

**NOW ... A GLOVE THAT HELPS
OVERCOME ONE OF THE WORST
FAULTS IN MOST GOLF SWINGS!**

Griploc[®]

GOLF GLOVE

*Reg. U. S. Pat. Off.

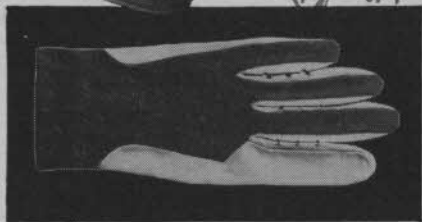


Every professional knows that good golf cannot be played unless the left hand starts the down swing to the ball — and that's impossible if the left hand loosens, a common occurrence with the average player. Here's a new approach to the old problem of how to keep the left hand closed at the top of the back swing. GRIPLOC helps overcome ...

- WEAK LEFT HAND
- OPENING UP
- IMPROPER GRIP

The middle, third and small fingers are sewn together on the palm side, locking the latter two to the strong middle finger to give added support and reducing the tendency of these fingers to loosen. Proven in actual tests to help in the development of a good left hand grip, automatically improving the swing. Conforms to Rule No. 2-2F, USGA Rules of Golf.

Palm and fingers of fine imported Cabaretta, specially tanned for touch, feel and tacky grip. Backs of Helanca, the stretchable Nylon that molds to the shape of the hand.



PAT. PENDING

GRIPLOC is manufactured exclusively by C. M. Hill Co., Peoria, Illinois, and sold only through distributors.



ASK YOUR DISTRIBUTOR





Spalding's new for golfers!



*Now for the first time in
golfing history you can sell
all those customers who'd
rather buy on credit!*

Another big reason why

SPALDING

sets the pace in sports

Time Payment Plan

Yes, that's right! Now all your club members who want new golf equipment—clubs, bags, balls by the dozens—can buy from *YOU*.

Just 10% down buys any Spalding golf equipment. But . . . you collect the full sale price promptly through the Spalding Plan. You can't lose because *Spalding takes all the risk!*

The Spalding TIME PAYMENT

PLAN is now available to golfers across the country. Now the many who want credit can get it from *you*.

It's welcome news to golfers and it offers tremendous new sales opportunities to you.

So get set *now* to sell Spalding golf equipment as you've never sold it before. Clip and mail the attached coupon *right away*.

MR. GEORGE DAWSON
A. G. Spalding & Bros., Inc. Dept. G-B
Chicopee, Mass.

YOUR FULL NAME _____

GOLF CLUB NAME _____

STREET _____

CITY _____ ZONE _____ STATE _____





At 10th Annual Southeastern Turf Conference

A review of the organization's research record and the development of Tifgreen, the new hybrid Bermuda grass, were the most discussed items on the agenda of the 10th annual Southeastern Turfgrass conference held in Tifton, Ga. More than 200 persons attended the three-day meeting. Post-session discussions occupied most of the turf specialists who attended the conference, as the above picture shows. In the group are (l to r): T. M. Baumgardner, landscape architect, Sea Island, Ga.; B. P. Robinson, Southeastern USGA green section director; Jimmy D'Angelo, Dunes Golf & Beach Club pro, Myrtle Beach, S. C.; G. W. Burton, principal geneticist, Dept. of Agriculture; Frank Ward, vp, Florida Turf Assn.; Gene C. Nutter, agronomist, Florida Turf Assn.; and Hugh A. Inglis, Athens, Ga.

members. He sums up by saying that if the budding pro combines personality with a real desire to succeed in the golf profession, he can make a very comfortable living and enjoy doing it.

As for educating the assistant, Bola has this to say: "If the pro sees fit to hire a young man, he certainly shouldn't neglect his education. I try to give him as much time as possible showing him my teaching methods and when I feel that he has assimilated them, I ask our members to take lesson from him. Inside, I make every effort to give him thorough training in salesmanship, service, buying and bookkeeping because I want a competent employee to run the shop when I'm not around.

"As I see it," Bola concludes, "the assistant should be groomed to take over his own shop when the opportunity comes. Older pros gave me a lot of help when I broke into this game and there's no reason I shouldn't pass along whatever knowledge I have to the young man who is breaking in."

Tom Fry of the San Mateo Municipal course opines that if a newcomer to the golfing profession is endowed with all the attributes that should make him a great pro, but won't assume responsibility, he is not going to succeed.

"As far as I am concerned," says Fry, "that is the real test. I want assistants around me who can take the responsibility

of making decisions and are not constantly looking to the boss to do their thinking for them. I want my men to be good salesmen, expert repairmen and, in general, handle all their duties both inside and outside the shop with the personal interest they'd show if they were running their own businesses."

Is this too much to expect?

"No," says Fry, "not if you are willing to spend some time training your employees and building up their confidence to the point where they know they can do everything around a pro shop. It's the fellow who is poorly trained," Fry adds, "who hesitates in making decisions or taking responsibility. If you have an assistant in your department who can't be depended on to fill in when you're absent, don't put all the blame on him. Look to your own shortcomings. He's holding back because you haven't taught him enough about running your business."

LPGA Sponsors' Manual

The Ladies' PGA has available a "Sponsors' Manual" for all sponsors and prospective sponsors plus a complete and up-to-the-minute publicity brochure. Prepared by Rob Renner, LPGA tournament director, these publications can be obtained by writing Renner at his office, 3302 Addison, Ft. Wayne, Ind.

Soil Tests for Golf Turf

(Continued from page 36)

themselves into groups or granules which act like larger particles. This flocculated condition has a marked favorable effect upon the internal structure of clay soils. Water infiltration is improved and deeper rooted turf is the rule.

Soil reaction influences the availability of soil nutrients. The solubility or availability of phosphorus decreases as the soil becomes more acid. According to Truog, the best point for the availability of phosphorus is in the range of pH 6.2 to 6.5. Strong acidity increases the solubility of trace elements such as copper, manganese, iron, etc. Copper and manganese toxicity can result. Conversely, over-liming may make the trace elements and iron insoluble and hence unavailable. Lime-induced iron chlorosis in semi-arid regions where soils are usually highly alkaline in reaction is a classic example.

Grass roots absorb nourishment from the soil solution in the form of soluble salts. The quantity of dissolved nutrient salts in the soil water is small, seldom more than enough for a day or two. The solution must be replenished quickly, especially when growth is rapid. A fertile soil is one capable of keeping the soil solution well supplied with nutrient elements at all times. A productive soil is never static. It is dynamic, undergoing constant change throughout the growing season as a result of the solvent action of the carbonic acid generated by roots, and activity of micro-organisms.

There are three kinds of nutrients—based on solubility—in every soil. They are the water soluble, the easily soluble, and the difficultly soluble substances. The soluble nutrients in the soil solution are immediately available, the easily soluble are readily available, and the difficultly soluble ones are unavailable in the foreseeable future. It is similar to a person's finances. The pocket change is enough for a day or two. It is immediately available. The bank deposit can be drawn upon when the pocket

change becomes exhausted. It is readily available. Defaulted stocks and bonds are of no immediate value, but may yield something eventually. They correspond to the difficultly soluble soil nutrients.

Some quick tests determine the soluble or immediately available soil nutrients only. They may be useful in greenhouses, etc., but not for grassland areas. Others determine the soluble and the readily soluble nutrients in varying degree. Some of these are the best for golf course soils.

As stated before, soil tests for nitrogen are not reliable for turfgrass areas. Existing methods measure the quantity of soluble nitrate nitrogen in the soil. Grass roots absorb this type of nitrogen quickly, as soon as it is formed by soil micro-organisms. The grass may be doing as well as can be expected and the test may show nitrogen to be deficient. So turf behavior is best for judging need for nitrogen.

Testing for only four of the 15 essential plant nutrient elements may seem inadequate to some people. Years of testing has shown that they provide enough basic information upon which to build an effective fertilizer program.

The commonly used tests, such as Purdue, Truog, Morgan, Spurway, LaMotte, or Edwards, etc., differ essentially in the strength of the solvent used to extract the soil nutrients. A small amount of soil is extracted for a definite period of time. The best solution dissolves the soluble and relatively soluble soil nutrients. Some solutions are too weak to solubilize the reservoir of relatively soluble substances which are insoluble in water yet become available quickly. Results obtained with these weak solvents are misleading. They fail to show any difference between soils of high and low levels of phosphorus and potash.

Samples were collected from fairways at Pickwick and Evanston golf clubs in the Chicago district. They were tested by three methods: Truog, Purdue and Spurway. Results are shown in Table II.

Table II

		Truog*	Purdue	Spurway
Pickwick	A	10	Very Low	Low
	B	10	Very Low	Very Low
	C	25	Very Low	Low
Evanston	A	90	High	None
	B	90	High	None
	C	100	High	None

*Fairway soils should contain 75 to 100 lbs. per acre, or more

There was marked response to the use of phosphate at Pickwick but no response at Evanston. The Truog and Purdue methods were in accord with field practice. This was not true of the Spurway method.

Similar results were obtained with potassium tests. The Truog and Purdue methods were in accord with field practice. The Spurway method was not.

These results show the necessity for using a good method, one which distinguishes between a soil of low and one of high potassium content.

For simplicity and convenience, most laboratories report results as very high, high, medium, low, or very low. Although these terms appeal to the layman, they can be misleading. The fertilizer level in greens should be higher than fairways because clippings are removed and growth is maintained at a higher level.

By reporting amounts as pounds per acre, it is possible to establish one level for greens and another for fairways. For example, with the Truog method fairways should contain a minimum of 75 to 100 lbs. phosphorus and 175 to 200 lbs. potassium. The corresponding levels for greens should be 200 to 300 lbs. phosphorus and 300 to 400 lbs. potassium per acre.

The tests are no better than the samples submitted to the laboratory. Improper sampling is responsible for erratic results and is another cause for questioning the value of soil testing.

Depth of sampling is very important. The amounts of phosphorus and potassium decrease sharply with depth on grassland areas because the soil is not disturbed after turf coverage is obtained. Failure to realize this fact has been responsible for misleading results even with the better soil testing methods.

Three samples were taken at the same spot on one of the check strips on fairway fertilizer plots at Blue Mound CC, Milwaukee, Wis. The Truog method was used with the following results:

Depth of Soil	Lbs. Phosphorus Per Acre
1½ inches	65
3 inches	35
4 inches	25

Phosphorus is reasonably good in the 1½ in. plugs. It would be considered very low in the other two. Yet the response to applied superphosphate was insignificant.

Trips To The Top



A cable car complete with ball washer (right front railing) flattens out a steep hill at Jackson Municipal GC, Seattle, Wash. for footsore golfers. Among the first to test the new lift were (l to r): Kermit Rosen, city park board; Pat Lesser, National and Western Women's amateur champion; Dick Masterson, city amateur champ; and Dr. Phil Smith, also of the city park board.

To obtain consistent results and to show and follow trends, it is necessary to take samples to *exactly the same depth at all times*. A sampling depth of exactly 2 in. has proven very satisfactory. All plugs should be uniform in diameter from top to bottom. A good sampling tool can be made from a discarded steel golf shaft as illustrated in the accompanying diagram.

The samples should be representative, composite samples. Each composite should consist of six to ten cores. The cores should be left intact in the bag. This will permit the laboratory to spot matting, presence of sand or peat layer, etc.

Variations in soil, topography, and turf determine the number of composite samples to collect from fairways. On level areas of uniform soil from four to six taken from widely separated fairways should do.

When sampling a localized area of poor turf, be sure to collect another sample from a nearby spot of good grass.

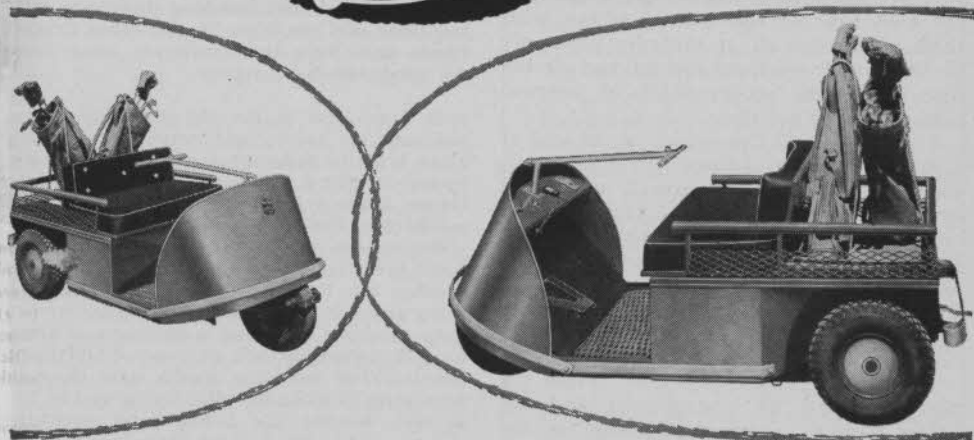
In the letter of transmittal be sure to include information about drainage, kind of grass, watering and fertilizing.

Each composite sample should be placed in a clean, new container. Small manila paper bags, obtainable at a nearby grocery store, are excellent. Label the outside of each sample plainly with a *soft lead pencil*.

Yearly testing is seldom necessary. A test every two to four years is usually enough.

Let us quote you - - any quantity 1 to 100 cars
either 4 battery or 6 battery models

NEW *LaHer* SPECIAL



First Golf Car Specially Engineered for Rental Operation!

The all-new LaHer "Special" is engineered by automotive specialists to take all the abuse, wear and tear, day in and day out, that rental cars get!

A CHALLENGE TO COMPARE!

- The only Electric car made with full ELLIPTIC SPRINGS BOTH FRONT AND REAR.
- The only car with CHROME ALLOY SPRING STEEL BUMPERS—FRONT, REAR AND SIDES—CADMIUM PLATED.
- The only electric with a choice of LAHER TURBO BELT DRIVE or DOUBLE SPROCKET CHAIN for hilly golf courses.
- The only electric with 6 powerful (190 AMPERE each) batteries.
- The only electric with all the equipment on an AUTOMOBILE-TYPE DASHBOARD—HAND BRAKE - LOCK - FORWARD and REVERSE SWITCH-AMPERE METER-and CHARGING SOCKET!
- SHORTER and WIDER, with lower center of gravity-easier handling-safe.
- WELDED CHANNEL STEEL FRAME—no tubing, etc.
- AUTOMOTIVE TYPE DIFFERENTIAL, EQUIPPED THROUGHOUT WITH TIMKEN ROLLER BEARINGS.
- 2 brake controls—separate FOOT and AUTO HAND EMERGENCY BRAKE ON DASH.
- DEEP AIR FOAM SEAT CUSHIONS—FINEST MADE BY MAJOR RUBBER CO.—most comfortable of any car.
- New type golf bag container with SUNKEN WELL AND HANGER—convenient and substantial.
- Only electric car manufactured by large maker of auto parts and equipment, with world-wide distribution.

WE'LL PROVE THE *LaHer* "SPECIAL" IS AMERICA'S FINEST!

Mail this coupon today for complete information on the profitable LaHer "Special" rental system.

LAHER SPRING & TIRE CORP.
ELECTRIC CAR MFG. DIV.

Makers of quality automotive equipment for over forty years.
2615 Magnolia St., Oakland, California
300 Madison St., Memphis, Tennessee

LaHer Spring & Tire Corp.

ELECTRIC CAR MFG. DIV.
2615 Magnolia St., Oakland, Calif. • 300 Madison Ave., Memphis, Tenn.

Please send me the beautiful brochure describing the LAHER "Special" and other LAHER Electrics.

- I am interested in purchasing a LAHER Electric.
 I am interested in the LAHER "Special" rental plan for my course.

NAME _____
ADDRESS _____
CITY _____ STATE _____



Soil Conditioner Effects

(Continued from page 58)

dries out and gets harder faster than the treated greens. Treated soil seems to be able to hold proper amounts of water as well as take it.

5. We are always able to get water into the root zone of the treated greens with little or no run-off at the rate we apply it. On No. 3 we have lots of run-off before we get the proper depth of penetration (when we get it).

6. On the par 3 tees (which we treated at 1 lb./100 sq. ft. and roto-tilled 3 in. deep) the story as well as his overall opinion is given by W. P. Anderson: "Turf recovery on our par 3 tees is exceptionally fast. On these tees the condition of the turf is actually better than on the par 4 tees which were not treated. The turf on our practice tee is also Krilium treated but, as on the par 3's recovery is unusually fast."

Pro. George Gargovitch said: "From the point of view of management and the golfer there is another advantage in the treated greens at North Ridge. On these greens play can be resumed as early as 3 hours after a heavy rainfall."

The direct material cost of Krilium ran approximately \$284 per 10,000 sq. ft. This was at the price of \$1.44/lb. Altogether our records show we spent less than \$5,000.00, including all labor costs, in the treatment of 17 greens, five 3 par tees and the practice tee and the practice putting green.

* * * *

New Supt., Frank Emery, Adds To Story

"I took over as Supt., on Bell's recommendation, in July, 1955, after Ed Knight left to build some more courses for Bell.

"Water penetration on the greens is everything one could ask for. Response to fertilization is very fast. Plugs taken as recently as one week ago show the roots well below 12 in. except on No. 3 where they are about 6 in. deep.

"Water penetration is not nearly as good on this untreated green and the cup is not as easily changed. We have had no compaction on the treated greens and they hold shots very well even when on the dry side. This past winter we have had one of the worst rainfall years on record. All courses in the area, with the exception of North Ridge, were shut down for varying lengths of time. We were not shut down even for one day. Our greens show excellent surface and internal drainage."

Wichita Pro Tells of Weather's Evil Blow

This spring's weather has been no bargain for pros in many sections. In checking up on the effect of the weather on play and pro shop sales, we wrote Gene O'Brien, pro at Rolling Hills CC, Wichita, Ks., among other fellows.

From many of the pros we got bad reports about rain and cold knocking down pro sales but Gene said the blow he and other Central Plains pros have been suffering came from the wind. Here's his report:

As I sit here in the old pro shop gazing out over my vacant and wind-blown course, I can hear the faint moan of a gentle 60 mile breeze. It isn't a hurricane Mable, it's only a breeze. I am a bit bitter about the weather out here in the vast plains.

During the past six or seven months we have been talking about the windy, windy weather but few of us pro boys can do anything about it. It's nothing to turn on my pro shop radar set and catch a foursome of Omaha golfers wending their way toward Oklahoma City at 2,000 feet. We usually have three or four acres of Colorado dirt flying at 500 feet to zero. Sounds like I might be stretching things a little? It's nothing for a group of my players to be blown to Kansas City one day and catch a 70 miler back the next day. Press bets at 2,000 feet is something new.

The sale of items such as chains to tie your cart up while you shoot, special concrete shoes to hold you steady while you swing, pencils for writing in dust and winds up to 70 miles per hour—things like these are going real well. The golf equipment, not so hot.

Wind Wobbles Cups

You folks out of the wind country can appreciate how tough it is to just hit the ball. Out here, the cup even wobbles around in the green. I know you won't believe that statement but, it does seem to move a little now and then.

Driving into some of our more breezier days you don't worry so much about what happens to the ball after you hit it just as long as it doesn't blow back and hurt you. We had a fellow the other day who teed off and wound up just 150 yards off line and just 100 yards back from where he started. He was tickled to death; it was the first 250 yard drive he ever hit. But anyway, with his slice he never did get there.

I am one pro who declared a disaster area for my 18 holes. Ike being a golfer and from the mid-west may show me some sympathy when I file my disaster claim.

I have always talked and griped about the weather but just couldn't ever get enough ahead when the weather was good to get out. Sure, I know that the weather is going to change one of these days. It always does about ten times a day. My father told me that 25 years ago and his father before his father told him

the same thing. Tomorrow in this part of the country is always going to be a better day. That's one reason why the folks around here are such patient people.

Develops "Weather" Swing

I have developed a new "lean-to" and "lean-against" type golf swing for the unusual windy weather we have been having. I am not going to disclose it until I happen to need \$10,000, which is right now. So here is my secret; with the lean-to swing for winds that are blowing your nose backwards, you bend forward until the clubhead has just enough room to get under your nose. You must grip down on the club of course.

On the lean-against swing where the wind is whipping your billfold around something awful, you lean over backward until you can just barely see the ball. Use a longer club, of course, and in some cases a pretty high tee.

If I seem a little bitter I am a little bitter. I haven't given up yet. I'm keeping my old chin up and getting a face full of dust but I'm not giving up.

The wind is now steadying down a little as the sun goes down in the west. We can't see it go down but I haven't heard of it going down in any other direction. It's a funny thing, the wind never blows at night or on Mondays.

Foundation Distributes Chart on Golf Rules

A new 23 in. by 35 in. wall chart on the Rules of Golf is being distributed by the National Golf Foundation at 50 cents a copy, according to an announcement by Rex McMorris, executive vp of the Foundation.

Designed as an aid to promoting smoother, more enjoyable play and greater respect for golf courses through the painless education of players in the basic rules and courtesies of the game, the new chart is attractively printed in two colors, on heavy paper, and is illustrated with 58 humorous cartoons taken from the Foundation's popular pocket-size booklet, "The Easy Way To Learn Golf Rules."

Don't Know Rules

According to McMorris, the popularity of golf has grown so fast in recent years that many players annually explode onto golf courses without first being exposed to traditional rules and courtesies of the game.

The new "Easy Way To Learn Golf Rules" Wall Chart may be obtained at 50 cents a copy (postpaid) from the National Golf Foundation, 407 South Dearborn st., Chicago 5, Ill. All orders should be accompanied by check or money order.

The Babe Wants You To Help Her Help Others

During June there's a drive on to raise money for the cancer detection and treatment program that was started right after Babe Zaharias was told she had cancer.

Golf wants to make a good showing in this fund raising. So many of us in golf know Babe. We know how this valiant girl is driving herself to put over this campaign.

There is no use kidding ourselves; action has got to be quick on this deal and men golfers usually are not much good at this sort of a project.

It takes women's golf committees to put across this fund raising drive. They know how to get men and women to contribute.

If the professional will bring this matter to the attention of the head of the women's golf committee at each club plans can be made and put into action quickly to raise money for the Babe Didrikson Zaharias Fund, Inc.

Headquarters for the fund is at University Station, Galveston, Tex.

Michigan PGA Raises \$3300 for Pros' Families

Michigan Section PGA staged a pro-amateur at Grand Rapids May 7 as a memorial to Ted Lemanski, Danny Nowack and Eddie Van Popering, three PGA members who drowned.

Kent CC and Green Rdige CC got the play of 284 who paid the \$10 entry fee. Others paid and didn't play. Expenses were assumed by the Michigan PGA members and their amateur friends.

Families of each of the deceased professionals received \$1100.

Green Ridge CC offered its course when Cascade Hills CC became unplayable, due to weather conditions. Green Ridge manager, Bruce Matthews, and pro, Bob Lavacek, and club officials, Grand Rapids and Detroit newspapermen and sportscasters and Detroit district pros and came over for the tournament, were named by Maurie Wells, chmn. of the event, as deserving special thanks of the pros and amateurs who organized the event.

Turfgrass Questions Answered by Grau

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

COMES now the season when golf is the heaviest, temperatures are highest, humidity possibly greatest, diseases the "spreadingest" — when grasses and supts. get their most severe test. This is the period during which better grasses, adapted to severe summer weather, provide nearly care-free maintenance. Quite the opposite are weak, poorly-adapted grasses that require 24-hour days (and sleepless nights) on the part of supts. to try to "hold the turf".

**Poa Annua —
Friend
or
Foe**

For the moment, let us consider *Poa annua*. *Poa* is either a blessing or a pesky weed depending upon where you are and what you have under it to take over when the *Poa* leaves. Florida threatens to banish forever anyone who sends *Poa* into the state knowingly or otherwise. In parts of Canada and some of our northern states there wouldn't be much golf if it were not for the rugged character of *Poa*. Many are in between depending upon a number of factors.

Poa has been receiving well-deserved attention as a cool-season companion to warm-season grasses. Evidence is growing as to the desirability of the combination when the turf is managed correctly! The answers to correct management have not been written as yet, but experience has given a lot of good leads.

First of all, we need a strong perennial summer grass (warm-season grass) under *Poa*. This may be a bentgrass or a strain of bermuda. Among the bents, Washington strain is a good hot-weather grass, yielding gracefully to *Poa* during cool seasons. In general, evaluation of bents has been given little or no prominence in research studies. In practical use this is a major consideration. Whether base grass is bent or bermuda, it is important that it be sturdy, disease-resistant and tolerant of being cov-

ered during its dormant period. Since *poa* fades and "disappears", sometimes "explosively", it is equally important that base grass thrives and be ready to assume complete charge of the situation. Some progress has been made in this direction.

"How to hold what we've got" is a real need because only a few have achieved care-free maintenance. The answer lies in doing the right things at the right times — and the book hasn't been written that will tell you what and when. It is a case of understanding principles of plant growth, water and soil, knowing why certain things happen, and living with your problems.

It seems to me that all the successful hot-weather practices — syringing, showering-off, spiking, etc.—accomplish one thing in common. They supply life-giving oxygen to suffocating root systems. As temperatures soar, water in the soil surface gets hot and then hotter. Hot water contains little oxygen. This is the time when growth rates, and thus oxygen requirements, are highest. Heavy traffic and watering seal the surfaces and reduce air movement into and out of the root zone. Spiking, a great invention, helps to achieve air circulation. Sprinkling refreshes the grass by bringing needed oxygen. Cold water contains much more dissolved oxygen than hot water. The grass actually may have an excess of water and yet be in a state of wilt (wet wilt). Additional water is not needed, but its oxygen is vitally important.

We deprecate the need for summer mid-day syringing, yet we know that it's absolutely necessary to save grass during severe spells of weather. We believe that a better day is coming as we learn how to use the better strains of grass and improved techniques of soil and water management in relation to soil physics.

Q—We are experiencing our first real siege of *Poa Annua* in some of our greens, especially ones on which we had some brown patch last season. What can we do to check or stop this infestation? We had the good fortune last