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January, 1957
Choose grass that will be permanent • Check this summary for leading turfgrasses in general use throughout the U.S. • New strains to be considered

By FRED V. GRAU

This old world of ours is in a violent period of climatic changes. It may be too hot one year, too cold the next — the same with wet or dry. Emphasis for years to come must be upon those grasses that can tolerate the greatest extremes of climate with minimum requirements of irrigation. They must have resistance to disease and insects, and maximum ability to recover from unforeseen and unpredictable injury.

Selection of grasses is No. 1 on my list. Without a good sturdy grass all the fine equipment and expensive labor is in vain. We seek grasses which will be permanent once they are planted and which will give maximum satisfaction with minimum care. Our program of developing superior grasses is in its infancy.

For the record it will be well to name here the leading turfgrasses in general use over the country.

Kentucky bluegrass: Standard. Has definite regional adaptation, intolerant of close mowing demanded by many sports, susceptible to leafspot disease which weakens the grass just in time for crabgrass invasion. Resistant to rust.

Merion Kentucky bluegrass. Has a definite regional adaptation, tolerates close mowing, highly resistant to leafspot, susceptible to rust, especially when not properly fed.

It has been shown that 50-50 mixtures of Merion and standard Kentucky bluegrass may have definite advantages over either alone. The weak point of one grass is masked by the strength of the other. Best suggestion: Buy straight seed of each, mix your own.

There are other bluegrasses on the horizon but performance to date does not seem to be enough better than standard Kentucky to warrant suggesting more than trial plantings. All have been rated lower than Merion in test trials in the east. (Arboretum, Delta, Troy, Minnesota 95).

Better bluegrasses than those we have today are on the way.

Fescues have dropped in popularity for turf use. Diseases, heat and wear quickly ruin turf of fine-leaf fescues. The new Pennlawn, now on the market, may revive interest in fescues. There should be a trial plot (nursery) of Pennlawn on every golf course in its range of adaptation.

Tall fescues are becoming more popular in turf circles for certain areas and types of use since the first large lawn was planted to Alta in 1947 at Beltsville. The coarse blades and clumpy nature become less conspicuous when seeded heavily 5 to 10 pounds to 1000 sq. ft., and when adequately fertilized and properly mowed. Resistant to drought, disease, wide range of soil pH, and insects, tall fescue deserves a thorough trial in test plots alone and in mixtures. Alta and Ken-

(Continued on page 65)
Common Bermudagrass stand on Squad 'C' field, West Point 9 days after planting pre-germinated seed.

Photos by O. J. Noer

Closeup of the Bermuda on the Squad 'C' field. Growth of the pre-germinated grass was excellent in spite of the cool nights.

Roundup

Pre-germination Experiment • Summer fairway renovation • What to do about iron chlorosis • Trend to use of lead arsenate on tees, greens grows during year

By O. J. NOER

Several clubs have used sodium arsenite at heavy rates of 30 to 35 lbs. per acre during summertime in conjunction with fairway renovation programs. Customary procedure has been to use 2,4-D or a mixture of 2,4-D and 2,4,5-T in June to kill broadleaf weeds and clover. By using them then, the interval before seeding has been sufficient to dissipate any adverse effect upon seed germination. Fairways were fertilized generously and sprayed with the heavy rate of sodium arsenite in August, and again a week later at 5 lbs. per acre. They were seeded immediately afterwards and poor, weedy, clover infested fairways were transformed into excellent turf.

Similar treatment in a spring renovation program gave equally good results at the U.S. Military Academy. The method was tried on Squad "C" practice field which was mostly knotweed, clover and had every known kind of crab grass in midsummer. The field was aerated first in several directions, spike dined thoroughly and fertilized generously. This was done in late May. The surface was sprayed with sodium arsenite at 35 lbs. per acre with about 100 gals. of water. Another 5 lbs. per acre were used a week later. The field was seeded immediately with pregerminated common Bermudagrass seed at about 80 lbs. per acre. An alfalfa and grass disc seeder was used, with seed placement 1/2-in. deep. The field was seeded in two directions on June 6, using half the amount of seed each way.

Overall cover looked good by June 19 due to pregermination. There were no weeds of consequence, only a few scattered crab grass plants. By fall there was a good stand of turf. A small square section was roped off and not sprayed with sodium arsenite. By mid-June it was a solid mass of knotweed. It was renovated then and the subsequent cover with Bermuda grass was satisfactory by fall.

Various formulations of disodium methyl arsenite were sold in considerable volume in 1956. Its acceptance seems best in the South, probably because discoloration of Bermuda grass is negligible at rates which effectively control many weeds. Kill of sedge has been excellent. It is said to give promise of controlling crab grass, nut grass, dallis grass and even lemon grass. If preliminary good results continue, higher cost of disodium methyl arsenate over sodium arsenite can be justified for use on green and tees. In other areas it must produce superior results to justify the cost difference because discoloration of Bermudagrass is less annoying.

The fairways at Miami Shores were badly infested with weeds of all kinds, including dallis grass, crab grass, and lemon grass. Glen Byrd started a renovation program in June of 1956 after winter play stopped. He used the following mixture to kill weeds: 2 qts. Dimer formulation of disodium methyl arsenate, 1 pt. of their wetting agent, 1 qt. Dow 40 type

(Continued on page 67)
Increasing Importance of Municipal Courses Cited at Park Meeting

Boston's plan for preserving breathing space around the metropolitan area exemplifies the kind of thinking park and recreation officials will have to indulge in if they are to provide top recreational facilities for their communities, Rex McMorris, executive vp of National Golf Foundation, told the 58th conference of the American Institute of Park Executives at their golf course planning session. The conference was held in Seattle's Olympic Hotel.

McMorris told how Boston city officials, cognizant of increasing population and shorter hours and added leisure time for their more than 800,000 inhabitants, have provided a 100 mile "green belt" around the periphery of the metropolitan area to take care of recreational needs. McMorris also pointed out that although municipal layouts account for only 15 per cent of all courses in the U.S., more golf is played on them than on semi-private and private courses combined.

"Since golf has so definitely been taken out of the category of being a rich man's game," he added, "we are all faced with the reality that it must be fully provided for in any community recreation development program." McMorris cited an imposing list of cities in which the game is adding revenue to municipal coffers and mentioned several other communities in which as many as two or three municipal courses have recently been built, will soon be opened for play or are being planned. On the other hand, the Foundation executive called attention to the 700 communities of 5,000 or more population without municipal golf facilities.

Must Overcome Difficulties

Burt Anderson, South Gate, Calif., park super., told the Seattle audience of some of the difficulties that have to be overcome in obtaining land, appropriations and equipment for the starting of municipal courses, but added that the arguments against expanding golfing facilities are not by any means insurmountable.

Anderson said the one strong argument in favor of municipal layouts is that they are invariably self-supporting. Then, after tracing the building of and history of South Gate's publicly owned Par 3, he told how his park department constantly sampled opinions of golfers who played the course and got some very definite ideas as to why short courses are necessary in a city's recreation program. He listed them as follows:

1. Golfing facilities usually are inadequate, even in golf-conscious communities;
2. Factors such as time, transportation, age and health prevent some persons from playing the longer courses;
3. Many people have found a hobby for the first time in their lives.
4. It has brought the family to parks and playgrounds in a group rather than separately. Where pop, for example, once begged off going to picnics and outings, he now enthusiastically endorses them because he knows he can get in some golf at the Par 3 adjoining the park or recreation area.

Tram Is Popular

Pete Masterson, golf director, dept. of parks, Seattle, mentioned two innovations in course operation in his brief report on the Seattle courses. Most popular in the eyes of the golfer is a tram or power lift that eliminates a long uphill hike from 11th green to 12th tee of the Jackson Park course. Golfers gladly pay a dime for the trip to a private concessionnaire who has a contract with the city for three years. At the end of this time the tram reverts to the city.

The second "labor saver," reported by Masterson, is a mechanical ticket dispenser installed on the short nine hole course in Jackson Park. The golfer obtains a ticket by inserting a half dollar. Tickets are checked on the course by a park employee. Masterson reported the dispenser has proven to be very satisfactory.

The remaining hour of the session was devoted to planning and building the course. Course architect William F. Bell served as moderator and was assisted by architects A. Vernon Macan and Norman H. Woods. Bell discussed contractual agreements covering such details as maps and plans, supervision, time limits, inspection, payment and feasibility of split contracts.

Macan told the officials, "a mere string of numbers (par) on the scoreboard is no standard by which to judge a golf course. Rather it is the strength and character of the individual holes that are the determining factor."

He said the challenge to be met by the architect was to see that every hole demanded its rightful number of good golf shots. Many holes rated par 4 on the scoreboard are probably par 3½ or less, and total par, be it 70 or 72, does not tell the true story.
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- equipped with Briggs 4 cycle 8B engine
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**Lightweight**  **Easy to Handle**  **Sturdy**

Because this mower's reel blades and bed knife are of laminated steel that is not effected by the abrasive action of the soil, the ATCO is especially valuable as part of the "three-step way to perfect greens:"

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New, improved and backed by the West Point Products organization, the ATCO is worthy of your serious consideration in 1957.

*West Point Products Corporation  West Point, Pa.*

"Modern Turfgrass Tools"

January, 1957
Golf's New Books


Originally published in 1948 at $15.00 per copy, this golf classic has been revised and brought up to date through the 1956 Open. In addition, it is now being retailed at a price that other than collectors can afford.

Wind, the Sports Illustrated golf sage, spares the reader involved detail about the early American history of the game, gliding swiftly to the story of Walter Travis, who, if he is a legend, is at least a living one even for those who may have only mild interest in golf lore. After recounting Travis' 1904 victory in the cold climate of the British Amateur, Wind goes on to trace the triumphs and defeats, the great moments and heartaches of golf's giants from Jerry Travers through Hogan.

Painstaking research has gone into The Story of American Golf. At least 20 of the most decisive matches of the last half century are described stroke by stroke, not in typical play by play fashion, but with an intimate feeling for the drama that surrounded them. Behind-the-scene stories are as colorfully told as the action that takes place on fairway and green.

 Ouimet, Hagen, Jones, Sarazen, Lawson Little, Snead, Nelson, Babe Zaharias and lastly Hogan, all rate their chapters in Wind's history, but just as interesting are the stories of such tragic figures as Macdonald Smith, Leo Diegel and Harry Cooper, who never quite passed over the threshold to greatness.

For all its dates and details, The Story of American Golf is one of those engrossing books the reader will want to digest in one sitting. And, besides becoming steeped in the game's history, he probably will reach the conclusion that, as golfers go, man's triumph comes not in victories over other men, but over himself.


Every American golfer who has played the Old Course at St. Andrews, whether or not he's been in the R&A clubhouse, every one who hopes to play at St. Andrews and every golfer who's wondered about the history of the game, its rules and vividly interesting Scotch pioneers will get a great deal of enjoyment out of this book.

Bernard Darwin in the book's foreword, writes: "I have always loved the ancient lore of St. Andrews, but Dr. Salmond's admirable, nay, enchanting pages have made me realize how much there is that I did not know."

What virtually none in this country knows about the changing architecture of the Old Course — its beginning and alterations by nature, and later by man — alone make the book intensely interesting and educational reading. Another chapter that also is worth the price of the book is the story of the first 19th hole of the Royal and Ancient Golf Club.

Intermingling of the history of the R&A, the town's Old and other courses and the colorful golfers of St. Andrews who didn't belong to the R&A, weaves a story that pretty nearly makes "must" reading for the man who pretends to know about the game and business of golf.


Stanley and Ross have made a good collection of information and entertainment for the newer golfer. Instruction, procedure and conduct at private, public and semi-public courses, a glossary of golf terms, something about clubs and rules, a directory of leading sources of information and classics of golf humorous short stories give the man or woman who wants to get into golf or who is a newcomer to the game very good elementary schooling in print.

The book's instruction reprinted from works by Doc Middlecoff, Jack Burke, Johnny Revolta, Ernest Jones, Bobby Jones, Joe Novak, Johnny Farrell, et al., is the sort of stuff that gives the student on the reading tee solid help. All in all the book teaches the new golfer to talk and understand a good game.


In previous volumes, which were British best sellers, George Houghton tried to ex-
By May 23rd, I was convinced that AQUA-GRO was helping me. I bought enough material for all tees and several problem greens. The results have been tremendous—the turf on the tees has a better texture than I've ever had. Tees built on clay have roots 18-inches deep—look as good and are almost as soft as those built with top soil. My few untreated tees lost turf during the dry spell in June—soil was dry and hard—AQUA-GRO treated tees were perfect, green, soft and moist 15 inches down.

Clippings on my treated greens are almost twice as much as untreated greens. The color of these greens is much better; particularly noticeable before mid-morning. The heavy mat I have on the banks and aprons always gives trouble in hot dry weather. Light rains or even hand watering does not wet these matted areas unless they have been treated with AQUA-GRO.

Mr. X of Colorado
Pet Hobby: Fishing
Reports: Excellent results using AQUA-GRO to cure
- Localized-dry-spots on greens

Mr. Y of New Jersey
Pet Hobby: Golfing
Reports: Success using AQUA-GRO for
- Pimples and contour on greens
- Slow draining hollows on greens

Mr. Z of Ohio
Pet Hobby: Experimenting with Grasses
Reports: Using AQUA-GRO on
- Localized-dry-spots on greens

1 Gallon of AQUA-GRO FREE to each of first 10 clubs to correctly name all Silhouettes

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plain his own addiction to golf as well as that of his English and American contemporaries. Here, he enlarges on the theme by going back six centuries, and in a couple instances, practically to the Stone Age, to analyze the mania that gives modern man what well may be his real link with the past.

Probably the most interesting addict described by Houghton is Alexander M'Kellar, who couldn't be anything but an old Scot. Alex bought a tavern but was so religious he decided he couldn't operate it. Thereupon he acquired a wife and installed her as the tavernkeeper so he could devote full time to golf. He played in the snow, even after dark by hurricane lamp, and occasionally had his supper brought to him on the 17th green. Nights when he wasn't playing, he sat around the inn talking about the game with his cronies. What ruined an otherwise perfect picture was Mrs. M'Kellar's refusal to serve ale.

This, and many similar anecdotes, give Houghton's latest book a bounce that should keep the reader in good humor for many days following the two hours it takes him to read it.

Pros Study Profits
(Continued from page 38)

All the pros and Jones emphasized having pegboard displays well off the floor so it is easy to clean beneath them and to change the displays often. Some references were made to installing pegboard panels in golf shops so both sides of the panels are used.

Byron Thornton of the National Cash Register Co., retail sales training department, in telling “How to Increase Shop Sales” said that before long there will be 5,000,000 golfers spending an average of at least $1 per week for golf equipment.

Shop of Tomorrow

He believes that golf shops generally are going to take on a “new look” that will be semi-self-service retailing establishments rather than the face-to-face selling places pro shops now are. Complete self-service outlets with check-out systems similar to those of the big chain food stores also are a possibility.

Thornton's talk reflected considerable study by NCR experts of operations at the company-employees' 36-hole club at Dayton, O., and of suggestions advanced by five Dayton area professionals and their assistants.

Tommy Bryant, Gene Marchi, Norman Butler, Dixie Rutherford, Wilmer Goedeke and their assistants were guests of NCR at what Thornton and Leigh Metcalfe, the company's asst. adv. mgr., call a “brain storming” session. Everyone wrote down ideas he thought would make pro business better. The ideas weren't evaluated or debated but simply put into the record for the individual consideration, later, of each pro and his staff members.

The Dayton pros produced 105 ideas, all of which were classified by Thornton and will be printed in GOLFDOM.

Thornton says that selling steps NCR advocates and has used successfully for 70 years are rated in this order: Introduction of the product, arousing interest, proving the need, demonstrating and closing the sale.

He thought that “Did you find what you are looking for?” is the best selling approach that can be used in the golf shop.

Clyde Mingleendorff, pres., Club Managers Assn. of America, and mgr., Atlanta Athletic Club, told the pros that they, and manager have to work together like doctors and druggists. If there are petty, uninformed and selfish attitudes instead of cooperation between pro and manager, both department heads will suffer, the CMAA head said. He has worked with George and Harold Sargent, professionals at East Lake, the Atlanta AC's country club and has found the association thoroughly pleasant and profitable in making both clubs more attractive and useful to members.

Mingleendorff suggested that in cases of clashes between managers and pros that each fellow investigate his own personality and operations before he starts blaming the other person.

Brugger Heads Turf Group

E. J. Brugger, Swope Park GC, Kansas City, Mo., is pres. of Heart of America GCSA for 1957. Other newly elected officers are: Vp: P. L. Pepper, El Dora (Ks.) CC; Secy-treas: L. E. Lambert, Bethel, Ks; Directors: Harold Henry, Hillcrest CC, Kansas City, and Floyd Bears, Unity CC, Lee's Summit, Mo.

Holdover directors are Ray Whitlow, Topeka (Ks.) CC and H. J. Elmer, Indian Hills CC, Kansas City.

Check GOLFDOM'S
Buyers' Service — Page 77
Swinging Around Golf
(Continued from page 18)

Seiling (Okla.) 9-hole sand green course in play late last year ... Gillbert A. Currie, sr., donor of Midland, Mich., Currie muny course, designed and helped to build a 9-hole par 3 addition to the muny course ... New layout expected to be in play in June ... Charles Smith retires after 34 years as pro at North Shore CC (N.Y. Met dist.) ... The Association of Golf Salesmen of the N.Y. Met district has been revived ... Leo McNamara of Wilson is pres. ... Maurie Marabon, Mike Long, Fred Decker and Jack Lust also are officials.

Hal Langdon, pro at Colonia CC, Woodbridge, N.J., already has the winter golf instruction schedule going strong ... Langdon is teaching evening classes in beginners and advanced golf at Cranford (N.J.) Adult High School ... Present indications point to this being by far the biggest winter in indoor golf instruction.

Dick Wilson, Delray Beach, Fla., designed new course being built for Harder Hall at Sebring, Fla. ... Robert J. Coffee, director of Mercer County (N.J.) Recreation dept., George R. Coulton, county supt. of public works, and Russell Kerns, Trenton (N.J.) CC supt., who is in consulting capacity on new Mercer County public 18 say efficient use of county machinery and key personnel is keeping construction costs remarkably low.

Bayside Links, in Queens, N.Y., which closed last fall after 24 years and is being subdivided, was designed by Dr. Alistair Mackenzie who also designed the Augusta National course, Pasatiempo and other fine courses ... Bayside was on 97 acres and laid out so no slice was out of bounds ... Walter Grego kept the course in great condition despite traffic that averaged 1,500 a week in season ... Turf from several of the Bayside greens was given by Jack Parker, buyer of the course, to the club where he is a former champion, Fresh Meadow.

Manuel de la Torre re-elected pres., Wisconsin PGA ... Harry Pezzullo re-elected pres., Illinois PGA ... Leo Fraser elected pres., Philadelphia PGA ... Dugan Aycock re-elected Carolina PGA for 11th time and Purvis Ferree re-elected Carolinas PGA sec. for 14th time.

Mrs. T. E. Patterson, Lubbock, Tex., re-elected pres., Women's Trans-Mississippi Golf Assn. ... The 27th Women's Trans-Miss will be played at Desert Inn CC in late October or early November.

With Goldflom's last issue each year on our ten-times-a-year schedule combining our October, November and December issues, we don't get a chance to record the grand parties that clubs put on in the fall for stars who work for them ... Last fall saw many such gala affairs among them being the 11th annual tournament for Danny Williams, pro at the Knolls, Boonton, N.J. ... More than 220 men and women, pros and amateurs, played and at a dinner hailed that grand gentleman who's served in Jersey pro golf for 35 years ... Bruce Matthews, mgr. and supt., at Green Ridge CC, Grand Rapids, Mich., for 25 years, was honored by a tournament and a dinner at which he and his wife were crowned with laurels and oratory ... Bruce, prominent nationally as well as regionally in turf maintenance work, has been active in the planning of the course now being built at Michigan State College.

Among the other fiestas honoring golf notables was that given Armand Farina, mgr.-pro at Schenectady (N.Y.) Municipal course at which Mayor Sam Stratton, sports editor, Al DeSantis, and other luminaries spoke in praise of Armand and his work ... They gave him a diamond studded wrist-watch ... Course workers gave him a desk set ... Another party was for A. B. Thorne, pro at Lancaster (Pa.) CC ... Thorne got a check along with the kind words ... Bernard (Bun) Quinn, pro at the Watertown (N.Y.) CC, was honored by his club at a dinner following an afternoon tournament.
You can’t beat TORO for service!

Look at that list of Toro Parts and Repair Depots on the opposite page. There isn’t a state in the union—or a province in Canada—that doesn’t have at least one Toro Distributor with his own top service dealer organization ready to give you speedy service with factory-trained mechanics.

One thing’s pretty clear: Toro backs up the finest power mowers you can buy with the only national service system that puts factory-trained repairmen and distributor-stocked parts practically at your back door.

This system prevents long delays in parts replacement—because every Toro Distributor has a complete stock. And this system keeps your machines working steadily during the cutting season—because the expert maintenance men are always near and ready to help.

Look down that list right now. Find the name of your nearby Toro Distributor. Then give him a call, or write him soon. He’ll be glad to show you the latest Toro equipment. He’ll help you choose the right machine for your needs from the world’s most complete line of power mowers. And when the time comes, he’ll give you the kind of service that’s made Toro the No. 1 choice wherever grass cutting is the problem. You can bet on it!

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