COST AND RECORD KEEPING — expenditures, payroll, material application, weather, etc.

REPORTS — written weekly progress, long term plans, annual plans, meetings, etc.

STRUCTURE MAINTENANCE — service building, shelters, fencing, pump house, bridges, etc.

PROGRESSIVE EDUCATION — publications, conferences, schools, associations, field testing, meetings, etc.

COOPERATION — committee, golfers, manager, pro and caddymaster, superintendents, etc.

KNOWLEDGE OF GOLF — participation, reading, conversation, spectator, etc.

EQUIPMENT — purchase, storage, maintenance, inventory, operation, selection, etc.

BUDGET — preparation, presentation, execution, etc.

The above outline makes a good guide for the supt. In appraising his qualities as an operating executive, responsible for a big and basic investment in golf property. It also gives club officials an idea of the extensive and vital scope of the supt’s work.

Remarks of supts. who spoke in this section of the program appear elsewhere in March GOLFDOM or will appear in future issues.

Robert E. Scott, Jr., Bonnie View CC, Baltimore, Md., marshalled the research experts who reported on the high spots of new developments in research with Dr. Marvin F. Ferguson, Southwestern Director, USGA Green Section, College Station, Texas, serving as moderator. Superintendents were treated to a comprehensive roundup of the latest developments from north, east, south and west in one of the most compact and enlightening sessions of the conference.

Dr. James R. Watson, Jr., Agronomist, Toro Mfg. Corp., reported recent findings in studies made by graduate student Raymond Kunze at Texas A. & M. College and Dr. O. R. Lunt, Dept. of Irrigation and Soils at UCLA to determine mechanical composition of a soil mixture which resists compaction yet produces good turfgrass growth. Conclusion reached by Kunze in his study was that a mixture containing 80 to 85 per cent sand, 5 to 10 per cent of a well aggregated clay soil and 10 per cent peat most nearly met the requirements set forth. Tests made by Dr. Lunt showed maximum compaction occurred in the top inch.
and one-half of soil on putting greens and also that a four inch layer of sand on top of a soil susceptible to compaction would protect the soil underneath from compaction. Lunt pointed out that in building a green over which a sand layer is to be placed, preparation of the underlying soil is important; it is not necessary to mix sand with the underlying soil, fertilization program will have to include frequent applications and indications from the experimental green at UCLA are that two irrigations per week are adequate to support growth during hot weather.

Watson also reported developments in the work on snowmold control. In summarizing he referred to the work of Dr. J. B. Lebeau at the Univ. of Alberta, Edmonton, Canada and the emphasis placed on the fact snowmold is a general term applying to a disease which has many casual organisms and because of these different organisms control measures may differ in various geographic areas. This explains in part why some fungicides may perform satisfactorily in one area and give poor control in another.

In a rapid fire presentation using slides to fully illustrate his discussion, Dr. Gene Nutter, Turf Technologist, Dept. of Orna-

mental Horticulture, Univ. of Florida, gave a complete roundup of the research being carried on at the University and at Tifton, Ga., Experimental Station to help solve the problems in Southern turf management with special attention being given to nematode and weed control study.

Dr. Ralph Engel, Associate Research Specialist in Turf Management, Rutgers Univ., New Brunswick, N. J. reported on work being done at Rutgers and in the Northeast. He warned superintendents many new ideas and new chemicals today are being developed and that often premature use of these new materials may prove costly. Two or three seasons or more are needed to prove a given material or practice. If mistakes are to be made make them on test plots. If new products or materials are tried take the conservative approach until assured of favorable results.

A summary of investigations and studies being made on controls of new diseases and uses of new compounds gathered from many sources was presented by Dr. William Klompares, Plant Pathologist, The Upjohn Co., Kalamazoo, Mich. New results as well as old recommendations were tabulated by Klompares on at least a dozen of the more common diseases. This
tabulated information was distributed to those present and is available on request.

Contributions research have made to golf course maintenance and reports of the practical application of new developments were made by regional directors of the USGA Green Section. Charles K. Hallowell reported from the Mid-Atlantic, Alexander Radko from the Northeastern and William Bengeyfield from the Western Region.

In closing this most informative session Ferguson pointed up the need for more research. Every new day presents more problems to be solved. In a national economy of better than $400 billion industry reportedly spends approximately $4 billion or one per cent on research. Better than $100 million is spent annually on golf course turf maintenance. At the same rate, at least $1 million should be going into turf research but according to Marvin not more than one-fifth that amount is being spent.

Thursday afternoon, Ralph Zegarac, Sunnyside GC, Waterloo, la. conducted the session which opened with Dr. William H. Daniel of Purdue University and Midwest Turf Foundation giving the supt. case histories on learning from experience. He cited instances of zoysia, bent and Bermuda use under comparable conditions in St. Louis, Evansville and Ft. Wayne, Ind., which would eliminate expense of time and money in event tests of the grasses were made independently in each city.

Daniel urged that more attention be given to examining the experience of other supt.s, and conditions under which their experience was gained, before making major changes in maintenance or construction programs.

The Purdue agronomist told of the need of improving watering practices and of making more use of soil moisture measuring devices. He commented on growth of soil sterilization in golf course work. Daniel showed views of research work at Purdue's test plots and remarked that 60 varieties of Kentucky bluegrass are being tested.

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No need for Green Chairmen or Golf Course Superintendents to continually shoulder the blame for greens having those ugly ball marks.

Provide your golfers with this inexpensive tool and have 200 to 400 men and women help maintain those beautiful and expensive greens. Our many repeat orders prove that this little tool has a definite place on all golf courses. This tool can be used as a shoe horn—to clean dirt from spikes and upper soles of shoes; also clean scoring from club heads.

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Ten percent of order in small individual envelopes with printed directions. Extra envelopes one cent each.

Ten dollars for imprinting name of firm or club. Limit of 26 letters and spaces for upper; 29 for lower line. Imprinting on one side only.

WOODSIDE GOLF & PARK SUPPLY CO.

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March, 1957
Garber 5 ft. seeder-fertilizer spreaders

Can be used with any 2 or 4 wheel garden tractor—

The Garber 5 ft. seeder-fertilizer spreader quickly attaches to any type tractor you may own. If it's a two-wheel model, you ride right on the hopper. The gate control is located on the tongue—within easy reach of the operator.

A COMPLETE LINE OF PUSH AND PULL TYPE SEEDER-FERTILIZER SPREADERS

Moffitt Speaks

Harry Moffitt, PGA pres., extended greetings from the pro organization to the supts. and stressed the importance of cooperation between the two department heads. Moffitt said fullest use should be made of the pro's contact with players to acquaint the latter with the problems and achievements in course maintenance work. Harry pointed out that if the player enjoys a game on a well-conditioned course, he is a good customer for the pro shop. He also stated that where club finances call for a combination job, the man on that job has to have the course in good shape before he can operate as a pro.

"Golf Cars — Friend or Enemy?" was the exciting, practical topic presented by William J. Freund, sales mgr., Electri-Car div., Victor Adding Machine Co. Freund asserted the car situation is settling down and 23 companies are making golf cars today rather than the 43 active in manufacturing a year ago.

The Victor sales mgr. reported that the trend is to have the supt. made responsible for cars from the 18th green until they arrive at the first tee, ready for action, and for the pro to be responsible while the car is on the course.

Freund reported that the division of revenue from golf cars is frequently under discussion and that the supt., whose work and results are most directly affected by golf car use, must be considered in these discussions.

There was spirited discussion following Freund's address. Paths, if provided for golf cars, it was pointed out, should be half again as wide as the widest car, laid out with golf architecture in mind so a ball won't hit or rest on a car path, and be free of wide, sweeping curves so a tendency won't develop among players to take short cuts. The possibility of getting tires, designed for golf cars, was also mentioned.

The conference concluded Friday morning in a "wrap-up" session launched by Ralph Guyer, Westborough CC, Webster Groves, Mo.

Charles G. Wilson, agronomist of the Milwaukee Sewerage commission summarized the conference in a masterly condensation of each talk.

The finale was a Question and Answer period which presented as experts, supts. who had talked as members of the panel, which had discussed "Responsibilities," and turf panel experts who reported on "New Developments in Research."

(Continued on page 130)
Support for Tax Repeal
(Continued from page 39)

merits of the bill and encouraging full support.

Fewer Private Clubs

It is not generally known but the present 20 per cent tax on assessments for construction and improvements has been a more far reaching deterrent to the development of new private clubs than is realized. So much so that there are fewer private clubs today than at any time in the past 25 years. In 1931 with a total of 5700 golf clubs in the United States, 4448 of these were private clubs. Today, with a total of less than 5400 golf clubs, there are only 2801 private clubs — an alarming downward trend. At the same time and during the same period, the number of public courses, i.e., privately-owned fee courses, has more than doubled. There are now 1692 compared to only 700 in 1931, and there are now better than 870 municipal courses where there were only 543 in 1931.

Certainly this heavy tax has had a telling effect; not only stifling construction of new facilities but in denying a very desirable segment of our population (the nation's young men) club memberships. In the words of Golfdom's editor, Herb Grafis, "you can be confident that any competent study of this tax on 'the pursuit of happiness' would show that passage of the proposed bill would result in an overall and logical increase in tax revenue from recreation activities — particularly private golf clubs."

Specifically, the bill under discussion, if enacted will amend section 4243 of the Internal Revenue Code, adding the words, "notwithstanding any other provision of this part, there shall be exempted from the provisions of section 4241 any assessment paid for the construction of any social, athletic, or sporting facility (or for the construction of any capital addition to, or capital improvement of, any such facility)."

"Actually, as Rep. Curtis says, "this bill will be of considerable benefit to many groups besides golfers. Hunting and fishing clubs, bowling clubs, etc., are all affected. Organized labor is interested in the bill because of the numerous clubs they have and the undue cost in the original capital investment due to the tax ... It will be a great boon to millions of Americans."

Every club must act now. 2800 private

Roughs Look Smoother
WHEN MOWED WITH A
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- 12 Models...for every tractor
- Mows grass, shreds brush, mulches leaves
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Your roughs will look neater when they're mowed with a Wood's Rotary. No more ragged corners...no matted tall grass or missed weeds. Fewer stops, too — mower doesn't jam when it hits tin cans, lost balls or other obstructions. The Model 80 takes nearly a 7-foot swath, cuts up to 4 acres an hour. Ideal for any large acreage weed mowing, brush cutting—leaf mulching, too. Maneuvers easily around banks and ditches. More dependable and less expensive than reel-type or sickle bar machines.

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March, 1957
White Grubs, Cutworms, Ants, Chiggers, Earwigs, Chinch Bugs, Mole Crickets, Japanese Beetle Larvae, Sod Webworms (Lawn Moths) ... hlordane kills 811 of them ... and prevents mole damage. That's why you can't go wrong with Chlordane ... it help keep turf green and healthy a credit to your good management, all summer long.

To help give your greens and fairways the "cared for" look, use Chlordane to kill turf insects.

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Please send me your new FREE Lawn and Garden Insect Folder, and Turf Insect Folder.

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clubs must act now. Rep. Curtis introduced a similar bill in the last Congress which got nowhere because of a lack of interest on the part of the general public. Passage of H. R. 133 should not fail for the same reason.

Members of the Senate Finance Committee and the House Ways and Means Committee are shown in the box on page 89. Write, wire or see your own Congressmen and Senators who may be on these committees and explain to them the merits of the bill. Do it today.

Modernized Drainage, Scald-proof Bent Are Great Assets

By CLIFF DEMING
Supt., Sleepy Hollow CC, Brecksville, O.

Last year's experience at our club strongly confirmed our reasoning which resulted in the modernization of our drainage system three years ago.

We had worked on the belief that drainage installations that had been made years ago in our and other older courses probably were inadequate and obsolete in design. Consequently, we installed 20,000 ft. of drain tile through our fairways.

The cool, wet spring and summer in 1956 found our new drainage system functioning so well the course was playable several weeks earlier than ever before in the spring, the fairways were in fine condition for play throughout the golf year and there was an excellent stand of grass in soil formerly too wet to produce good turf.

I am sure that drainage systems merit a lot more attention than they generally get on older courses.

One thing that worked out very well in our new system was the plan of laying three or four parallel lines lengthwise on a saucer-shaped fairway rather than in herringbone pattern.

Brownpatch Problem Licked

Research done in the fungicide field in the past few years has virtually licked the brownpatch problem so now we have scald as the No. 1 headache when hot and humid weather hits us suddenly after moderate or even cool temperatures.

Poa annua, being exceedingly susceptible to scald, calls for continued and intense research that will point to how we may eliminate that grass, or control it so it can be kept through scalding periods.
Parents' Support Needed in Junior Golf Program

Keeping parents informed of what is going on insures the kind of support and encouragement needed to put over a Junior golf program, says Grant Bennett, pro-supt. of the Florence (S. C.) CC.

"I'm strong for good parent relations," Bennett says. "When I started my Junior program I found that if you try to sell a kid's father and mother on the idea that golf is not only healthy for their youngsters, but teaches him self control and sportsmanship, you've got a real talking point. When I want to put over something special in my Junior program, I put more pressure on one or both of the parents than on the child because after you've got the adults properly enthused, their enthusiasm is transmitted to the child. It makes the job easier."

Bennett, who held offices in both the Carolinas PGA and GCSA, points out that the real secret of running a Junior program is being able to detect when a group of youngsters have become restless and distracted and would rather play Cowboys and Indians than continue swinging at golf balls. He has had them all the way from two to 18 years of age in his Junior setup and has concluded that any pro who can get 10 solid teaching minutes out of 80 has conducted a successful lesson. Another important thing, Bennett says, is for the pro to try to understand the complexes and restraints common among children and then learn how to cope with them.

Saturday mornings are set aside for Bennett's Junior clinics. Children, 11 and under, make up one group and the older ones, a second. Practice emphasis for the younger ones is placed on short iron play; the older kids besides getting instruction in hitting short shots are shown how to handle long irons and woods. When rain intervenes the kids are taken inside to brush up on rules and etiquette which Bennett graphically outlines through the use of imaginary situations and rounds.

For the past several years, Bennett has played a leading role in promoting and staging Junior tournaments in South Carolina. Several of them have been held in Florence. They are divided into three groups with 64 12 to 18-year olds competing for the major title; 16 sub-juniors (9 to 11 years of age) playing for the championship in that class; and eight youngsters (8-years old and younger) vying for pee wee honors.

CUT MOWINGS
CUT COSTS...
with
MH-40

Now, with MH-40, you can actually slow the growth of grasses of your roughs and you can reduce cuttings to as few as twice a season. Think what a saving this means in labor and equipment costs.

Order MH-40 from your local supplier today. Contact us if unable to locate source of supply.

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produces of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap, Duraset.

March, 1957
HERE YOU SEE HOW
THE Greens Air SPECIAL
aerifies compacted turf with bare minimum disturbance to putting green.

HERE YOU SEE HOW
aerified turf responds with a deep, vigorous root system vital to healthy putting greens.

Note in the top action photo, the clean cores ejected by tyne, moving down slides — and the freedom from disturbance to the putting green. On expertly maintained courses in every section of the country The Greens Air Special is proving its turf improvement benefits and its safety, ease and efficiency of operation. The tyne action is straight up-and-down — then the Greens Air automatically moves to the next position.

Precisely cuts and ejects cores from perforations of ½ in. diam., to depth of 3 in. or more, 2 ins. apart. 90,000 holes to 1,000 sq. ft. at rate of 5,000 sq. ft. in 2 hours.

Write for information and nearest dealer.

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What's New

Products and Personalities

Spikleen—Spike Shoe Cleaner
A new item that should fill a definite need at tees and lockerroom entrances is being marketed this spring under the descriptive name "Spikleen." The device, shaped like the sole of a shoe, is made of cast aluminum with 3/8 in. cleats positioned to permit passage of spikes while cleaning them and shoe soles. Perforations in plate permit drop-thru of dirt. Spikleen are mounted on legs of strong, aluminum tubing with pointed ends and bent to assure installation of plate at comfortable angle in the turf. An aid to firmer footing on the tee Spikleen will put a stop to dirt tracking into the pro shop and lockerrooms. Price and literature from makers: Spikleen Co., 10 Warren Rd., Maplewood, N. J.

Bowen & Hull 1957 Catalog Presents
Wm. Joyce Shoes in Color
In a handsome, practical catalog just off the press, Bowen & Hull, Inc., 81 Masonic Place,

TEE MATS
★ For the FINEST, LONGEST-WEARING and MOST ECONOMIC Tee Mat on the Market! Nationally acclaimed by golf clubs and ranges as the best buy. ★ SEND TODAY FOR LOW PRICES
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FLOOR MATS FOR EVERY PURPOSE

PREVENT ACCIDENTS
INSURE A SAFE, NON-SLIP FOOTING on smooth or wet floors or inclines even with spikes. Ideal around pools, in shower rooms, pro shops and locker rooms.
BEAUTIFY ENTRANCES
grills and toprooms.
PROVIDE COMFORT UNDERFOOT
RETARD FATIGUE when used back of bars.
REDUCE BREAKAGE when used in kitchens and in drainboards.
KEEP DIRT OUT
REDUCE CLEANING
CUT DECORATING COSTS
PROTECT CARPETS

Send for free catalog and prices.
AMERICAN MAT CORPORATION
"America's Largest Matting Specialists"
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Pasadena, Cal., pictures its new models of Wm. Joyce golf and casual shoes in natural color, with description and prices appearing on the facing page. On heavy coated stock with durable cover, spiral bound, the "shoe style show in print" is designed for customer pass-around, pro shop use as well as for pros' ready reference. Included is a page devoted to 12 different leather colors to guide golfers in selection of shoes to their individual color preferences.

Name Labels Stop Club Loss
Pro will note a slight change in the Wether-Prof Name Labels this year. The widely-used club identification band is narrow in width yet provides ample space for club owner's name. Weather, scuff and dirt proof, and quickly applied to adhere tightly to the club shaft just below grip, the labels come 15 to a kit, 12 kits to a counter-card. The item has proved its merit in pro shop operations by protecting against mix-ups and losses on course and in club cleaning. Prices and literature from: S-C Products, Inc., 395 Ronan I., New Haven, Conn.

Brady with PGC
Mike Brady, widely known veteran pro, now is sales rep for Professional Golf Corp. First Flight line of clubs in Florida in the winter and Connecticut and Westchester County, N. Y., in summer.

H. D. CAMPBELL CO.

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H. D. CAMPBELL CO.
Save Club House Floors with spike-resistant pneu-mat runners

Protect your floor from spike holes with rugged Pneu-Mat Runners. Absolutely spike-resistant, they provide a comfortable walking surface — improve the appearance of your club house.


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**Upjohn's Spray Calendar**

**Acti-dione**  
**Acti-dione RZ**

Acti-dione RZ is also effective for controlling Pythium and Large Brown Patch

One of the most talked-about items at the GCSA convention was the Spray Calendar distributed by the Upjohn Co., Chemical Sales Div., Kalamazoo, Mich. The calendar covers the period from April through November and is laid out so the sup't can enter a daily spray record and also note rainfall, temp. and humidity for the day. Copies are available from the Upjohn Co.

---

**Toro Appoints Schulke Institutional Sales Manager**

Donald L. Schulke has been promoted to institutional sales mgr. of Toro Manufacturing Corporation, Minneapolis. Schulke, who had been serving as brand sales mgr., formerly had been affiliated with General Mills, Minnesota and Ontario Paper Co., Gould National Battery Co., and the Firestone Tire and Rubber Co. He joined Toro in 1948.

In his new position, Schulke will be responsible for the planning and development of sales of the large, heavy-duty mowing equipment line, marketed primarily to golf courses, schools, parks, cemeteries, highways and other institutions.

---

**Sanders, Marr Added to Wilson Golf Staff**

Two promising young pros, Doug Sanders and Dave Marr, are newest additions to the golf advisory staff of Wilson Sporting Goods Co., Fred J. Bowman, pres., has announced.

Sanders, first amateur to win the Canadian Open, a feat he accomplished in 1956, turned pro early this year. He is a former national Jaycee champ and also holds two South-eastern Amateur titles. In 1955, Doug won the amateur version of both the World Championship and All-American at Chicago's Tam O' Shanter. As a pro he owns a victory in the Columbian Open, was runnerup in the Jamaica Open and tied for fifth in the Boca Raton Open.

In turning pro at 19, Dave Marr followed in his father's footsteps. He has held assistant's posts at Westwood, N. J., Winged Foot and Seminole (Fla.) GC. His best showing to date came in the 1957 Los Angeles Open when he placed third. Marr has qualified for three National Opens since 1953.

---

**Golf-Swing Wonder Helps to Improve Grip, Rhythm**

Golfers can work on their grip, improve their rhythm and work toward a better swing with the Golf-Swing Wonder, marketed by Bea Gottlieb Golf Ent., 191 7th ave., New York City 11.

The buggy-whip device can be used safely almost anywhere indoors. It features "Twin-Thumb" plastic handle with grooves for the thumbs. Among those who endorse it is Helen Hicks, former national women's champion.