

Du Pont Semesan[®] and TURF FUNGICIDE disease control”

Says Orville Young

Superintendent, Moraine Country Club, Dayton, Ohio

“It takes the best of fungicides to control turf diseases—especially in the Ohio Valley, where brown patch is a severe problem. To do this job, I use ‘Semesan’ Turf Fungicide and ‘Tersan’ in combination approximately every two weeks, and oftener during hot, humid weather.” Mr. Young continues, “I also know that these chemicals are compatible with most turf insecticides and chemical fertilizers.”

You can guard your greens against com-

mon fungus diseases—brown patch, dollar spot, and snow mold—with regular applications of Du Pont “Semesan” Turf Fungicide plus “Tersan.” It’s an outstandingly effective combination in both the cure and prevention of fungus attacks. “Semesan” Turf Fungicide and “Tersan” are packaged separately for convenient, accurate measuring and mixing and are easy to apply with spraying equipment.

DU PONT AMMATE[®] X for brush and weed control... Use Du Pont “Ammate” X for control of undesirable brush and poison ivy. It kills both foliage and roots, prevents regrowth. “Ammate” X is non-volatile, reduces to a minimum the hazard of damage by spray drift.



• View of a fairway and one of the beautifully maintained greens at Moraine Country Club.

On all chemicals, follow label instructions and warnings carefully.

TERSAN[®] 75 Turf Fungicide

SEMESAN[®] Turf Fungicide

AMMATE[®] X Weed and Brush Killer



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BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

Grau's Answers to Turfgrass Question

If you've got a question you want Dr. Fred V. Grau to answer, please address it to Grau Q&A, Golfdom, 407 S. Dearborn, Chicago 5, Ill.



The Need for Trained Men

One of the prime requisites, and one that's seldom considered first, is, "Who is available and properly trained to manage and direct the golf physical plant? Who can we get to supervise construction, to be responsible for management of the grass and all labor and equipment? Who can we find who has knowledge of managing turfgrass, soils and all related subjects so as to provide the very best possible playing conditions? Who can we get who knows how to set up and operate within a budget? Who is available that is willing to do all this and be on the job 24 hours a day, 7 days a week?"

The job isn't quite as tough as intimated above because a man must get some sleep. What we are trying to emphasize is that somewhere, somehow we need to find or to develop capable men with the specialized knowledge and skills that the profession of the course supt. demands. Many positions are going begging or are being filled temporarily by untrained men who are doing the job by trial and error. Gradually they learn how to do the most necessary things to maintain reasonably good conditions. This is not the most desirable situation.

At the Turf Field days at Penn State, Paul Weiss and Leonard Strong were able to tell us that the GCSA scholarship and research fund has been established. Already one \$400 undergraduate scholarship has been placed at Purdue University.

This is clear evidence of the progressive thinking of the GCSA and of its desire to train men for the exacting profession of

golf course supt. Few details are available but it appears most probable that the men trained under these scholarships will receive both theoretical training in the classroom and practical training on the course and in the research plots of the institution. This program deserves full measure of support from all superintendents, clubs and golfers.

We should like to mention just one phase of construction which, if placed in competent hands, will make life easier for the supt. and will provide greater satisfaction for the golfer. We refer to physical soil conditions, particularly in putting greens and tees and to a lesser extent, in fairways. Many perennial headaches have been built in, relieved only when the areas are completely rebuilt at high cost and to the disgust of the players. Too often the superintendent gets the blame for not being able to grow perfect turf under impossible conditions. Had he been on the job during planning and construction, with complete authority to provide the proper physical soil conditions, the ultimate cost would be lower.

Many letters that come to this department have this as their theme. This was of interest in 1931 when we worked with Ken Welton at the Arlington Turf Gardens making mud pies in an effort to learn the best way to blend soil, sand and humus for the 'perfect' putting green soil. Years of trial and error, considerable research, and new tools to work with have relieved the situation somewhat. None of the knowledge of how to do it right is any good unless it is put to work. No longer need we build headaches into the golf course.

This brings us back to our original theme. We need more trained men that

can be hired to assist in writing specs and in supervising construction so that the facilities are built right the first time.

All golf courses and golf facilities now building or in planning will do well to look to the GCSA. Its members have the know-how. They know the whereabouts of trained men. They are creating scholarships to bring us more trained men.

Q. We are sending a sample of soil and a sample of muck from a nearby farm. Our greens were built in 1924 with this clay soil and we have had a constant battle with compaction. They have improved some with aerifying but it leaves much to be desired. We topdress with 65% sharp sand, 20% topsoil, 15% humus. Gravel underlays the course but it is covered with 4 feet of clay.

How would you advise us to prepare the proper soil mixture for new greens we are going to build to replace the old unsatisfactory ones? Can we use the muck? Can we use slag? (Ohio)

A. After making several mixtures with the clay soil and the muck which you sent, it appears that the best mixture would be, measurements by volume:

Coarse concrete sand 70 per cent

Clay soil 20 per cent

Muck (brown, fibrous) 10 per cent

Black muck is highly colloidal and would be undesirable in the mixture if used in quantities over 10 per cent by volume. Use the brown fibrous portion — if you can. Mix the materials off the site if at all possible and haul them to the green, spreading it uniformly 12 ins. deep over the prepared well-drained base. By removing the clay and providing gravel for the base, you will need no tile.

These are very basic and incomplete directions or suggestions. They may or may not apply to another golf course, that has a different type of top-soil and subsoil.

You may double-check the calculations but I believe that 12 ins. of this mixture over 1,000 sq. ft. requires 40 cu. yds.

Yes, you may use agricultural slag to replace part of the sand. Slag will provide calcium and several trace elements. Without seeing your slag, I would suggest not more than half slag, half sand. A sample of slag would be appreciated.

Q. I am a doctor and I am constructing a small (10 x 25) putting green in my yard. Is there a small hand mower that would be satisfactory? I feel this size green would not require the usual power putting green mower. Also, I would like information on the proper type of grass and on the care and management of the turf. (UTAH)

A. The best information that I can give you is to solicit help from representatives of the Golf Course Superintendent's Assn. in your area. A. R. Emery, GCSA, Salt Lake City, is one who has given much help to others and in whom I have great confidence. If he can-

50-Year Veteran



John H. Dimmick (center), 50-year vet at Shawnee Inn, Shawnee-on Delaware, Pa., and course supt. there, was the guest around whom all festivities centered when the Pocono Turf Assn. held its annual banquet recently. John is flanked by Fred Waring (left), Shawnee pres., and Harry Obitz, vp and club pro.

not help you he can refer you to someone who can.

Hand putting green mowers are available and would be preferable on such a small area. Your local golf course supply dealers can brief you on hand mowers.

Care and management of bent putting greens is adequately described in *Turf Management* (McGraw-Hill) by H. B. Musser. A subscription to *GOLFDOM* and *Golf Course Reporter* also will keep you up-to-date. Your local golf course superintendents are well versed in the subject.

Q. Do you think that Milorganite has enough trace elements in it so that it will supply what my greens need? (Kans.)

A. Inspection of the analysis of Milorganite indicates that this fertilizer probably will supply most of your trace element requirements. Practical results on many courses support this view. The exception may be iron. When iron chlorosis appears, the sensible way to overcome it is by the application of soluble iron in iron sulfate, ferrous ammonium sulfate, or iron chelates.

Q. I am having trouble with my dirt tees. What would be the best dirt to use? We have 300 or more rounds of golf a day. (Mass.)

A. From our limited experience with bare-soil tees, we would suggest a sandy clay with 10 per cent by volume of sawdust mixed in to keep the soil open enough to permit the peg tees to be inserted when the soil is dry. Your soils department at the Agricultural Experiment Station could help you to locate or to mix a sandy clay that would be suitable.

Your chief problem probably is to replace and level the soil as it is worn away by golf shots and to keep it reasonably moist. The sand would keep it from being gummy and sticky in wet weather.



Sell players who like their golf bags big this Spalding #704. It's an extra-large "Stay Type" model with a plastic bottom and Vinyl-coated fabric body that can really take a beating. Has enormous ball and boot pockets. Sells for \$70.00.



Round and rugged, the Spalding #705 is made of tough, heavy Navajo fabric trimmed with full grain red strap leather. Has indestructible plastic bottom, leather handle and strap, inside all-weather hood. A profit-maker at \$50.00.

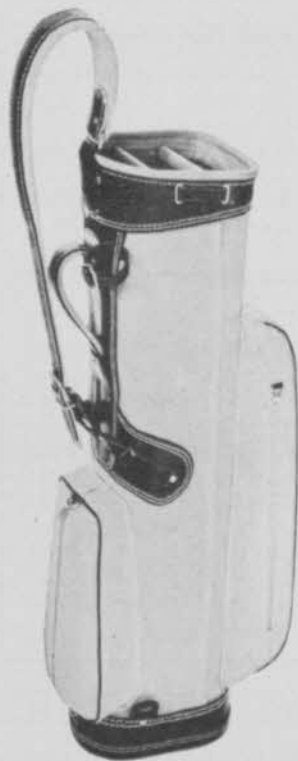


A colorful cameo pattern brightens this #707 keystone step-down bag. Has Vinyl-coated fabric body with full grain leather trim—center piece with heavy leather wings. Umbrella strap and socket add the finishing touches. Sells for \$40.00.

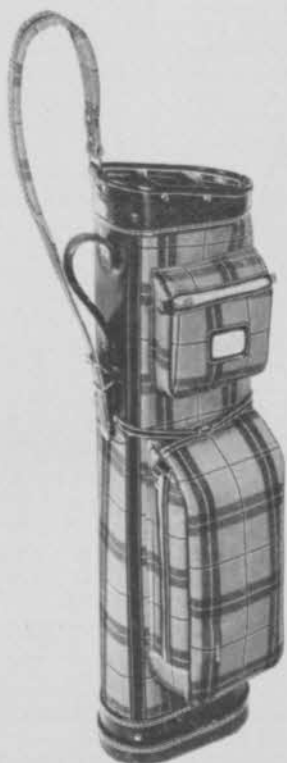


Profits "in the bag"

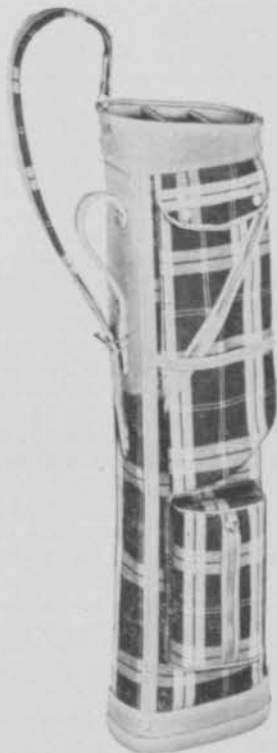
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Good-looking and practical, the Spalding #709 is a real value for your customers—a real money-maker for you. It's a big bag of durable duck fabric with heavy leather trim. Has big ball and boot pockets, too. And it sells for just \$25.00.



There's plenty of room in this red and black beauty for all a golfer's needs. Its big pockets are full-welted for extra strength. Has name card holder, side shield and full accessory strap. The number? 717. Selling price? Just \$12.00.



Big, bright, and beautiful—this colorful Spalding #716 golf bag has everything a weekend golfer wants. Plaid duck body backed with rubber for years of wear. Big ball pocket. Hanging hood. And you can sell it for only \$12.00.

There's more room, more wear, more good looks in Spalding golf bags than any others you can sell. Here are just a few from the full Spalding line—in sizes, colors and styles to suit every one of your customers' needs and pocketbooks.

Stock and sell them with confidence. And remember, like all Spalding merchandise, these golf bags are unconditionally guaranteed.

SPALDING

sets the pace in sports

Q. We are starting construction of a new 9-hole course. Our committee is charged with responsibility of securing the best possible putting surfaces and fairways. We know very little about the relative merits of the various strains of Bent and Bermuda. We would appreciate any information you could give us on this subject generally and specifically on the following points:

1. What grasses give the best putting surface during the various seasons in our location? What is the initial comparative cost of the various green turfs in regard to:

- cost of seed?
- cost of stolons?
- Any special green construction cost or soil preparation cost of one green not necessarily applicable to others?

2. Is growing bent, considering initial cost, heat and disease susceptibility, practical in this climate for a small club with somewhat limited funds?

3. What maintenance operations are necessary in the good management of bent that are not also necessary in the management of Bermuda?

4. Is it essential to have a "bent grass" man to grow and maintain bent successfully, or rather can any intelligent greenskeeper master the problems peculiar to management of bent greens?

5. Which variety of Bermuda is best in our section? Which variety of bent is best in our section? (Tenn.)

A. Considering your length of growing season and knowing the habits of improved strains of Bermuda, I would say that your club, with limited funds, will have the best putting surfaces from an improved Bermuda grass.

The cost of preparing and planting a green is about the same regardless of the kind of grass used. Using seed may be slightly cheaper at first but more costly later because of higher maintenance costs.

Stolons of bent or sprigs of improved Bermuda cost about the same for establishing a green, roughly \$40 to \$50 for 1,000 sq. ft. for planting material. Knowing what an improved Bermuda can do on a green in your area I would advise against bent at this time under the conditions which you describe. Bentgrass requires more careful watering, much more attention for disease control, and very delicate handling during the heat of the summer. Bermuda greens are more rugged, and more disease resistant. Mowing costs are the same. Watering costs will be less for Bermuda.

From what I have seen, I'd say a "bentgrass man" is virtually essential for bent greens in your part of the country. Any good supt. can master the problems of bent but it is possible to lose a lot of grass while he learns the proper methods.

Again, based on my experience, I would choose Ugandagrass for bermuda greens in your section. It is as fine as bent, it is rugged, easy to keep, and it is a good companion to

Turfgrass Meetings

Feb. 10-15 — 28th National Turfgrass Conference & Show, GCSA, Kentucky Hotel, Louisville.

Feb. 18-21 — Penn State Turfgrass Conference, University Park, Pa.

Feb. 25-26 — Southern Turfgrass Conference, Colonial CC, Memphis.

Feb. 25-28 — Cornell Turfgrass Conference, Cornell University, Ithaca, N. Y.

Feb. 27-Mar. 1 — Minnesota Turf Conference, Curtis Hotel, Minneapolis.

Mar. 4-6 — Midwest Turf Conference, Purdue University, Lafayette, Ind.

Mar. 11-13 — Iowa Turfgrass Short Course, Memorial Union, Iowa State College, Ames.

Mar. 18-19 — School of Soils, Fertilization, Maintenance Conference, Ontario Agricultural College, Guelph.

Apr. 12 — Truro Turfgrass Conference, Nova Scotia Agricultural College, Truro, N.S.

Poa annua which is our universal winter grass. No Bermuda that I have seen produces finer putting surfaces. It is very winter-hardy into Pennsylvania, West Virginia and New York.

If I were to grow bent greens in your area I would choose Cohansey (C-7) bent. It is a good heat-resistant bent but very susceptible to dollarspot. There are excellent greens of Arlington (C-1) bent in Tennessee but I would hesitate to select this grass under your conditions.

1957 International Matches To Be Held in Japan

The third International Trophy matches and fifth annual competition for the Canada Cup will be held concurrently in Tokyo in October, according to the International Golf Assn. of which John Jay Hopkins is founder and chmn. This will be the first major event played in Japan in which golfers throughout the world will participate.

In accepting the invitation of the Japanese Golf Assn. to hold the international competitions in Tokyo, Hopkins said he was influenced by the fact that the Japanese are among the world's most enthusiastic golfers and many of their courses are of championship caliber. In the 1956 matches in Surrey, Eng., Japan, represented by Yoshiro Hayashi and Michio Ishii, placed fourth in the Canada Cup competition.



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In the Lubbock Country Club, Lubbock, Texas, (shown above) HOLMES Quality 282 was installed in a smartly styled, specially monogrammed pattern. This design with *your club initials* is just one of the many HOLMES patterns available in Quality 282.



Please send me HOLMES "Golf Club" HERALD, illustrating installations of Quality 282 in many well known clubs.

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Officers, Directors Nominated by GCSA Committee

Nominating committee of the GCSA has prepared a slate of candidates for pres., vp and directors which will be voted upon at the 28th Turfgrass Conference in Louisville's Kentucky Hotel, Feb. 10-15. Nomination usually assures election although GCSA by-laws permit floor nominations for all offices.

Those nominated include:

Pres. Paul Weiss, Lehigh CC, Emmaus, Pa.

VPs: Robert Williams, Beverly CC, Chicago and James E. Thomas, Army-Navy CC, Arlington, Va.

Directors: Leonard Bloomquist, Brookview CC, Minneapolis; Nelson Monical, Portage CC, Akron, O.; Tom Hayes, Meadow Brook CC, Overland, Mo.; Marion Mendenhall, Kenwood CC, Cincinnati; Thomas Topp, Syracuse Y & CC, Clay, N. Y.; Henson Maples, Pinehurst (N. C.)

Auditor Points Pro to \$600 Annual Saving

One of the younger professionals, good on a club job and in the tournaments, told GOLFDOM:

"Pros can't very well complain about club officials having no idea of pro department expenses when the fact is that the pros often don't know what the score really is on what it costs them to do business.

Had Eyes Opened

"I thought I was pretty well informed about my business expenses and was handling them carefully until I made a deal with an auditor to go over my books each month and tell me where I could save and make money. I wasn't charging what I should have charged against the expense of operating my department. I was paying a lot out of what I thought was profit in my pocket and I was missing a lot on legitimate income tax deductions. I wasn't buying right or making sales before I had money tied up in too much slow moving stuff.

"The auditor's discoveries, suggestions and advice saved me \$600 last year. That may not seem much to some pros who talk big money but when you figure it as the profit on shop business or as lesson income, \$600 represents a lot of business."

USGA ANNOUNCES 1958 DATES

The USGA has announced that the 1958 National Open will be played at Southern Hills CC, Tulsa, Okla., June 12-14.

The 1958 National Amateur will be played at the Olympia Club, San Francisco, Sept. 8-13.

The Americas Cup will be played Sept. 5-6, 1958 at the Olympic Club, San Francisco.

Other 1958 dates:

Women's Open, Forest Lake CC, Bloomfield Hills, Mich., June 26-28.

Amateur Public Links, Silver Lake GC, Orland Park, Ill., July 7-12.

Women's Amateur, Wee Burn CC, Darien, Conn., Aug. 18-23.

Better Pro Merchandising Assures Bigger Pro Sales

Kenneth Smith, who went from a pro job to establish what has become the world's largest custom clubmaking business and to make a stock line of fine clubs, takes a bright view of the pros' business picture for 1957.

The Kansas City club specialist says "the representative professionals have steadily improved their buying, display, advertising, selling and service operations, have bettered their stock control and extended careful management of other details of their business.

"These pros are alert and successful merchants and can solve their problems just as competently as competitive merchants solve problems they have in their businesses," Smith continues. "The pro's intimate contact with golfers, and the strong sales opening he has through the lesson tee, give him an advantage over the inevitable competition. But he must constantly offer customers what they need and want and have it ready for their inspection and use."

Turfgrass Course at U.C.L.A.

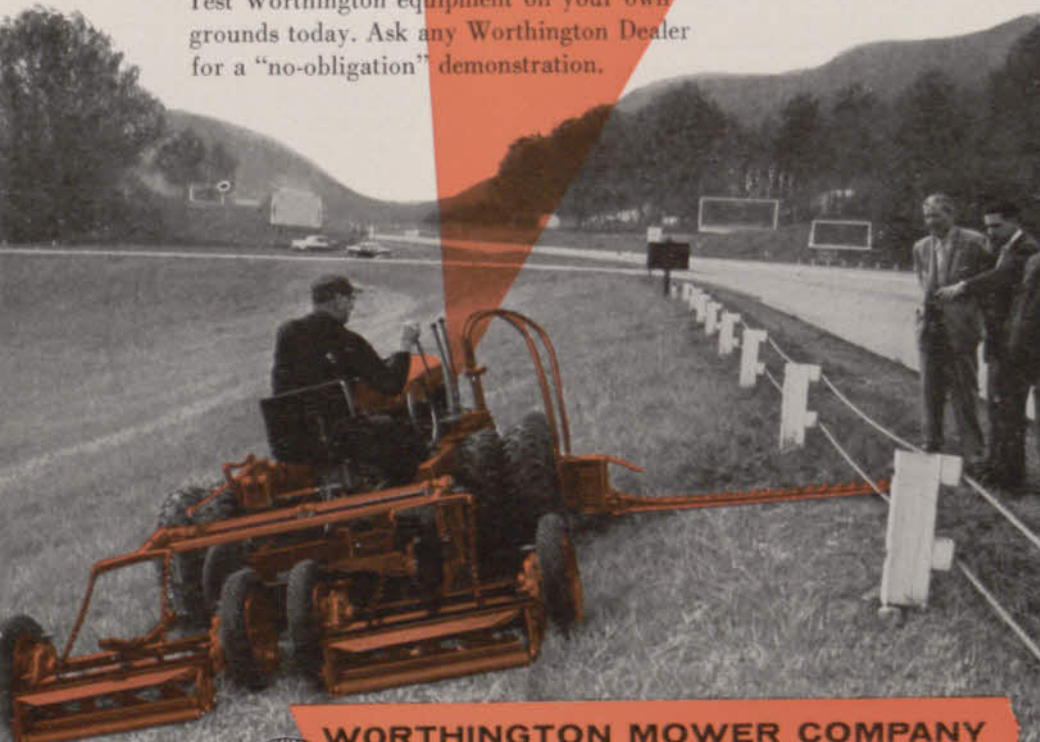
Starting Feb. 5, the University of California Extension, Los Angeles, is offering a 12-session course in Turfgrass Culture. Classes are being held at U.C.L.A. Experimental Area, Bldg. B, 300 Veteran Ave. in LA on 12 consecutive Tuesday evenings from 7 to 9:30 p.m. Victor B. Youngner will instruct the Extension course.

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Yes, on any ground... a park, golf course, highway, cemetery, institution or estate... there's a Worthington mowing combination that's just the right answer to your grass maintenance problem. By any test *you* want to apply, Worthington units perform with low-cost mowing efficiency. Before you buy, have a demonstration on your own grounds. and—when you do, do your own testing. Compare and test Worthington against all other types and you'll agree that Worthington does it better... faster... cheaper. Test Worthington equipment on your own grounds today. Ask any Worthington Dealer for a "no-obligation" demonstration.



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STROUDSBURG
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The most complete line of large area grass maintenance equipment in the world!

If funds aren't immediately available to build 18 quality holes, a leading golf architect gives this advice . . .

Settle for 9

By GEOFFREY S. CORNISH

BECAUSE numerous golf courses are worth from half to a million dollars or more and even would be a bargain at these prices, many groups contemplating new layouts often feel they could never raise sufficient capital to bring their projects to successful conclusions.

Actually, new courses can be put into play at relatively modest figures with further construction making the investment appreciate over the years. During this same period a qualified golf course supt., backed by correct design and construction, all the maintenance equipment he needs and an adequate budget, will greatly increase the value of the part of the course already built.

One of the first questions to be settled in the earliest organization and planning stage is whether the initial layout is to be 9 or 18 holes. When sufficient funds are available or can be raised it is wise in most cases to strive for 18. But if funds are restricted, 9 quality holes are vastly preferable to an inferior 18, while even 6 holes to start may get the project rolling. Dissipating limited funds for 18 holes can prove disastrous with the final result that there is either no golf course at all or a very mediocre one.

Safe and Sane Program

The following figures illustrate a wise program adopted by one New England club whose committee realized there was a limit to what could be raised. First, the following estimate was prepared:

a. Known cost of 160 acres required for 18 holes	\$ 16,000
b. Estimated cost of building 18 holes	90,000
c. Course furnishings and initial maintenance equipment	5,000
d. Estimated cost of modest clubhouse	60,000
e. Estimated cost of parking lot and very small swimming pool	13,000

f. Expediency figure 10% of b, c, d, and e	16,800
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Total capital required ...\$200,800
Attempting to raise this total was considered an overwhelming task by this particular group. Instead, 9 holes were promoted in line with the following estimates:

a. Known cost of 160 acres land required for 18 holes	\$16,000
b. Estimated cost 9 holes obtaining plans for 18	47,000
c. Course furnishings and initial maintenance equipment	5,000
d. Estimated cost small building to act as temporary clubhouse and later to be used as pro shop	8,000
e. Expediency figure 10% of b, c, and d	6,000

Total capital required ...\$82,000
Although land values vary widely and other groups may require a much more lavish clubhouse than this group had in mind, the above figures provide relative planning data for other committees with restricted funds. Note that sufficient acreage was purchased for 18 holes. Note, too, that plans were drawn for the second nine. This latter point is occasionally overlooked. When the time comes to expand to 18, holes have to be sacrificed at the very time turf on greens and fairways is reaching maximum perfection. Consequent loss is then even greater than the dollars involved.

The New England club has excellent terrain and soil. The estimated \$90,000 provided for a high quality 18 of championship length on this ideal land plus a water system for greens and tees. On less desirable land the cost would be higher as it also would be if a fairway water system was installed. Moreover, exorbitant costs and waste arising from inadequate

(Continued on page 65)