

# Supts. Use of Research; Theme of GCSA Conference

By HERB GRAFFIS

**M**ORE THAN 700 superintendents, turf research, and equipment and supply men applied themselves to the plain and complex problems of golf course operation at Miami, Fla., Jan. 3 to 9. The 25th turf conference and equipment exhibition of the Golf Course Superintendents' Assn. of America which engaged these men, and which had as a sideline an interesting entertainment program for almost 250 of their wives and children, again warranted the GCSA verdict of "best" on the steadily increasing value of its meetings.

For the first time the supts.' organization held its national meeting in the south and not only answered requests of southern turf men to make the association's program truly national but, in acquainting northern and central supts. with some southern turf maintenance difficulties and triumphs, showed broad, enlightening close-ups of remarkable progress in course condition.

The south was further spotlighted by the GCSA in the election of Norman C. Johnson, San Jose CC, Jacksonville, Fla., as president to succeed Leonard J. Strong, Saucon Valley CC, Bethlehem, Pa. Johnson had a highly successful background as supt. on northern courses prior to his excellent operation in Florida.

Wm. Beresford, Los Angeles (Calif.) CC, was elected vp. Agar M. Brown, who has very ably served the association for years as its sec.-treas. was re-appointed.

New directors elected are Earl S. Bell, Armour Fields GC, Kansas City, Mo.; John Gormley, Wolferts' Roost GC, Albany, N. Y.; and Paul Weiss, Lehigh Valley CC, Allentown, Pa.

Florida Assn. of Golf Course Supts., co-

sponsors of the convention, saw to it that the visitors were taken around to see the Miami area's famed courses and that visiting supts.' wives and youngsters got samples of vacationland as partial payment for not complaining about daddy having to be on the job long hours and seven days a week, often at the cost of a normal family life.

## Research Application Is Theme

Keynote of the educational conference was sound application of turf research. In almost all addresses on grasses, weed and insect and fungus pests and other phases of turf management, stress was placed on individual judgment in the use of basic findings of research.

The conference opened promptly at 9:15 a.m. Jan. 7 with invocation by Rev. Wayte Fulton, Jr. of Miami's First Presbyterian church. Pres. Leonard J. Strong briefly reviewed the association's contributions to improvement of courses and American turf in general, and to the increase of golf play and enjoyment.

Warren Bidwell, Seaview CC, Absecon, N. J., chmn. of the opening session, introduced Willard M. Fifield, director, Florida Agricultural Experiment stations. Fifield outlined the principles of turf research and tersely referred to the complex factors of water, light, temperature, soil, plant food and diseases that figured in practically every phase of the scientific search for improved turf.

## Using Weather Forecasts

Henry M. Tonkin, Jr., meteorologist of the U. S. Weather Bureau at Miami spoke of the use of weather forecasting in course maintenance as the less dramatic but tre-



—Hinman Photo

Officers and Directors for 1954 of the GCSA elected at the annual meeting held in conjunction with the 25th National Turf Conference and Show in Miami during the first week in January. Front row, (L to R): Andrew A. Bertoni, Dir., Meadowbrook CC, Northville, Mich.; William Beresford, V-Pres., Los Angeles (Calif.) CC; Norman C. Johnson, Pres., San Jose CC, Jacksonville, Fla.; Robert Williams, Dir., Beverly CC, Chicago, Ill. Back row, (L to R): Agar M. Brown, Sec.-Treas., St. Charles, Ill.; Colin Smith, Dir., Shaker Heights CC, Cleveland, Ohio; Earl S. Bell, Dir., Armour Fields GC, Kansas City, Mo.; John A. Gormley, Dir., Wolferts Roost CC, Newtonville, N. Y.; and Paul E. Weiss, Dir., Lehigh CC, Allentown, Pa.

mendously important employment of a fairly reliable art and science.

Tonkin said nobody can predict weather with high accuracy any longer than 48 hours in advance but Weather Bureau 5-day forecasts and 30-day outlooks provide valuable guidance as weather in most areas follows a repetitive pattern. He advised supts. to secure weather forecasting data available from the Bureau's 14 district offices and from Washington. This material, he said, provided information on high, low and average stages of weather factors and enabled a supt. to plan his work with reasonably good adjustment to a 30 day outlook. He said that "Climate and Men" published by the Government Printing Office at Washington contained much valuable information for supts.

In response to a question Tonkin said that a supts.' own observation and experience on cloud formation and wind direction as local weather forecasting was quite reliable in forecasting.

Frank Godwin, professor of marketing, University of Florida, delivered a highly amusing and instructive address on the little things that count in selling and public relations. He urged that supts. know the names of their members or frequent players on pay-play courses. He also said that the attitude of the prospective buyer generally was a reflection of the attitude of the fellow who was trying to sell his own

personality or an idea and urged that supts. keep this thought in mind in developing their own status.

#### Berg Judges Course Care

Patty Berg, first of the professional stars ever to address a GCSA convention, was introduced by Joe Dey, USGA executive secretary.

The energetic and competent Miss Berg told of being grateful to supts. for providing facilities that not only were materially favorable to good golf play but which supplied psychological aids to better scores in beautiful turf, landscaping and grooming of courses.

Patty said that the golfer who enjoys the game most regards the course as another home and shows toward the course the same consideration one would exhibit in keeping a home attractive. She expressed appreciation of the supts.' problem with untidy players.

Her talk pioneered along lines that is great public relations for topnotch pros as well as fine propaganda for supts. It appears on page 44 of this issue of GOLFDOM.

#### Supts.' Publicity Needs Care

The publicity aspect of the golf course maintenance job was treated in an excellent address by Frank Dunlap, Country Club of Cleveland, and pres., Cleveland District GCSA. Dunlap declared that local association activities coordinated with national GCSA activity was the groundwork

of effective publicity for the individual supt. and his profession.

Dunlap reminded the supts. that as they are in big business they must develop more big business techniques, among them the capacity of clear expression orally and in writing. He advised that records be carefully kept and budgets prepared 30 days in advance of the close of the club's fiscal year. He also said that the supt. can't do the required job of business operation without the club's monthly financial statement as a control.

He urged that a supt. pay attention to personal appearance in identifying himself with expert management. He also strongly recommended that supts. address garden clubs and other groups interested in outdoor beautification and to become associated with civic organizations.

Dunlap remarked that collaboration with various turf research activities had done much to win wider recognition for supts. as foremost practical turf specialists. He added that the meetings and dinners at which supts.' associations were hosts to club officials had been decidedly effective in getting recognition and understanding for the men in charge of course maintenance.

#### Asks Press Agent for Supts.

In commenting on rare mention of supts.' work in general magazine, newspaper, radio and television copy Dunlap said, "We have been talking about adding the services of an agronomist to the valuable services now available in this field. What we now

most need in additional personnel is a publicity agent."

Dunlap's blunt remark was justified by failure to get any more than bare minimum of coverage of the GCSA convention in Miami newspapers although there were numerous possibilities for news stories of national and regional interest in the meeting. Advance copies of conference addresses, customary in operations of other technical, professional and business organizations were not provided for release in newspapers and other media, and no radio or TV interviews with course maintenance experts of national reputation were arranged.

Now that the majority of first class clubs include their supts.' convention expenses as essential and profitable elements of the maintenance budgets the Dunlap advocacy of expertly organized and conducted publicity scored with the supts. who heard him. The publicity on a remarkably interesting and valuable business conference of supts. in Miami was probably about the same kind of a job as a golf course would be if maintained by a publicity specialist.

#### Management Is Prime Improver

Marvin H. Ferguson, southwestern regional director, USGA Green Section, emphasized that wise management rated higher than improved grasses in bettering condition of golf courses. Ferguson said that the recognition supts. have won is the result of their turf being better than that of surrounding areas. He reminded supts. that "improved" grasses are improved in

*(Continued on page 72)*



Robert F. "Red" Lawrence welcomes fellow superintendents attending the National Turf Conference and Show as he takes them on tour of great course he has at Indian Creek CC.

lent work in professional golf activities was responsible for the establishment and growth of one of the finest pro golf divisions in the company. During his career with Wilson, Bob won the respect and affection of the entire industry, particularly in the eastern part of the country.

He is survived by his widow Elsie, and by his son Robert who is also a member of the Wilson staff in New York.

### Fred Halloran Dies

Fred J. Halloran, for the past 22 years a member of the sales and service staff of George A. Davis Co., Inc., Chicago, died suddenly January 6, 1954, at the age of 54, after a brief illness. Born on an Illinois farm, Fred worked at a variety of jobs after leaving school until he joined the Marines, with whom he served in France in World War I. Upon his discharge he came to Chicago and began his turf field work as a power mower salesman. Fred won a host of close friends throughout Chicago's golf and park maintenance fraternity, particularly those of the North Shore district, who regarded his able, ever ready and sincere team-work one of their most valuable assets. He is survived by his widow, Frances, two sons, two daughters and a grandchild.

### Supts.' Use of Research

(Continued from page 32)

one or two respects usually but in other respects may be no better than existing strains.

Ferguson said that not one of the 100 experimental strains pass tests warranting their release and even after these approved strains are available they require informed expert management. He referred specifically to Merion bluegrass resistance to helminthosporium and the hardness of U3 Bermuda in cooler climates as factors recommending the varieties in certain sections. He pointed out that varieties are not tested in every section before their release hence require adjustment by management to many localities.

Ferguson stressed that the finer-leaved Bermudas require special management techniques, especially in controlling their tendency to form thatch. Natural selection is the most important of the grass breeder's tools, said Ferguson in counseling supts. to be on the watch for grasses that are doing particularly well on their courses.

He said there was a parallel between a

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great racehorse and grass in that the horse and the grass both might have breeding from championship stock but both required expert training and management.

Problems of cool and warm season grass management vary so much and are in such large and important geographical divisions that the GCSA convention held two group sections Jan. 8. These sessions will be covered in the March issue of *GOLFDOM*.

### Efficiency Rating Suggested

The final joint session of the conference, under chairmanship of Ward Cromwell, Lockmoor Club, Grosse Pointe, Mich., led off with a thought-provoking address by James R. Watson, Jr., Toro Mfg. Co. agronomist, in which Watson proposed that a supt. might rate the efficiency of his operations by studying the possible preventable waste in his operating procedure.

Watson's paper is on page 54 of this issue of *GOLFDOM*.

### Policy Cause of Poor Turf

O. J. Noer, Milwaukee Sewerage Commission's widely known, widely traveled turf expert, summarized in his usual thoroughly practical manner, his observations and judgments of turf experiences in 1953.

This durable and helpful authority said maintenance of courses in central and

northern states is complicated by lack of enough men on year-around employment basis. Neglect of winter or early season work is a frequent cause of midsummer trouble, Noer asserted. By the time a supt. gets seasonal help or kids trained it's too



Marcus List, Glengarry CC, Toledo Ohio, receives from tournament chairman Jim Thomson cup presented by the USGA to the winner of the championship flight of the annual GCSA Tournament held this year for the first time in conjunction with the annual Turf Conference and Show. The 36 hole, two day event was played over the Plantation CC course, Ft. Lauderdale and the Miami Springs CC course at Miami.



## 1954 TURF CONFERENCES

- Feb. 8-9—ANNUAL CONFERENCE OF MID-ATLANTIC ASSN. OF GC SUPERINTENDENTS, Lord Baltimore Hotel, Baltimore, Md. E. N. Cory, Director.
- Feb. 15-18—PENN STATE TURF CONFERENCE, Pennsylvania State College, State College, Pa., H. B. Musser.
- Feb. 22-25—7th ANNUAL CORNELL TURF CONFERENCE, Cornell University, Ithaca, N. Y.
- Mar. 1-3—MID-WEST REGIONAL TURF CONFERENCE, Purdue University, Lafayette, Ind. W. H. Daniel.
- Mar. 8-10—20th ANNUAL IOWA TURF CONFERENCE, Iowa State College, Ames.
- Mar. 11-12 — MASSACHUSETTS TURF CONFERENCE, University of Mass., Amherst.
- Mar. 10-12—MINNESOTA TURF CONFERENCE, Curtis Hotel, Minneapolis.
- Mar. 11-12—MICHIGAN TURF CONFERENCE, Kellogg Center, Michigan State College, East Lansing, Mich.
- Mar. 15-16—OHIO STATE TURF CONFERENCE, Ohio State University, Columbus.
- Mar. 17-19—5th CENTRAL TURF MEETING, Ontario Agricultural College, Guelph, Ont.
- Mar. 29-30—3rd WESTERN TURF CONFERENCE, University of Saskatchewan, Saskatoon.
- Apr. 5-6—SOUTHERN TURF ASSOCIATION ANNUAL MEETING, Jackson (Miss.) CC.
- Apr. 21-22—8th ANNUAL SOUTHEASTERN TURF CONFERENCE, Tifton, Ga.
- Aug. 5-6—UNIVERSITY OF FLORIDA TURF CONFERENCE AND FIELD DAY, Gainesville.
- Aug. 19-20—23rd ANNUAL RHODE ISLAND TURF CONFERENCE AND FIELD DAYS, University of Rhode Island, Kingston.
- Oct. 4-5—SOUTHERN CALIFORNIA CONFERENCE ON TURF CULTURE, University of California, Los Angeles.
- Oct. 4—FIELD DAY, Oregon Experiment Station, Oregon State College, Corvallis.

### OTHER MEETINGS

- Feb. 7-10—CLUB MANAGERS' ASSN. OF AMERICA ANNUAL CONVENTION, Atlanta Ga.

late to do much good.

Noer, who deservedly enjoys confidence of chairmen as well as of supts., blamed top management policy's failure to make golf course jobs comparable with those of industry generally in pay and security, for wasteful and unpleasant turf conditions at numerous courses.

He remarked, parenthetically, that on an hourly basis the pay of many supts. might be less than the average pay of the help.

He said that the bents are moving south but he thought that it would be a long time, if ever, before they justified headaches, vigilance and expense south of Atlanta. He said the better types of natural warm season grasses were the south's best bet, but spoke of excellent performance by C1 and Old Orchard in locations where elevation and/or dryness were favorable.

Noer cited work by Charley Danner in modifying texture of existing soil as an example of what is being done on the fundamental job of improving soil. He also told of work being done in improving drainage to move excess water out fast.

He gave a quick round-up of work done by Hoerger, Hall, Tift, Robinson, Burton,

Baer, Nutter, Watson and others in discovering and breeding grasses that have figured in the tremendous improvement of southern courses. He said that the first thing to look for in a new grass is player acceptance for the strain, then disease and insect resistance.

### Other Turf Zones Surveyed

Noer also concisely surveyed turf conditions in the northern and intermediate zones, pointing out that able management was the prime factor in getting any good strain to perform in its best manner. He told of U3 Bermuda in Pine Valley fairways with dye spraying to provide color. He thought that in some cases use of dye might be added to mowing as a labor factor in adapting warm season grasses to play farther north.

Merion bluegrass, he said, has accounted for some very fine areas but when seeded into established strains or mixed with aggressive grasses doesn't behave too well. Cases of rust on Merion, Noer believed, have been aggravated by too much watering.

In northern and central areas Noer said fairway trend was strongly toward bent because it would stand watering and close

mowing. He observed that promiscuous use of 2,4-D was damaging bent fairways and encouraging weed invasion.

In telling about fungicide advances Noer reminded supts. that fungicides can't correct what is fundamentally wrong in construction and/or maintenance.

Trouble on greens aprons Noer said was common in 1953 basically because of friction from mower drums bruising the turf when it is wilting. He said power greens mowers are being operated too fast just as fairway mowers were when corrugated fairways were a common complaint.

#### Architecture, Maintenance Coordinated

Supts.' keen interest in golf architecture from the maintenance and shot testing perspectives was made manifest in the extensive question and answer session that fol-



Joseph Reposkey (R), Talbot CC, Easton, Md., won the playoff for the Goldom trophy presented to the winner of the Pro-Supt. flight from Jack Thompson, Tippecanoe CC, Canfield Ohio, following tie scores of 146 at the end of the regulation 36 holes of play. Tournament chairman Jim Thomson, Mohawk CC, Schenectady, N. Y., is shown at the "mike" in the background.

lowed Robert Bruce Harris' talk on "The Impact of Course Design and Construction on Turf Management."

Harris illustrated his talk with black-board sketches showing examples of right and wrong in design and construction.

He said that the trapping problem was one testing the genius and restraint of the architect as too many and poorly placed bunkers penalized players and budgets heavily and unnecessarily.

In a diplomatic way he got across the idea that considerable of the useless bunkering was the result of architectural features dictated by inexperienced judgment. Supts. agreed with him that it was economy in money and headaches to have course ar-

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chitecture planned by architects instead of leaving the chairmen and supts. on the hook.

Harris said that poor selection of sites accounted for many troubles in maintenance and play. The rugged, ravine-scarred "sporty" sites so popular in the '20s don't go today, nor does the selection of sites without soil sampling where a variety of soils is available in a locality.

### Machines As Architectural Factor

He referred to the architects' awareness of the essential character of machine maintenance today and said that course design to meet machine maintenance requirements without sacrificing interesting and testing shot problems presented architects with a sharp challenge to their abilities.

Harris urged large tees with easy slopes that could be handled for the most part with fairway mowers. He also stressed greens contouring with thorough consideration of drainage, watering and mowing problems as well as of shot-making factors.

Modern machinery's larger, faster and more adept work in handling earth has made it possible to construct or alter courses with fine results and without prohibitive costs, Harris remarked.

Harris observed that numerous excellent



Team championship of the annual GCSA tournament was won by the Cleveland dist. team composed of (L to R) Mike Sopko, Pine Ridge GC, Wickliffe; Lorn Parrish, Worthington GC, Parkersburg, W. Va.; Jack Thompson, Tippecanoe CC, Canfield; and Howard Simmons, Highland Park Municipal GC, Cleveland, selected over Lester Bishop, Edgewood GC, North Canton, on the flip of a coin.

dogleg holes had been ruined architectural-ly by failure to follow the fairway mowing lines the architects had designed. He recommended that supts. and green chairmen consider this element in planning work.

Harris also advocated strategically





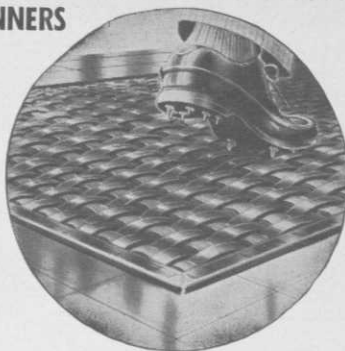
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placed groups of large planting of native material rather than small trees and shrubs.

How to measure a golf hole was one subject of lively discussion after the Harris address. The Rules of Golf book in giving information on measuring par directs correct general procedure in measuring. But reference to measuring along "line of play" is confusing due to uncertainty about line of play. On dogleg holes because of championship play calling for longer carries than usual play, the championship distance may be shorter despite tees being placed farther back, than the line of play for most golfers.

### Johnson Tells of LA Public Golf

Wm. Johnson, supt. of Los Angeles Park dept.'s 7 course system (to which 4 courses are being added), told of the policies, planning and operation the LA system has devised to contend with a serious shortage of public courses in the area.

Johnson remarked that metropolitan Los Angeles now has 20 fewer courses than 25 years ago and has 13,000 registered to become able to play its munny courses on Saturdays, Sundays and holidays. The capacity

of the LA munny course on any one day is 3580. He said that the demand for golf is so strong that 9-hole, pitch-and-putt, or 6-hole courses must be installed when the traditional 18-hole courses can't be provided soon.

The Johnson paper, reflecting a great deal of close, valuable cooperation between Johnson, George Hjelte, LA supt. Recreation and Parks, and other teammates in first class conduct of an important civic asset, will appear in full in GOLFDOM.

The conference was briefly summarized by Marvin Ferguson, USGA Green Section, in high-spotting each address.

Wm. H. Daniel of Purdue university presented a parallel between a football team and the organization for better turf.

He placed the chairman as the center who passes the ball back and initiates the play. The supt. is the quarterback who calls the play. The tackles are the equipment; mowers, sprayers, tractors, ball washers, etc. The guards are the fungicides and other chemicals. The ends are the research and extension men. The halfbacks are the grasses and the fertilizers and the fullback,



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Daniel made it plain that the turf team, like the football team, had to work together with every man being good and filling his assignment or there'd be no victory.

He cited research problems involving complicated factors that had the quarterback (supt.) calling on an end (research) for making the distance. He mentioned that on poa annua research alone there were over a thousand different tests being made at Purdue.

## Water, Weeds Waste Budget

*(Continued from page 56)*

structure and uniformity) governs the infiltration, retention and movement of moisture in the soil medium, controls the air-water relationship, and along with the chemical properties, determines the type of vegetation that grows most satisfactorily under a given set of climatic conditions.

A brief listing of a few of the many and

varied ways in which the soil influences watering practices, and thereby has a direct bearing on the subject of weeds and waste, may serve to illustrate its importance.

Physical properties — Texture (particle size) should be variable to prevent packing and promote drainage. Structure (arrangement of particles) should be granular and well aggregated to insure variable pore size distribution which promotes desirable air-water relationships. Such is desirable because:

(1) Compacted and poorly drained soils favor invasions of clover, knot weed, chickweed and pearl wort; (2) Compacted and water-logged soils restrict the development of deep root systems; (3) Layers of sand, clay or organic matter interfere with normal air-water relationships and contribute to poor root development; (4) Good drainage helps counteract effects of excessive rainfall — prevents water-logging; (5) Hand watering may be required when greens are not properly graded or are not uniform in texture and structure.

Chemical properties — (1) High nitrate levels, coupled with excessive water, produce succulent turf which is more susceptible to disease and insect injury, with subsequent invasion of weeds; (2) Improper balance of nutrients may favor weed invasion — Clover thrives under low nitrogen and high mineral element levels; (3) Excessive watering leaches nitrates from the soil; hence, weakens turf or necessitates the use of additional nitrogen fertilizer, either of which may be uneconomical; (4) Too low or too high a level of lime brings about unfavorable chemical situations which weaken turf and favor weed growth.

### Waste in Relation to Climate

Essentially, the only climatic factor over which man may exert direct control is rainfall. Man may alter the effect of rainfall in two ways. First he may irrigate if rainfall is deficient, and second, he may provide for rapid removal of excess rainfall by proper surface and subsurface drainage, and by altering the texture and structure of the soil, insure effective percolation of the water. By choosing an adapted grass, man may indirectly offset the adverse effects of temperature and air movement to a rather limited degree.

Syringing of golf greens during periods of high temperature and wind movement may prevent loss of turf. Loss of turf from desiccation (winter kill) may be avoided by proper water application in early spring. Judicious use of water during periods of

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