



"I want to be sure of good results so I use AGRICO[®]"

"Over the past three years we've been using the AGRICO Country Club Turf Management Program. And, our greens have a better color, as well as an improved density."

"We've seen a marked improvement in growth and playing surface, throughout the season," says James W. Davison, Supervisor of the Huntingdon Country Club, Huntingdon, Pennsylvania.

If you're not one of the two out of three clubs who use Country Club fertilizers, you'll be interested in knowing more about the AGRICO Turf Management Program. Just call or write your professional AGRICO representative or: AGRICO Chemical Company, Division of CONTINENTAL OIL COMPANY, P. O. Box 346, Memphis, Tennessee, 38101. AGRICO Fertilizers are available in Canada.



AGRICO Country Club Fertilizers

Preferred by professional turfmen.

**TOP QUALITY
GOLF SUPPLIES FOR
GOLF COURSES
DRIVING RANGES
PAR-3 COURSES
MINIATURE COURSES**

Balls, clubs, tees, mats, pails, grips, markers, retrievers, golf bags, obstacles, ball washers, ball pickers . . . and more!



**EASTERN GOLF CO.
2537 BOSTON ROAD
BRONX, N.Y. 10467**

SEND FOR CATALOG

EASTERN GOLF CO. DEPT. G

Please send catalog of golf supplies for:

☐ Golf Courses ☐ Driving Ranges
☐ Par-3 Courses ☐ Miniature Courses

Name _____

Club _____

City _____

State _____ Zip # _____

For more information circle number 109 on card

FRED GRAU

continued from page 20

posal in place. We would like to learn more about this but we don't know where we can get burners. Do you have any suggestions?

(Indiana)

A.—The flaming method essentially is that of 1) dislodging thatch by suitable mechanical equipment, 2) allowing the thatch to dry on the surface of the turf, 3) burning the dry thatch by passing a burner over the area. This has been done in California and Pennsylvania.

Flamers may burn oil or L-P gas. Some work has been done in several states operating flamers to control alfalfa weevil. Several manufacturers offer information: AFCO Flame Cultivator Company, P. O. Box 231, Little Rock, Arkansas 72203; Barrentine Manufacturing Co., Inc., P. O. Box 697, Greenwood, Mississippi 38931; Brunner Manufacturing Co., P. O. Box 559, Bedford, Indiana 47421; Consolidated Manufacturing Co., P. O. Box 1100, Englewood, Colorado 80110; Gotcher Engineering & Manufacturing Co., P. O. Box 670, Clarksdale, Mississippi 38614; Manchester Tank and Equipment Co., P. O. Box 318, Lithonia, Georgia 30058; Western Tank and Steel Corporation, P. O. Box 1338, Lubbock, Texas 79408.

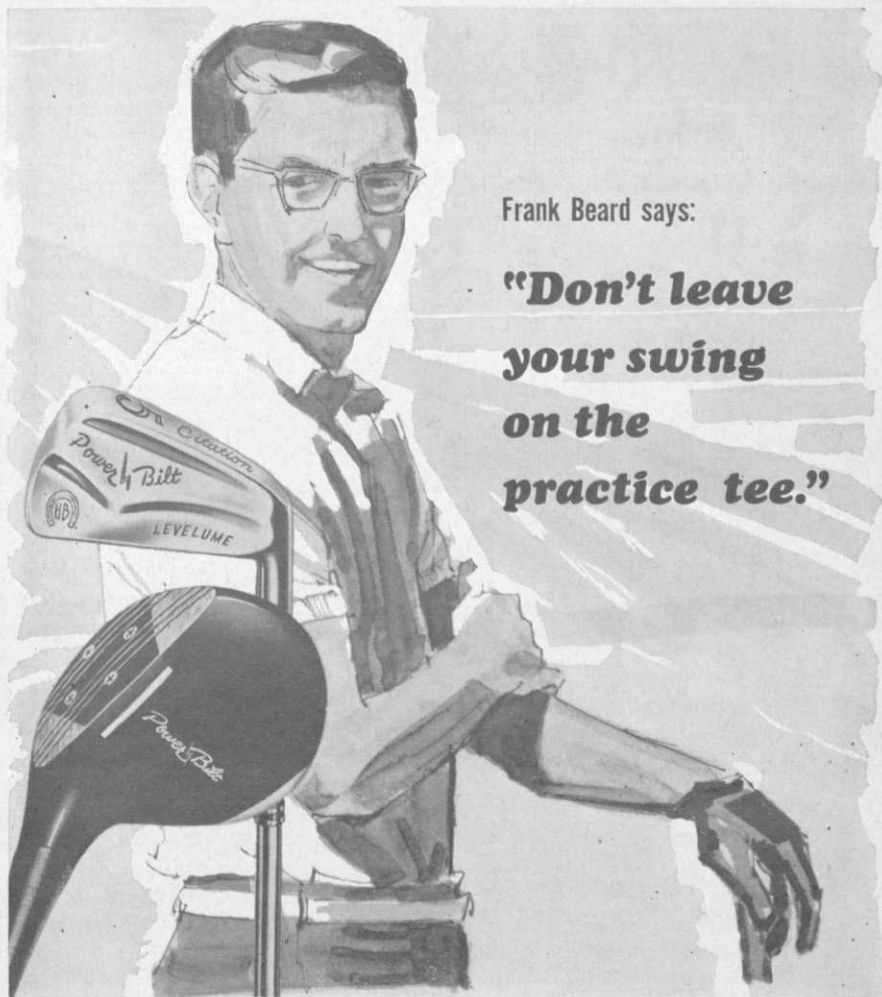
Note: There is no known published information on flaming for thatch control in turf at the present time.

Q.—How effective is overseeding fescue greens with Pennncross bent seed? Is the bent strong enough to take over?

(Michigan)

A.—Pennncross will take over if your operations and subsequent management favor the bent. Thorough spiking will provide resting places for the bent seed. I favor hydroseeding (if you have a good sprayer), and fertilization with a slow-release organic fertilizer. If *Poa annua* is a problem, the takeover will be slower.

Fescue greens are a rarity. Is it possible that they might be good enough to be preserved? •



Frank Beard says:

**"Don't leave
your swing
on the
practice tee."**

With proper concentration and a set of Master-Matched Power-Bilts your members can take their practice tee swing right out on the golf course where it belongs. The big difference between swinging on the practice tee and playing on the course is the switching from one club to another on the course. With Master-Matched Power-Bilts this is no problem, because every club in a Power-Bilt set swings the same. For example, a 2-iron feels and swings just like a 7-iron! So tell your members to have confidence on the course in the knowledge that with Power-Bilts they can play every club in the bag equally well!

HILLERICH & BRADSBY CO.
P. O. Box 506, Louisville, Ky. 40201

Master-Matched
Power-Bilt
Golf Clubs

*Engineered
to Perform
Better*

For more information circle number 104 on card

USGA GREEN SECTION MEETING

Modernizing - when, why, how

Over 400 persons participated in a thorough program covering course renovation to putting green improvement.

By ROGER GANEM

The important matters of when, why and how to modernize the golf course attracted the largest crowd ever to attend a USGA Green Section meeting. The 1967 conclave took place on January 27 at the Biltmore Hotel in New York City.

After introductory remarks by Henry H. Russell, Chairman of the USGA Green Section Committee, the topic: Why Renovate or Revise? was discussed by Dr. Marvin H. Ferguson, Mid-Continent Director, USGA Green Section, John P. English, Williams College (Taconic Golf Club) and M. G. Miller, Green Committee Chairman, Baltusrol GC, Springfield, N. J., site of the 1967 U. S. Open.

Some courses have to go through expensive renovations simply because maintenance demands it. Dr. Ferguson pointed out, through the use of excellent color slides, how thatch, a bugaboo to all superintendents, often is removed only through renovation procedures; how weeds can cause revisions, and how even a watering system, with all its obvious benefits, can lead to expensive changes if it produces crabgrass. Dr. Ferguson also cited the example of how a green, with poor drainage, led to all golf course traffic being re-channelled: In searching for the reason for the grass's poor condition, the green was excavated, a layer of sand was discovered too close to the surface, choking off the roots, and the green had to be ultimately revised.

But, perhaps, his most graphic case history was the southern course that wanted to rid its grounds of all its burr weed. Not owning a sprayer and not wishing to invest too much money in the purchase of one, it arranged to borrow the necessary equipment from the highway department.

However, the department failed to clean the tank thoroughly before loaning it to the club and the results were nearly tragic. Nine fairways were ruined and it cost the club a lot of additional money and two full years to grow blue grass.

John English tackled the problem of how and when to modernize just to keep up with the demands of the growing number of golfers. Lamenting that Monday is no longer the free day it once was, the Green Section committeeman offered a four point objective in scheduling: 1) Protect club property; 2) Expedite play; 3) Increase visual beauty and 4) Simplify maintenance.

Fences and trees on the club's outermost limits will serve to keep the golf balls in and the undesirables out, English said in expanding point One. Planting trees on corners of tees and other areas to discourage short cuts by golfers will do a much better job than a boundary stake or stanchion. You must also consider the safety factor. On blind holes, erect some indicator, a bell or a periscope or mirror, to note or denote that the fairway or green is all clear.

To expedite play, design or maintain the rough, woods, ponds and brooks so that any ball that falls in is at least retrievable, if not completely playable. The stroke or strokes penalty should not be compounded by an additional loss of the ball. Special women's tees should be erected, too, not directly in front of the men's tees, and not too far from the green. The test for the women golfers should be a fair one.

You can beautify your course, English stated, by paying careful attention to the manner in which all disposable matter is treated, by considering the color schemes in plants, shrubbery and flowers and in the selection of type of fences erected to help divert or direct traffic. Rustic fences look particularly good, he noted. You will also simplify maintenance by building ramps for both the pull carts and the gas or electric cars, and special walking paths for golfers for up or down slopes.

But, perhaps the most demanding, in-depth type of renovation is that experienced by the club that is preparing for a major championship. In preparing Baltusrol for its U. S. Open, M. G. Miller first selected his committee, which consists of some 225 men and 225 women, outlined their responsibilities, then

started looking into making the already-superb layout more challenging. "We started working on this project some 3½ years ago," he said, "starting with inspections of other Open courses, namely the Congressional, Bellerive and Olympia Hills. We had to overcome the affects of the prolonged drought, redefine boundaries, build new tees and bunkers and change the measurements of several holes. We have erected a new tee on the 7th hole, changing it from a par-5 to a par-4. We also changed the first from a par-5 to a par-4 and increased the length of a par-3 from 174 to 214 yards, surrounding the entire green with bunkers. The course will measure 7,200 yards and plays to a par-70."

Preparing for a Championship involves many things. A defective pine tree has had to be removed, the fairways have to be narrowed to 35 - 40 feet in the drive area, and the rough will be allowed to grow two to four inches by June, according to the USGA directive. Bridges will have to be reinforced or built over the 20 places where spectators and golfers cross the club's brooks; new shelters will be erected and tents will be provided to accommodate some 20 concessions, and 225 members of the press.

Most of the golf course will be staked,

continued on next page

Elmer J. Michael making his acceptance speech for USGA Green Section Award, left, as William Ward Fosbay, USGA president, looks on.



USGA GREENS

continued from preceding page

Miller continued, 70 temporary sanitary facilities, portable, will have to be installed (and serviced nightly), parking made available for 12,000 cars and service roads constructed. Over 20,000 feet of snow fencing from the highway department will be used to direct the flow of traffic. This has to be obtained, erected, removed and returned. There will also be as much chain link fencing as necessary.

A supplementary water supply will be needed for the lakes, and stakes and 42,000 feet of rope positioned to handle the gallery. Also, since it is the American custom to discard paper napkins and cups, containers located in 250 convenient places will have to be provided and a clean-up squad mobilized to police the area. Then there are the unbelievable involvements with the large scoreboard, the additional power lines, cables, platforms, security personnel, towers for the cameramen and a selection of the clothing to be required by the course worker.

"We've had 40 months to do the job," Miller said, "but we expect to be working on it right up to zero hour. All this and more for just one week of action."

When deciding the scope of revision, do you do it yourself or do you hire an architect and contractor? What is the committees' responsibilities toward improvements? E. L. Meister, Jr., Willoughby, Ohio, described how his Kirtland Country Club handled its renovation program. "We hired an architect who presented his proposal to up-date our course. The plan was submitted to the membership for approval. The architect did a fine job, and his plan was accepted."

"It is important to have the right person as your Chairman of the Green Committee. He should be a man interested in making changes. A person with tournament experience who sees the need of staying with the times will do a better job than one who might not be as skilled." The less talented committeeman

might fight a change.

Communicate with your membership, Meister urged, and in discussing the renovations with him, try the 'negative approach'. That is, if he says the course is looking fine, say "Yes, but we could do a lot better". He'll probably then point out all the nice things about the course. "If you agree with him, however, he'll probably find something to criticize. I agree only when he is complaining."

A most valuable member of your team is your course superintendent, Meister stated, and he urged full support for him. "There is no middle ground when it comes to this kind of support. Either you get behind him or you should get rid of him."

Meister created a minor stir when he disclosed that his course seeds its fairways each year, during the fall and winter, uses fungicides three times in the summer and once in the winter, and keeps the course in good shape on a budget of \$60,000.

Putting Green Improvement

In the highly sensitive and crucial matter of putting green construction, Holman M. Griffin, Agronomist, USGA Green Section, made a strong plea for adopting the widely-accepted USGA system in its entirety or not at all. "There is no better method than that advanced by the Green Section. It is often a waste of money to renovate rather than rebuild. Like installment buying, you end up paying more in interest charges, year after year after year.

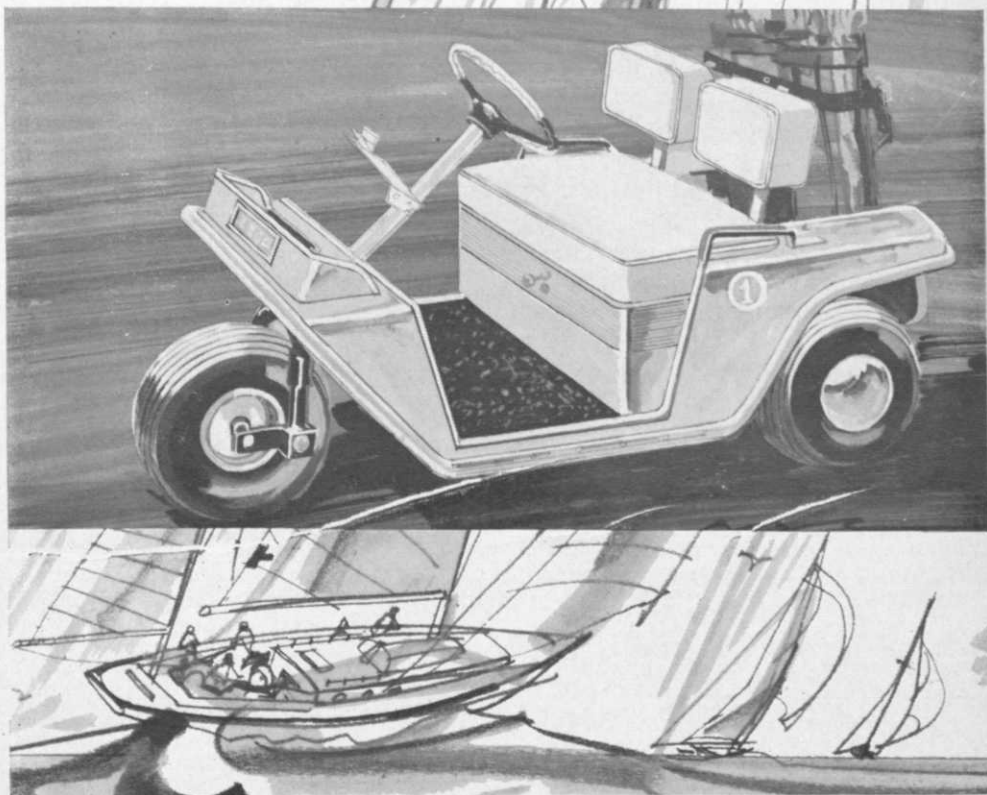
Griffin made use of color slides to illustrate both the proper and the improper ways to renovate and reconstruct greens. Among his list of "don't's" are the following: don't mix soil in an on-site blending—do it off-site and haul it to the green when ready; don't renovate a green that is removed or destroyed in order to modify the soil—do think seriously of rebuilding, instead; don't put thick, heavy sod on top. It isn't true that the thicker you cut the sod, the better the soil will be.

continued on page 92

Any old port in a storm?

Who can be patient when customers are waiting and you need a fleet of cars now? That's no reason to put the quickest, cheapest thing you can get on the course. That could be the costliest move of all. What's the best thing to do? Look at E-Z-GO's Profit Production plan. You can get a comprehensive profit preview that points the way to a faster payback — and assurance of the highest possible return per dollar invested.

E-Z-GO CAR DIVISION, TEXTRON INC.
Augusta, Georgia 30903



For more information circle number 118 on card

Pro's Big "Top" Smash Hit

"The best show ever in terms of sales . . ."

By VINCENT PASTENA

That's how one manufacturer summed up the 1967 PGA National Merchandise Show at Palm Beach Gardens—and he wasn't alone in his opinion. "Facilities were excellent, and most important, the pros came down this year in a buying mood," he added.

In fact, a PGA spokesman estimated that some 500 to 600 pros roamed the "Big Top" daily from January 21st through the 24th.—at least 75 to 100 more than last year. There also appeared to be keener interest this year by the general public, with an additional 500 to 600 visitors daily who would be considered outside the golf business field.

The opening day of the show was marked by election of officers for the Golf Manufacturers & Distributors Assn. All former officers were re-elected to serve another term: Chuck Cumming of Charles A. Eaton Co., president; Jack Murray of Atlantic Products Co., vice-president, and Robert Hornung of Hornung Pro Golf Sales Inc. secy-treas.

Last year's two smaller tents were replaced by the mammoth 300 X 150-ft. "Big Top" of the Clyde Beatty-Cole Bros. Circus—the largest single tent available. With the whole show under one roof, there was a greater feeling of unity, with visitors less apt to miss exhibits.

The enormous floor space was taken up

by 130 individual exhibitors utilizing 198 10 X 10-ft. booths, making more multiple-booth exhibits than ever before, according to the PGA spokesman. Every inch of space was taken. In fact, some 30 applicants had to be turned away this year for lack of space.

Although it is impossible to estimate the amount of business done on the floor of the show, all exhibitors were smiling and reported that they were "doing very well." Several manufacturers were talking about taking even more space next year. However, this could present a problem. One major exhibitor felt the show had already "outgrown the tent set-up," and that eventually some type of permanent exhibition facilities would have to be erected. "But this could be several years off," he added. The PGA is definitely aware of the space problem, and it will certainly be taken up for serious consideration before the 1968 show. ●



Showmen John Hubbard (left), PGA Admin. Asst., and John Vasco, Allentown, Pa., pro and Gen'l Chrmn., staged PGA winter show at Palm Beach Gardens. Huge tent housed over 130 exhibitors.

You asked for a utility tractor that will: mow a six-foot swath; turn with a 24-inch inside cutting radius; power a variety of year round attachments; position the operator up-front, in control of every grounds maintenance job; fill the tractor gap between 12 and 30 hp.; out-perform, out-maneuver anything in its class. You're asking for a miracle! You're asking for a . . .

BOLENS *GK*



Just one day behind the wheel of the new Bolens GK will convince you (or your grounds crew) that the GK does everything better than any conventional tractor of comparable size. We'll let you have it. Run it through every test you can devise. MOW GRASS faster, cleaner. 72-inch rotary mower is front-mounted, cuts grass before wheels press it down. In one pass you'll "pivot" around a 24-inch inside cutting radius! CHANGE POWERED ATTACHMENTS IN MINUTES. Just un-

plug direct-drive power-lock, release holding pins (five). NEED MORE REASONS? The GK can be equipped with 48-inch heavy-duty snow caster, 54-inch snow/grader blade (with hydraulically controlled angling), 1-cu. yd. utility cart. Transport the Bolens GK with drive-on transport trailer.

You asked for a unit that would make your grounds maintenance job easier. You can have it for your own evaluation. For more information just fill in the coupon.

Bolens Division, FMC Corporation, Dept. GC-82-20
Port Washington, Wisconsin



BOLENS

FIRST IN POWERED EQUIPMENT SINCE 1918

JOB DESIGNED JOB PROVEN

20-66R1

For more information circle number 171 on card

Gentlemen: ☐ Send full details on Bolens GK.
☐ I'd like to try the Bolens GK on my own grounds.

Name

Address

City

State Zip

Seminars are super

A record attendance is afforded a well-balanced program at the 38th annual turfgrass conference.

By HERB GRAFFIS

A record attendance and a program balanced well between the economic, agronomic and recreational phases of golf course management made the 38th turfgrass conference and equipment and supply exhibition of the Golf Course Supts. Assn. one of the most valuable business meetings to be held in golf this year.

The superintendents, gathering at Washington (D. C.) Hilton Hotel, Feb. 5-10 had a registration of 3,045. That figure includes salesmen and 560 women—wives and daughters of superintendents. Previous high attendance was 2,475 at Philadelphia in 1964. Former record of women's attendance was 347 last year at Kansas City.

Walter R. Boysen, for more than 30 years superintendent, Sequoyah CC, Oakland, Calif., was elected president to succeed Edward Roberts, Jr., of Fairmount CC, Chatham, N. J. Re-elected vice-president was James W. Brandt, superintendent, Danville (Ill.) CC. John J. Spodnik, Westfield CC, LeRoy, O., was re-elected secretary-treasurer. Herman R. Johnson, Quail Creek CC, Oklahoma City, Okla., Robert V. Mitchell, superintendent, Sunset CC, St. Louis, Mo., and Keith Nisbet, Westview GC, Aurora, Ont., Can. were elected directors. Richard C. Blake, Mt. Pleasant CC, Boylston, Mass., and Norman W. Kramer, Point o' Woods CC, Benton Harbor, Mich., are hold-over directors.

San Francisco was selected for the 1968 meeting.

Ben J. Chlevin, executive director of the GCSA with an energetic and highly

competent staff including Bruno Daube, Tom O'Hara, Dorothy Andrews, Kathy McLaughlin, Bonny Tomm, Barbara Nogay and Rita Engess, working with the host section of the GSCA and the association's program and show committees put on the smoothest running big event in GCSA history.

Sectional lunches and meetings and breakfasts of equipment and supply organizations, made the days long and busy. There was also a crowded schedule of women's events which got, among other publicity reflecting the advance in superintendents' economic and professional status, a CBS television network shot showing a White House visit by the turfmen's ladies.

Of the nine candidates for GSCA national office, five have college degrees. Each of the nine are prominent in civic, church and educational organizations as well as in their sectional and national professional groups.

New Light on Light in Growth

Norman Kramer, George Gumm and Ted Roberts got the opening session moving fast on the "America Beautiful" theme, a development in which golf course maintenance has been a leading factor. The usual convention "key to the city" overture was skipped for in Washington, the visitor needs a gun instead of a key. Two superintendents were victims of armed robbery during an evening's short walk. An amusing talk by Rev. Joseph Wick gave about 1,100 superintendents — average attendance at the educational assemblies—a suggestion

continued on page 32

GOLFDOM