

pecially on loam soils of good structure and water-holding capacity.

These tests bear out the contention that water should be used to keep the grass alive, and used to make turf lush and green. Grasses of the permanent perennial type like Bermuda, bluegrass, fescue and bent can and do withstand some wilting without loss of turf, provided the root system is deep enough to tap moisture in the deeper soil. When loss occurs the roots are near the top. Then grass dies from too much or too little water, and is very sensitive to — and sometimes severely and permanently damaged by — herbicides such as 2,4-D, 2,4,5-T, etc., and may be badly injured by sodium arsenite which is otherwise safe when used at moderate rates.

Poa annua is hard to hold because of its shallow root system. Roots are always near the top so it is necessary to keep the surface soil moist at all times. In bad weather several hours of neglect may be the difference between keeping and losing it. That is why light syringing with water is imperative in the heat of the day during bad spells of weather.

In places where *poa annua* is the sole grass in the ground cover, bare soil is left when it dies. But where the ground cover is a mixture of *poa annua* and a permanent grass, there is some cover when the *poa annua* is lost.

Instead of abruptly stopping the use of all water on fairways to curb *poa annua* the more logical procedure would be to do it gradually and take steps to introduce a more desirable cover of permanent grasses. Both schemes work but the first puts the course in bad shape for play for several seasons.

The investigations being conducted by Dr. Hagen at Davis and by other workers at State College, Pa.; at Rutgers, N. J.; at Beltsville and elsewhere are sure to provide valuable information. They emphasize the well known fact that water usage is one of the most important factors in golf turf maintenance. No set rule for watering applies everywhere. The secret of success is to adapt the basic principles to local conditions of climate, soil and kind of grass.

Top: This soil sampling tube will take samples to 6 ft. depth.

Middle: The soil sampler reaches 6 ft. in giving Hagen data on his research.

Bottom: Dr. Bob Hagen and student assistant in charge of the plots at Davis examine a plot of Merion bluegrass that has roots 3 ft. deep. This plot has been watered but once.





PGA National's New Shop

The new shop addition at the PGA National course presents a good example of the sort of a shop that permits extensive display even though it's not large. There is a lot of wall space making it possible to show many manufacturers' lines.

Displays are frequently changed.

Information service to PGA pros and their guests is very well organized so the pros get the kind of attention they want to see guests get at their own clubs.

At the counter end of the shop (above) Emil Beck, chmn. of the PGA National

GC Com. is at the left, with Art Clark of the teaching staff in the center and Hugh Bancroft at the right.

A picture window through which the first tee is seen is at the other end of the shop (below). Apparel gets prominent display and sells very well to pros getting an early line of the season's styles. Joe Zavodny, shop mgr., is at the left, going over one of the new items with "Sandusky Bill" Gordon.

Jim Duncan also is on the teaching staff and Joe MacMorran is starter.

—Fulmer & Cole photos





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Woes of Men and Weather

By **SHERWOOD A. MOORE**

Supt., Hollywood Golf Club
Deal, N. J.

My first reaction to the question "What do you think is the most important problem that faces golf course maintenance?" was and still is the labor situation. The shortage of labor has come to the point now where you do not look for good hard working men—you just look for anybody. And you hire them, hoping they will fit into your program and will work out well. If not, they are weeded out and you hope someone else will turn up next week.

A few years ago eight to ten men would come around each Spring looking for work, but not true today. This Spring I had one man looking for work and he is 72 years old.

Like most of the other courses in New Jersey we have had to resort to high school and college boys. That works out fine during the few summer months but then in the Spring and Fall, when you have just as much if not more work to do, you are down to a skeleton crew and something has to be neglected. This labor situation is becoming more and more serious every year and unless we do something about it we are going to find ourselves with more and more work and fewer and fewer men. You can have all of the power-driven equipment in the world but unless you have someone to operate it, it is of no use.

The comparatively low rate of pay and seasonal work offered by golf courses just does not have any appeal to a person who has to pay 19 cents for a loaf of bread. How can we help overcome this problem? By offering a decent living wage, pleasant working conditions, and above all to guarantee year-round work. We may not be able to compete with military establishments or industrial wages but if we can offer a man the security of a year-round pay check it would go a long way in acquiring a good and honest crew. Those courses that seem to have the least labor problems are those that retain a crew, or at least a nucleus of a crew, 12 months of the year. If you can have at least three-fourths of your crew to fall back on all year around and then hire your summer help from the young school fellows you are in much better shape than depending almost entirely on seasonal workers. Over the years your golf course will show the results of this plan—there is nothing like having experienced or regular men on your payroll. Thus to

me, the most important problem on a golf course is labor.

Always A Summer Tougher

In regard to the problems on turf in our area, this past season there have been plenty. And the main cause for all these headaches, heartaches, grey hairs and worrying frowns has been the weather. Whenever we go through a bad season like 1949 we think that we have seen the worst, but then there is always another summer to come rolling around that is a little tougher. Such has been the summer of 1952 and from all reports it has been unfavorable to courses all over the nation. We had a very cool and wet Spring with grass responding very poorly, especially the root development. Then in June we immediately jumped into summer with temperatures soaring to 90° and above. July was hot and humid with 17 days having temperatures of 90 or above and then 13 of those days were in succession. August was somewhat cooler but wet. We seemed to have the extremes this season and golf courses suffered likewise. Some had an immense amount of trouble while others seemed to hold on and come through.

On many courses sections or whole greens passed out of the picture and there were very few of the boys who did not have trouble of some kind on their course during the summer. It was also a beautiful year for diseases (the pathologist was in his glory) and required diligent watching and regular spraying of fungicides. And what a banner year of crabgrass! *Poa annua* disappeared and the turf grasses weakened so all old man crabgrass had to do was germinate. Thus this just added insult to injury and made the superintendent stoop a little lower under all of his problems.

Reducing the Trouble

Those courses that had the least amount of trouble during this severe season were those that watched their fertilization carefully; watered even more carefully; applied fungicide when needed; tubular-tined dry spots, or even aerified sections or whole greens; and in general kept a careful watch over all maintenance practices. During June, July and August we fertilized every two or three weeks but only in small amounts.

Hand watering on many courses was the only solution in keeping greens from passing out. Even though we had heavy

rains of 2 or 3 inches in a few days the grass would wilt, due to drying winds and short root development, and required light watering although there was plenty of moisture in the soil. We applied fungicide as often as twice in one week and then again went three weeks without applying any. For a while during the summer we spiked our greens weekly and then even had to go out and tubular-tine the knolls and aerify the edges to keep them from drying out.

The fairways also suffered considerable throughout our area this summer. Those who had good grasses in their fairways and could water them fared the best. Our tees, along with those on many other courses, took a beating this season due to the play and weather. We are now in the process of renovating them to get them in shape for next summer. Let's hope that it will not be "one of the worst summers you have ever experienced."

Sports Pages Telling Course Maintenance Story

Golf course condition and maintenance operations have been getting good space as live sports page news during the past two years. Sports editors and writers have recognized that course supts. have stories of interest and information to all golfers.

Supts. also have been getting feature publicity on garden pages in recent years and are in heavy demand for spring lectures at garden clubs on lawn care.

An example of how interviewing a course supt. brings out a sports page feature appeared in the Greensboro (NC) Record where sportswriter Adrian Brodeur wrote:

Ever wonder how much work and exactly what procedure is followed in making a new golf green? Take it from A. D. Edwards, Green Valley Golf Club superintendent, it's plenty of work and there's a hard pattern to follow.

Green Valley, newest course in the Gate City, will soon join the ranks of the city's other four when it officially becomes an 18-hole course in Spring. Work started months ago on an additional nine holes and work was just completed a few days ago on the planning and seeding of green grass.

Green Valley's new nine greens will be the city's biggest greens. This claim was made by Edwards who said they would almost double the size of the present nine greens at Green Valley.

"I doubt very much if a golfer will ever get the same putt to a cup twice in one year," Edwards said.

"We are going to have a lot of cup

space on these new greens and every inch of the new green will be available for cupping."

That's quite a claim since many greens have large areas, because of rolls and pitches in the greens, where cupping is impossible. But while the new Green Valley greens will include pitches and rolls, they will still be suitable for cupping purposes.

After plans for the size of the greens were formulated in the Starmount offices, Edwards and his crew went to work preparing the greens for next Spring's play. Seven of the new nine greens will be a texture of the fine Hall's Bermudagrass. The other two will be a combination of the Hall's grass and Tift bermuda, an imported fine grass from Florida.

Source of the expensive Hall's bermuda came right from Green Valley. Last year Edwards made a huge new practice green out of the famous Hall grass. In the past 12 days he has taken out 51,000 2-in. plugs out of the practice greens.

Using a special tool, made by West Point Products Corp., which cuts a perfectly round 2-in. plug, Edwards and his crew of eight dug up the 51,000 Hall plugs and then dug up 51,000 more plugs of topsoil on the greens where the Hall plugs were to be placed. The plugs were placed in the holes 6 in. apart over the entire surface of the greens. Within a few weeks time the new greens will be covered, not thick but covered, with stringers from these plugs.

Hall's bermuda doesn't have a seed. It has to be transplanted and that is a tremendous task. Eight men and boys aided in the vast job of digging the plugs and plug holes.

The reason for two of the greens to contain a mixture of Hall's bermuda and the Tift type is of an experimental nature. If it is successful golfers will have two of the finest greens in the city. While Hall's bermuda is fine in itself, the combination of these two grasses should provide an even finer putting surface.

Cotton Writes Helpfully in "My Swing"

Henry Cotton, one of the world's greatest students of golf playing technique as well as playing star and a clear writer has written "My Swing" which is published by Country Life, Ltd., 2-10 Tavistock st., London, WC2, Eng. It sells for \$4.

It's a most informative combination of picture and text analysis and instruction and is certain to have interested and extensive reading in the U.S. as well as in Britain. Cotton brings a keen freshness into golf shot-making analysis.



Late Winter TERSAN[®] SP SNOW-MO

Spraying "Tersan" at Country Club, Chagrin Falls, Ohio



"I keep ahead of snow mold by spraying with 'Tersan' early in the spring as well as late in fall," says Frank H. Dunlap, course superintendent at Country Club, Chagrin Falls, Ohio. "Snow mold has been a serious problem in the past. But since I started using 'Tersan' five years ago, there haven't been two dozen spots of snow mold on our twenty greens."

"Control of brown patch is also excellent with 'Tersan.' I am particularly pleased because 'Tersan' does not check the grass."

For ten years, "Tersan" turf fungicide sprays have prevented snow mold, dollar spot and brown patch at Exmoor Country Club, near Chicago. "Disease has been kept at a minimum," says course superintendent William Stuppel. "And 'Tersan' doesn't burn or take out grass color . . . in fact, doesn't injure the grass in any way."

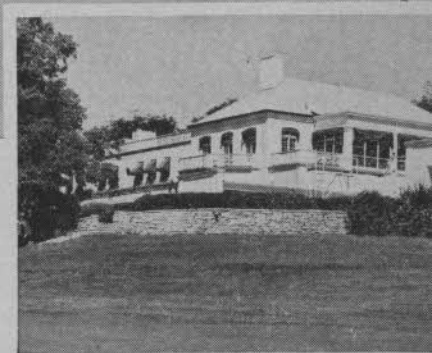
Handy "Tersan" 75 in 3-lb. packages is ideal for snow mold applications. Saves measuring from bulk, speeds handling, stays in suspension for more

(This is another in a series of "experience reports" from well-known golf courses, coast to coast.)

Early Spring AYS ASSURE CONTROL



Spraying "Tersan" at Exmoor Country Club, near Chicago



Exmoor Country Club

even application. Use "Tersan" 75 to keep your greens in top shape for spring.

"Tersan" is a registered trademark of E. I. du Pont de Nemours & Co. (Inc.)

Use "Tersan" on greens, tees, around bunkers and other grass areas where snow mold attacks



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BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

Tells Golf Salesmen What Pro's Problems Are

By **PAT MARKOVICH**
Professional, Richmond (Calif.) Country Club.

An article by Dan Ellis advising pros to "take it easy on salesmen" was one that made me reflect on my own relations as a pro with salesmen. I appreciate the salesman's position that Ellis describes from his own observation and probably his experience.

So to further understanding between salesmen, their sales managers and professionals, I'd like to set forth my own observations and thoughts. We all had better understand each other's positions because we all share the desire to increase volume and profits and reduce selling costs and keep our prices to the ultimate buyer as low as possible.

I must admit I probably have been as guilty as Pro Joe Blow. The pros must find a pleasant "out", still treat every salesman as a human being. As Pro Joe Blow mentioned, he has been in the habit of giving every salesman an order, and at the same time tried to take advantage of the 2% discount each month. He is not alone in his thoughts.

Using my shop and experience along with many of my neighboring professionals, I have drawn the following conclusion . . . in order to stay in business and show a fair return, one must act the part of a business man. My clientele and my promotional work directs me to handle certain lines.

In the last six years the average professional improved on his business ability and is still learning each day. Present tax conditions now compel volume in order to make a livelihood. This has made the professional take heed.

In years gone by the term "Pro Shop" was applied to the professional's headquarters. Most still have this habit. The word "shop" carries as one of its definitions, "place where mechanics carry on a trade." It is a long time since clubs were made in our shops. It is now a "pro store" where the merchandise is selected to fill the demand, and in the majority of cases the equipment is specially manufactured for the golfers.

Salesmen are increasing in number, and that is only part of the problem; many represent several firms. Naturally they expect orders; and it is not uncommon to purchase six items, and have six different invoices representing the name number of companies. Each calls for an indi-

vidual check and mailing, thus creating an added expense and confusion.

In 1948 I did business with 48 firms. In 1951 it had jumped to 72. To be a good fellow I found that I not only had to hire extra help, but at inventory time many dead items appeared on my shelves, shopworn and depreciated in value. Selling in order to obtain your cost, as well as clearing your shelves means also losing a profitable potential customer.

I have always felt and argued that the pro shop has been a display counter for the manufacturers. Changing names and models has been done without the consideration of the home professional. Talented salesmen are hired to cover the professional. As mentioned, I was a soft touch. So much so that at one time I carried 30 different makes and models of irons and the same number of woods representing 14 golf club manufacturers. Now I only have six, and am doing as much business with less confusion and resulting in a greater profit.

Shoes and sport clothing is relatively a new venture for the professional, and we are experiencing the same problems. I just do not know what to feature, therefore I am buying everything that looks good. "Good Guy" professionals are being overstocked by energetic salesmen.

It is probably true that salesmen do get information on possible pro vacancies, and that many of the assistants have been able to follow up the lead, but your clubs are turning more and more to others for recommendations.

Possibly I should end this article by giving advice to the salesmen and companies who are probably "pushing" their men and expecting a sale for every call. The majority of the orders by professionals are either mailed or called in to the local distributor. The only person who actually is in a position to know his potential is the professional. He has a limited clientele and his sales and purchases must be judged accordingly.

Again using my own experience, we must feature some name brand. In 1945 and 1946 one leading brand of clubs were my top sellers with another's woods running a close second. Prior to 1945 it was products of different makers. In 1947, 1948 and 1949 it was still another maker's goods by a wide margin. In 1950 and

1951 and now in 1952 I featured another line. Time is approaching when another change has to be made.

Customers Are Bosses

In a period of three years with as good selling as can be done without scaring the customers with high pressure I know that I saturate my market to the point of diminishing returns. I would like to continue to feature the clubs I have been pushing. They are very good or I'd never have bought and presented them in the first place. I like the salesmen and I like the companies. We all have got along very well together. But my members who haven't bought these lines for reasons that I certainly haven't been able to blast by steady, diplomatic and close-up salesmanship are not going to buy just because the salesman and his company and I like each other.

I think I know, and apply in selling, the value of a manufacturer's name of very high repute and try my level best to

concentrate the manufacturer's national advertising effectively at my point of sale. It works for two or three years in the case of each first class manufacturer, then to make sure that my members are allowed their "say" in my shop operations (and they'd got to have if I'm going to stay and make a profit) I give the other fellows a chance.

When the salesman learns that I'm not wedded to the line until death do we part, he doesn't need to be sore at me. My customers control my actions and it's no great secret that they are independent of manufacturers and of me. The manufacturers and I have to keep wooing them and it's life not to have the course of true love run smooth.

I can appreciate the golf salesman's optimistic hope. I, too, wish that all who come to my club bought something from me. But they don't, and I just have to keep after them, knowing that some day if I keep on the job, thinking and pleasant

CLASS IN CAPPS' SHOP AT DESERT INN

When Howard Capps left PGA Tournament Bureau management to become pro at Wilbur Clark's de luxe Desert Inn CC, Las Vegas, N. M., he brought with him ideas for pro shop arrangement and fitting he'd picked up at clubs all along the tournament circuit. Here's one view of the neat and colorful shop. No opportunity for appealing display of golf merchandise is overlooked anywhere in the shop. Capps has with him at Desert Inn George Bruno as teaching asst., Doug Grochow, shop mgr.; Milton Ross, tournament mgr. and starter; Spencer Trask as teaching asst. and starter and Ed Wardell as business mgr.



and eager to serve, I'll get them. I come back to the good companies in turn, headlining the merchandise of each and carrying enough stock of all leading brands so I won't be missing any bets. I figure if I keep trying to do the right thing eventually all my possible customers will buy from me.

But I can't get it all at one time, all the time, and I'm not going to tie up my money and display space in something that isn't in enough demand by my members to move fast. So I'm pretty much reconciled to having to work steadily and have some disappointments and suffer some losses of time and money I've devoted to selling. If any good golf salesman can tell me how I can escape these troubles I'd sure like to listen to him.

What has improved pros' credit rating with manufacturers is that the pros have been attending more to being good businessmen than to being good fellows, and that's something no salesman's company is going to complain about.

Course Shortage Cramping Golf Around Salt Lake

By ALMA R. EMERY

Supt., Forest Dale GC, Salt Lake City, Utah

Here in the Salt Lake district there is a definite need for more public golf courses. In this area many have given up the game and gone elsewhere for recreation because of over-crowded conditions. It is true the reservation system is used but many refuse to fight the lineup, even for golf.

In Salt Lake there are three, 9-hole, city-owned courses for public use. These courses range in age from 20 to 40 years; same greens, same tees, etc.

Changes of Administration bring new faces, new supervisors, making it impossible to bring about necessary long-time planning to revise, reconstruct, and remodel our golf layouts. Salaries paid are not attractive enough to obtain and hold the type of men required for such important work.

The development of new equipment has played a great part in saving many old golf courses from complete loss. Chemicals developed for use in preventing loss of greens and fairways by grub worms, brown patch, and snow mold, etc., have been one of our greatest benefits.

Our county has recently built an 18-hole course now being used, which has helped, but little, to alleviate heavy traffic. Blueprints have been made, and plans were well along to build an 18-hole

public course in this area to be called "Falcon Golf and Country Club." The public wishes the builders a most speedy success. It will be open to the public, but privately owned. I have been asked to help with its construction and maintenance

The Magna course, owned by Kennecott Copper Co., is operating 12 miles from Salt Lake. This course will be one of the west's finest layouts in a matter of two or three years. They are rebuilding greens, tees, and fairways. They purchased the latest modern equipment and grass, such as B-27, C-1-Arlington, etc.

Golf Market Could Be 20 Times Larger

By JOHNNY COCHRAN

Professional, Greenwood (Miss.) CC

Now an important part of a pro's job is creating more desire to play golf and promoting construction of additional courses to care for present and potential players. If this work isn't done young men with excellent education now coming into pro golf as tournament players and the present professionals will find there are a lot more pros than there are pro jobs available.

Population and income statistics indicate that the possible market for golf is 20 times larger than the present number of players. The game is losing some players because of lack of courses and is missing chances to recruit many new ones because these possible golfers haven't been made aware of how much pleasure golf will give them, and how to get playing the game. The pro is the man to do this essential educational job.

WHAT GOLFER MUST LEARN —

When the golfer becomes aware of what he can and should do in considering the condition of the course on which he plays many of his complaints about condition of the course and many of the superintendent's expensive troubles will end.

If the golfer would repair divots, get out of traps on the low side instead of on the high side, stop practicing on the tees, tee up on the tees, lift his feet so his spikes don't harrow the greens, put his debris in the waste baskets and remember that he owns and is paying for the course, course condition would be better and the costs and troubles would be less.

—JOHN PRICE

Supt., Southern Hills CC, Tulsa, Okla.