eliminate fungus which might prove troublesome years later.

The quantity and frequency of topdressing depends on local conditions. Some turf can be badly damaged by heavy topdressing, rather than by too frequent topdressing.

All of our practices are of coure de-

pendent on our budgets, our natural conditions and other factors such as the skill of the men we are able to hire.

It pays to maintain a sod nursery and to train a man or several men in the art of patching greens. After all, we superintendents are not miracle men. Anyone can lose turf, even the finest doctors have the undertakers to cover up for them.

	GOLF	COURSES	IN THE	UNITED	STATES	
	Private	Semi- Private	Muny	Total	9-Hole	18-Hole and Larger
1900				982		
1923				1903		
1929				5648		
1930				5856		
1931				5691		
1934	4155	1006	566	5727	3368	2359
1937				5196		
1939	3405	1199	699	5303	3264	2039
1941	3288	1210	711	5209	3202	2007
1945				4809		
1946	3018	1076	723	4817	2930	1887
1947	3073	1061	736	4870	2952	1918
1948	3090	1076	735	4901	2967	1934
1949	3068	1108	750	4926	2973	1953
1950	3049	1141	741	4931	2972	1959
1951	2996	1214	760	4970	2956	2014
1952	3029	1246	751	5026	2974	2052
1953	2970	1321	765	5056	2977	2079

U. S. Courses Five-Fold Growth Shown by Years Since 1899

Rebound and Solid Growth Since Panic and War Years — South Dakota Leads in Courses on Population Basis —

THERE'S a golf course per 31,052 of U. S. population, National Golf Foundation figures show as an over-all picture. When population figures are broken down into age classifications and other factors affecting golf playing potentiality the showing of golf, of course, is considerably improved but far short of demand and practical possibilities for increasing the number of courses.

There are approximately 32,000,000 under 13 years of age in the U. S. and around 12,000,000 65 and over.

South Dakota leads in providing golf courses with one course for 9,849. Vermont is second with one course per 9,890 of population. North Dakota is third with a course per 9,967 and New Hampshire is fourth with 1 to 9,998. Louisiana is lowest in ranking wth a course to 60,614. Percentage of non-white population is a factor in keeping population per course high in the south. The best showing of southern states is made by Florida with its winter resort courses and a course per 23,650 population.

Delaware is the nearest average state with a course per 31,661.

Despite the recent pronounced growth of California courses the state which has a course per 49,953 population lags behind large eastern states: New York with one to 37,789, Pennsylvania with one to 36,582, Illinois with one to 28,196, Ohio with one to 28,727, Indiana with one to 24,661, Michigan with one to 24,837 and Massachusetts with one to 25,349.

A copy of the complete breakdown may be secured without cost from Rex McMorris, Director, National Golf Foundation, 407 S. Dearborn st., Chicago 5, Ill.

These superintendents rely on

DCAN

"... the 1954 National Amateur course"

Stephan Forton, Superintendent Country Club of Detroit Grosse Point Farms, Michigan

"When the National Tournament Committee told us our club was ready for the 1954 National Amateur Championships three months before the date of play, it was a tremendous compliment for the club, the greens and "Tersan' Turf Fungicide.

"For six years 'Tersan' has done the job for me and each season's results are better. Brown patch control in our almost unbearable heat would be tough...if it were not for 'Tersan'... and I have yet to see a sign of snow mold since using it.

"Tersan' is remarkable, too, because you can give it to green hands, and they'll take over as though they had been superintendents for years . . . you don't have to worry about burned greens."



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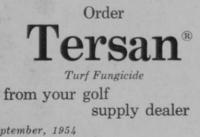
"... 3500 player-a-week greens"

Larry Walker, Superintendent Warren Valley Golf Course Garden City, Michigan

"I have been using 'Tersan' Turf Fungicide for six years on our 36-hole setup and for the last three years we haven't seen a trace of brown patch ... in spite of the almost 3500 players who walk our fairways and greens each week.

"I use 'Tersan' as a preventative ... I don't wait for brown patch to show up, and following this practice has shown up in steadily improving greens.

"Hard work, a good crew . . . and 'Tersan' have added up to a truly magnificent course. 'Tersan' is really good stuff, safe to use and extremely efficient."





There's no disease-favoring condition that "Tersan" can't help you lick. Whether it's heat, excessive moisture or heavy traffic, "Tersan" will control fungus diseases. Try the handy three-lb. package. If you like a combination of "Tersan" and a mercurial, add "Special Semesan" to your sprays. And, Du Pont Soluble Plant Food can be added to feed grass at the same time. Packed in 50-lb. bags, especially for golf courses, it gives grass extra vigor.

September, 1954



Eddie Hoblit's shop at the Ventura, Calif., municipal course makes use of every bit of space available, has a good stock of merchandise invitingly displayed and puts a strong accent on prices that will sell public course players.

Golfers Laud Muny Teamwork

Reconstruction of Ventura, Calif., muny course by Ed Newkirk, smart management by pro Eddie Hoblit and great teamwork by city departments has brought high praise from the area's golfers.

City mgr. Lawrence Olson, Recreation director Thor Olson, Austin Perley, city parks foreman, Lee Caldwell and Keith Eaton on the course, and Paul Rowland in the pro shop, and Gene Marzolf, equipment dealer, have put on a building and operation program with Hoblit that Ventura County golfers say makes the 9-hole establishment one of the most pleasant in the country.

There's heavy play from a community of about 19,000 and a plan for enlarging the facilities already is in progress with a new watering system getting high priority. Two new greens and a new fairway are being built and the clubhouse is being completely remodeled. First stage of the clubhouse work was building Hoblit's pro shop which is a lively center for the county's golfers.



Left: Eddie Hoblit, pro at Ventura (Calif.) new municipal course, and his team-mate, Thor Olson, the city's director of recreation.

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The May Company set up schedules showing our sales possibilities and explaining just how these bills could be paid over a period of time. Every one of our creditors accepted the program and before the end of the year they were paid and on a

The May Company also assisted us to a great extent in our banking connections and solved an acute personnel problem which had been hampering our operations for a long time. We current basis.

strongly recommend the services of the May Company even for a small business such as ours.

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STUHLER'S 'SELF-SERVICE' PRO SHOP

Arthur Stuhler, pro at CC of Pittsfield, Mass., has his new shop accenting "self-service" so members can see and feel what they want. Merchandise is departmentalized. At upper left is pictured the bag, putter, wedges, etc., double-decked display in the center of the shop. Stuhler is at the right; his asst., Pete Contenta at the left.

At upper right is the open ball display which allows members to serve themselves. This sells more balls, Stuhler says. Lower left view shows how easily buyers can examine and select apparel. Clubs, shoes, shirts, headwear are attractively, conveniently displayed as shown at lower right.

Daylight tubes beneath canopies give the right light. Carpet and grass matting on the floor, add to the shop's brightness. Imitation grass on wooden strips also is used as flooring and solved a dampness problem.

Club storage and Stuhler's office in back of the shop can have layout altered by removing a collapsible portion if shop expansion is required. The whole shop is attractively informal and functional.



Start Sales Campaign Early for Christmas Business By HARRY ADAMS

EVERY year more and more Golf Pros are keeping their golf shops open for Christmas business. Today's modern golf shop is no longer just a place to have clubs cleaned and stored but a fine exclusive store with the finest of sports apparel for both sexes, including Junior, plus a complete line of golf clubs, balls and bags by leading manufacturers. Realizing the terrific amount of money spent every Christmas in retail stores, the aggressive professional is going after his just share of this business.

The following are a few of the approaches used to gather in this business. 1. All ball manufacturers have fine

Christmas packages of six or twelve balls.

2. Personalizing of golf balls by placing the player's name on each ball (at no additional cost).

3. All companies have folders, shopcards or a small brochure that can be mailed or placed in the lockers.

4. A letter to the membership outlining the plan to keep open for Christmas, plus a story of what he has to sell.

5. Nearly every club has members who are executives of industrial plants or connected with the sales departments who are obligated to some of their valuable accounts for Christmas gifts. The proper approach to these men could lead to considerable volume in balls, clubs, etc., not to mention that they would be grateful to the pro for doing their Christmas shopping for them.

6. Last, but not least, the terrific increase in women's golf opens up a newer and bigger market for Christmas sales. Many husband and wife golfers could well exchange golf gifts instead of the horrible necktie and costume jewelry and don't forget that mama controls the family purse strings. Be sure to contact the ladies. Pop would like nothing better than to do his family Christmas shopping for his wife and Junior with one stop service at the pro shop.

Most pro's start their Christmas selling in late September to insure delivery of all goods in time. Don't wait! Start now.

Point Clear Sets Senior Invitation, Jan. 5-7

Lakewood, Grand Hotel's magnificent course at Point Clear, Ala., will stage its first invitation tournament for seniors 50 years and older, Jan. 5, 6 and 7. Play will be at 54 holes in three divisions.

Following the tournament at the famous course bordering Mobile Bay the contestants and their wives will attend the Senior Bowl football game at Mobile, Jan. 8.

Pros whose seniors desire an invitation should write for particulars to Andy Mortimer, pro, Lakewood GC, Point Clear, Ala.

HELP BURTON RESEARCH



Grau photo

Middleman of this husky team is Dr. Glenn Burton, famed turfgrass scientist of Tifton, Ga. On Glenn's right is his son Tommy, 13. The son who is bigger than Pappy is Bobby, 16.

The lads have been helping Burton and Robinson maintain the plots at Tifton for several years. They haven't got rich on the job but they've really been big helps in enabling turfgrass research at Tifton to be carried on with a limited budget.

Turfgrass experts who've been at Tifton say these two kids know more about fine grasses and their care than any other two youngsters in the country.

Lady Pros Disapprove Calcuttas

LADIES' PGA at its annual meeting in Evanston, Ill., Aug. 2, issued statement of its policy on Calcuttas:

"Though the LPGA recognizes its inability to control Calcutta pools, the membership does not approve or endorse the use of such gambling devices in conjunction with its tournaments."

With the 24 members of the LPGA officially aligning the organization with the USGA against the high-rolling gambling, those who are campaigning against tournaments becoming an instrument of gambling hope the PGA may declare its position on the subject.

Mildred Zaharias was re-elected pres. of the LPGA; Betty Jameson, vp; Betsy Rawls, secy.; Betty MacKinnon, treas.; Beverly Hanson, publicity chmn.; and Betty Hicks, tournament chmn.

The girls have 30 tournaments with \$160,000 prize money in prospect.

PGA Quarter Century Club Plans Championship

OHN INGLIS, pro at Fairview CC, Elmsford, N. Y., and many years president of the Metropolitan PGA section, has another important job on which he's working.

John is pres. of the PGA Quarter Century Club which consists of approximately 300 who have been PGA members for 25 years or more. Not all of them are eligible for the PGA Seniors' championship.

The Quarter Century pros played a warm-up competition last year and found it so interesting they want to put on a big event prior to the PGA Seniors' championship at Dunedin next January. It is planned to have a purse of \$2500 and Inglis and several others long associated with pro golf are discussing sponsorship of the Quarter Century championship with several likely sources of the money.

Southern Cal. Turf Conference Oct. 4, 5

The 1954 Southern California Conference on Turfgrass Culture will be held at the Elks Club in Los Angeles October 4 and 5 and will be presented by the College of Agriculture and University Extension, University of California, Los Angeles, in cooperation with the U. S. Golf Association, Green Section.

Association, Green Section. Presiding at the 9:00 a.m. to noon session the first day will be C. C. Simpson, Sr., chmn., Research Advisory Committee for the Experimental Program in Turfgrass Culture. V. T. Stoutemyer, professor of floriculture and ornamental horticulture, College of Agriculture, U.C.L.A., will deliver the address of welcome.

Speakers during the two-day conference will include John Gallagher, agronomist, American Chemical Paint Co.; W. A. Harvey, weed control specialist, College of Agriculture, Extension Service, University of California, Davis; Fred V. Grau, agronomist, West Point Products Corp.; and Robert M. Hagan, associate professor, irrigation, University of California, Davis, all of whom will address major first-day sessions. Prominent authorities drawn from related fields will participate in section and panel meetings dealing with such topics as Irrigation and its Application, Grasses and Weeds, Diseases and Insects, and Soils and Nutrition.

Scheduled for October 5 is a bus tour which will encompass the U.C.L.A. turfgrass gardens, Los Angeles CC, Santa Anita Race Track Grounds, and the Los Angeles State and County Arboretum. Stoutemyer will be tour director.



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Turfgrass Questions Answered By FRED V. GRAU

Q-We are planning to rebuild some greens. We have thought about planting polycross creeping bent. Would this be a good grass for us, and where can we obtain seed? (Texas)

A—Polycross creeping bent, officially known as Penncross, was developed by Prof. Musser at Pennsylvania State University. It is, however, adapted to other regions. Supt. Otis Owen has had wonderful success with Penncross at Dallas CC. There is no seed available at present.

If you are fortunate enough to locate someone with Penncross in the nursery, we suggest you try the following planting method: Run an Aerifier with $\frac{1}{2}$ in. thatch spoons over the nursery to remove little plugs of sod. Gather up these little plugs for planting material. Scatter them over the prepared surface of the green, topdress, roll and water.

Q—We are planting several new greens. What grass would you recommend for our area? (Okla.)

A—Cohansey (C-7) bent consistently has given good results in Oklahoma. The yellowish-green color is attractive and the putting surface is as good as one can find anywhere. Cohansey has heat-resistance which enabled it to come through daily temperatures of 110 degrees-118 degrees F. during the summer of 1954. If you are near Tulsa, you can see an excellent example, the No. 7 green at Tulsa CC, where Alex Repin is supt.

Cohansey was discovered by Supt. E. R. Steiniger at Pine Valley GC in New Jersey. It has demonstrated its aggressiveness at St. Louis, Kansas City, Indianapolis, Cincinnati, Richmond and other places.

The planting method described in the previous Q and A also could be used with Cohansey.

Q—We have heard about Pennlu bent. Do you recommend it for greens? Is there any planting material available? (Del.)

A—There is a limited amount of Pennlu available. Ask your Agricultural Experiment Station for the nearest source of supply. Pennlu produces a dense, dark green putting surface of high quality. It has good disease resistance In trials at Penn State, Pennlu consistently scored above other bents. It is one of the parents of Penncross.

Pennlu was discovered at Lulu CC, Phila., and the original area is still there and still beautiful, under the care of Supt. Harold Price.

Q—We wish to aerify greens this fall. Would it be best to do the work late in the season after most play has stopped? (Mass.)

A—No. Aerifying should be done while grass is growing actively. Otherwise, openings will not heal and poa annua invasion is apt to occur.

Time of aerifying is an important factor. There is a considerable variation in the growing period of different bents. Bents that grow late in the fall, such as Congressional, Cohansey, Toronto, Pennlu and Penncross, can be aerified later than a grass like Washington bent, which stops growing when cool weather approaches.

Aerifying is a practice that overcomes compaction which occurs constantly throughout the playing season (also the growing season). For this reason aerifying should be done regularly (preferably once a month) throughout the growing season.

Q—Can you tell me the best grass and the right management for open tees in the Cincinnati area? (Ohio)

A—On sunny tees U-3 Bermuda is doing a splendid job, and some of the other improved strains show great promise. Many Bermuda tees are being cut too high which gives the golfer a spongy, insecure stance. Briefly, the best management is to cut closely, about % in., and cut frequently, three to four times a week. Aerify frequently, at least once a month, and fertilize generously, at least two pounds actual nitrogen to 1000 sq. ft. each month. Water rarely is needed on Bermuda tees.

Q—We have a partially shaded tee where we cannot grow Bermuda. We were thinking of using Merion. Would you recommend this? (Michigan)

A—Merion bluegrass, properly managed, ought to give you satisfactory results.