all the technicalities that had been heard during the conference had to be converted into terms of people as golf is a game for people, not a game for grass.

**Turf Care Handbook**

A new 24-page turf care handbook is available from the Ryan Equipment Company, 2055 White Bear Ave., St. Paul, Minn. 55109. It also describes in detail the complete 1966 Ryan line.
IRRIGATION
Continued from page 110

urally there must be water under pressure and to obtain this we installed a small 75 GPM pump. It maintains approximately 60 PSI on the line at all times. This is adequate for almost any quick coupler operation and it also keeps the lines full so that when a large pump is turned on, the sprinklers will operate immediately.

One of the newest items on our course is a complete short wave radio system. I could talk from now on of the many uses that these radios have. Our system consists of a base station which has a range of many miles and four walkie-talkies which have a range of approximately 1/2 miles. The base station is in the maintenance shop where our shop mechanic stays. The irrigation system control room connects to the shop, so you can see it is convenient for the shop man to operate the irrigation if needed during the day.

At Quail Creek, I have Cohansey bent greens which average 8,000 square feet each. The high wind and temperatures in Oklahoma mean syringing greens as much as five times per day. As you know, syringing greens is very costly and a problem. The radio system we have makes this problem much easier.

Days when syringing is necessary our experienced men alternate in checking the greens. It is just a matter of the man riding around the course and calling on the walkie-talkie to the base station where the shop man turns on the sprinklers needed. With this method the schedule is controlled so that golfers on a green will not get wet.

We have another method of syringing but it is seldom used; one blast on the siren and all golfers know that the greens are about to be watered. We have a siren for each nine holes. It takes several minutes for the cycle to be completed, so by the time the last greens are watered in the cycle, some golfers have forgotten about the siren and the results are obvious.

The radios are used by all of the crew when contact might be necessary with the shop.

You might say well and good but my

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IRRGATION Continued from previous page

course can't afford the Quail Creek type of system, or we don't need that much irrigation. A system can be designed that will water anything anyway you need it watered. You can have anything from a single row down the middle of the fairway, to four rows down the fairway; from one large sprinkler placed out in the middle of the green, to several valves and sprinklers placed around each green. You can have whatever you can afford, but make sure it is properly designed and installed.

My contention is that you can't afford not to have a good irrigation system. As comparison, a good manual system that would cover the same area will cost approximately $70,000 and the automatic system approximately $100,000. The $30,000 difference can be paid for in less than five years in labor costs alone. Our system at Quail Creek originally cost approximately $100,000. This includes everything I have just described.

HERB GRAFFIS Continued from page 24

ing a bad mess and in protecting as well as substantially aiding and directing borrowers is to get examining, budgeting, building and operating guidance established by a joint committee of men who know what these new club propositions involve. . . Representatives of the American Society of Golf Architects, the National Golf Foundation, the Golf Course Supts. Assn. and the PGA in a few sessions with FHA men could get the golf part of this loose use of money corrected to the benefit of all concerned. . . . What's going on now could explode with political damage that Sec. of Agriculture Orville Freeman and FHA Administrator Howard Bertsch certainly don't want and with embarrassment and material damage to golfers and golf business.

A year ago GOLFDOM relayed warnings about dangerous generosity in FHA loans and tried to get FHA or Department of Agriculture information on how, why and where these loans were studied, approved and handled but got the brush-
off at Washington . . . Small Business Administration loans to golf operations think of money as money, not as hay.

Masters Tournament this year again will limit admissions and asks golf writers to advise golf fans not to make trips to the Masters without buying tickets in advance . . . April 7, 8, 9 and 10 the 30th Masters will be played at the Augusta National Golf Club . . . Bill Inglis of the Daily Oklahoman has compiled scoring records and statistics on the Masters that's a classic of tournament information . . . Average winning score in 29 Masters is 281.66 . . . Par of the Augusta National courses is 72 . . . Ringer score is 22-18-40 . . . Average age of the 29 champions is 32.03.

Roger A. Larson, who came into the Del Monte Properties Co. operation as construction superintendent for the Spyglass Hill GC 18 of the California golf associations and Del Monte Properties will stay on as superintendent of the course and supervising Pebble Beach and Del Monte courses . . . Spyglass Hill course will open this month . . . Larson got his BS degree in Horticulture at Iowa State, took graduate work at Wisconsin and is writing his thesis on minor element nutrition in turfgrass for his masters degree in soils, on a O.J. Noer Turf Foundation grant and spoke on that subject at the GCSA meeting . . . He was superintendent of Maple Bluff CC, Madison, Wis., before coming to Pebble Beach . . . Del Monte Press Bureau publicity on Larson shows how the superintendent is advancing as a

Continued on next page
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HERB GRAFFIS

Continued from preceding page

recognized asset of a golf operation ... One of the many subjects informally discussed at Kansas City was value of hiring a construction superintendent who will stay on after the course is completed ... Anybody who doesn't do that is throwing away thousands of dollars and at least a couple of years, experienced men concluded.

Burt Musser as winner of the USGA Green Section award for "distinguished service to golf through work with turf-grasses" was cheered by superintendents all over the land ... Musser, retired professor of agronomy at Penn State, edited and wrote by far the greater part of the Green Section's book Turf Management, the standard treatise on golf course operation ... He developed Penncross bent, Pennlawn fescue and Penngift crown vetch ... He long has been a leader in the training of superintendents ... During World War II the government borrowed him for military turf work ... He has been a very valuable and helpful writer for GOLFDOM and other publications.

Ed Famula now pro at Warrenbrook CC, Warren township, N. J. ... Carry Nixon, long a teammate of Sam Snead at Greenbrier and Boca Raton, and later pro at Philmont CC, Philadelphia, moves to Hominy Hill GC, Colt's Neck, N.J., as pro ... Bud Acton now pro-manager at Alva (Okla.) G&CC ... Glen Dornie GC at Linville, N.C., scheduled for opening in spring 1967 ... Ellis Maples is architect ... Agnes Morton Cocke,
is four times Carolinas' women amateur champion is president of the company building the course.

John Cafone, pro at Manasquan River GC, Brielle, N.J., pro on Queen of Bermuda 13-day Caribbean cruise . . . Massachusetts GA 75 member clubs working against politicians' proposal to put 20 per cent state tax on club dues and initiation fees . . . Federal 20 per cent tax was repealed January 1 . . . MGA stresses that club membership is not limited to the wealthy and already is subjected to such taxes and other discriminatory expenses that the number of private clubs in the state has dropped 20 per cent since 1931.

Floyd Farley of Oklahoma City elected president, American Society of Golf Architects at the society's annual meeting, held at Carefree Inn, near Scottsdale, Ariz. . . . Other officials elected by the association's membership of 30 are Wm. F. Gordon, Doylestown, Pa., vp, and Ferdinand Garbin, Export, Pa., secretary-treasurer. Design and construction from all viewpoints of artistry and economics were discussed . . . Maintenance problems got a lot of consideration . . . The puzzling problem of what qualifies an architect also was discussed by members of the group which has had 801 years experience in designing courses.

Al Biondi is building 18 as the Springbrook CC at Leeds, Me . . . Will open in June . . . Biondi, for past nine years pro at Augusta (Me.) CC and for past six years president Maine PGA, is owner of First Tee indoor golf range.

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GOLF offered then-Senator Hubert H. Humphrey, Chairman of the Senate Sub-Committee on Reorganization and Internal Organizations, an opportunity to express his views in support of GOLF's call for a National Junior Golf Program. Vice President Humphrey's article was inserted in the Congressional Record, and thousands of reprints were distributed by interested golf industry leaders.

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Harry Moffitt Elected
PGA Seniors’ President

Harry Moffitt, pro at Heather Downs CC, Toledo and PGA president 1950-1951 was elected president PGA Seniors at the veterans annual meeting, held Feb. 22 at PGA National course clubhouse.

Paul Erath of the Champions GC, Bolivar, Pa., was elected first vp; John Gaucas, Van Schaick Isle GC, Cohoes, N. Y., was made second vp and Denny McGonagle, Elks CC, Hamilton, Ohio, was re-elected secretary-treasurer. The election preceded the association’s 27th and largest tournament with a field of 428, with prize money being $35,000 and the winner getting $3,000, the Teacher’s trophy and a trip to Britain to play the British senior champion.

The Senior’s banquet, held at Palm Beach Towers, also was its largest. Retiring president Cliff Good conducted the affair briskly with brief talks by Ronald Teacher, Paul Erath, Cary Middlecoff and Herb Graffis. Middlecoff was at the tournament to test it for TV.

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