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UNITED STATES GOLF ASSOCIATION GREEN SECTION

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Contents

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The Use of the Grounds for Winter Sports

By Sherrill Sherman, Yahnundasis Golf Club, Utica, N. Y.

Naturally the title of this article restricts the discussion to those clubs that are prevented by climatic conditions from the use of the golf course for golf in the winter months. As cities have grown and crept closer and closer to the club grounds the sum necessary to start and equip a club with all that the modern member demands, or even to continue the further development from the days of cheap land and building, is great. With this big investment, it would seem the part of wisdom to utilize it for the benefit of the members every month in the year, for the reaction to the continuous outside use is the better support of the club house and the consequent increased revenue. In proportion as the full use of the club's facilities is made by all its members the better the club spirit will be. A question often arises with clubs where the climate prevents year-around golf, what should be done to furnish outdoor activities for the members and so hold their interest and patronage. The answer, I believe, for those clubs who are situated in the northern climate where the cold weather means snow and ice for at least two or three months, with reasonable consistency, is to avail themselves of the opportunities of year-around service to their members by the furnishing of facilities for the winter sports.

And the first question to be answered is "How accessible is the club in the winter for its members, either by automobile or trolley, for without accessibility it can hardly be a success." And if the reply is favorable that a majority of the members can reach the club readily and easily, then surely winter sports should be encouraged. If it is possible to locate the facilities near the clubhouse or entrance to the grounds, so much the better, for the easier they can be reached the greater the patronage will be by the members.

In reply to the query what are the winter sports that are possible to develop by the average golf club, I shall answer by merely listing them here as skating, including hockey, skiing, tobogganning, snow-shoeing and curling.

With questions of accessibility and sports settled the next question is one that is of vital importance in the consideration of the whole plan and that is "What will it cost for these different sports?" In all of them the layout can be simple or elaborate, as the club feels justified in spending money. The longer the season and the greater attendance, the more expense would be warranted to be incurred. This also will vary with the winter and the location of the club, in a snow-belt or otherwise.

Most clubs carry their greenkeeper on the payroll throughout the whole year, whether the clubhouse and grounds are kept open or

everything closed. Generally for the protection of the club house from dampness and cold a moderate fire is kept and the greenkeeper takes care of it and acts as watchman for the property. With this expense anyway the additional outlay, besides the original moderate investment in equipment the first year, would not be great. The number of men needed would vary as the rink was large or small, and also with the extent to which the other facilities were developed. Normally, three men should be sufficient, besides the greenkeeper, and the cost per week could be readily figured when the local rate for labor is known. The cost of the water used would not be large. The lighting bill would depend on the evening use of the rink, and the coal to heat the skating house would probably be a little more than a ton a month, unless the skating house is quite large.

Skating would be probably the leading sport, for it appeals and can be partaken in by both the old and the young, the women and the men. Once learned, like swimming, it is seldom forgotten. It is much better for the average golfer to keep himself in condition for the coming summer's golf than a comfortable chair about the bridge table. Ordinarily the tennis courts are located close to the club-house and these, with their level surface, can be flooded to form the rink without damage to the courts. As water is piped to the courts for spraying in the summer, the supply for making and keeping up the ice on the rink is at hand without additional outlay. The tools required are few, simple and inexpensive, such as snow shovels, ice scrapers, armored hose, snow scrapes, and six (6) inch-boards for the side of the rink to build the ice against.

For the sides of the hockey rink two-by-four stakes driven into the ground, preferably before it is frozen, form the supports to which the side boards, to the height of three (3) feet or three feet six inches, are nailed. Where the ice surface is sufficiently large it is a good idea to have a half sized hockey rink for the boys from 10 to 14, where they can safely play and learn the game without danger of injury from the older players. Hockey goals can be made at little cost from piping and cord netting. It is well to have at least six (6) or eight (8) fifteen-feet high poles about the sides of the rink which will carry the electric lights to light the skating surface for night skating. Several chairs, with wooden runners, are a great help to the beginners in learning to skate and for the younger children to play with. When tennis courts are used, there is no danger such as is always possible when the frozen surface of a pond or small lake is used, that an air-hole or thin ice makes possible a wetting or sometimes a more serious accident. As skating is done during cold weather it really is necessary that a heated house of some kind should be convenient to the rink in which skates can be changed or the skater enter to be warmed. Toilet facilities should be provided, and when the attendance warrants small lockers, for nowadays even the children have the skates attached to their shoes. Besides plain skating, with snap the whip and tag, amusement and enjoyment is furnished by fancy skating, races in classes to fit all ages and skating abilities, and hockey games. It adds to the pleasure, if a music machine, such as a victrola, is in the skating house wired to carry its music to amplifiers on the outside which will carry the sound to every part of the rink. Where possible, it is well to supply light refreshments in the skating house for the crisp weather and winter exercise brings real appetites.

Friday night seemed to work out as the best night for carnivals and special programs. It is quite often the family night, with no school on Saturday when the parents have a real time in going out with their children. The different stunts that can be run off are races, fancy skating exhibitions, fancy costume parties, with prizes for the best or funniest dress, or any interesting suggestions from members that can be worked out. Where there is sufficient demand a skating instructor can be obtained and classes held for fancy skating.

When one has skated sufficiently the natural thing to do is to go to the clubhouse for something to eat and something warm to drink. The winter sports will increase the patronage of the restaurant, and the House Committee would be wise to cater to their special desires, with menus that can be served with reasonable rapidity, with leading items for party nights, such as sausages and pancakes, or sausages and scrambled eggs, with coffee, tea and cocoa. Cinnamon toast, ice cream, different varieties of pies, cakes and candy will fill the bill especially for the children. Of course this does not prevent the supplying, by *a la carte* order, to the members whatever their special desire in delicacies might be at that particular time. The new loud-playing music machines also allow dancing when the crowd has come indoors for refreshments and will make the time seem short before service begins.

For snowshoeing and skiing, the natural slopes of the club's ground furnish the proper facilities. Where it is desired by the wishes of the members a simple ski jump can be built on one of the steepest hills on the course. As an added inducement, the club should have for rental to the members at a nominal fee skis and snowshoes. Tobogganning is a most exciting and exhiliarating sport which can be partaken in by a crowd, for toboggans can be obtained that will carry several people. Toboggans also should be kept for rental to the members. Where the natural hills are not steep enough or where the ground is level, an artificial toboggan slide can be built to give the necessary speed to satisfy the cravings for this excitement and exercise. While it is no effort to go down, one earns the pleasure by the walk back. It is possible to have horses or a tractor to draw the sleds or toboggans back up the hill.

Curling should certainly be indulged in by the members. It is the great Canadian winter game and it is spreading rapidly in the United States. It is a wonderful sport for skill and interest, with team play a very necessary factor. Aside from the upkeep of the ice, there is practically no expense to the playing of the game. The stones or irons, which are used, could be purchased by the club and would last indefinitely. The cost of the season's brooms for the sweeping along of the stones would be nominal. Like golf, it adapts itself to many years of play and in this game the skill of the older man is very often more than a match for the strength and energy of the younger man. In some of the golf clubs, rinks have been maintained and curling has interested the members for years, as the Country Club at Brookline, Massachusetts, and the Mohawk Golf Club, at Schenectady, to mention only two which have played the game for sometime. It can be played outdoors or indoors, if a long, narrow building without heat is provided.

In all these sports the competitive spirit can be utilized to increase

the interest in them of the members. Club teams, both senior and junior, can be formed for games with neighboring clubs or teams of equal ability.

In this short sketch I hope that I have been able to clearly state the advantages to be gained by a club and its members, and that this will induce more clubs to provide the needed facilities. In this way a modern winter playground can be provided at one's own door and no longer will it be necessary to forego these sports and their attendant benefits if one is unable to spare the time for trips to Lake Placid or Switzerland.

Leipzig, Germany

United States Golf Association Green Section,
Pennsylvania Avenue Station, Washington, D. C.

Gentlemen: There is considerable interest in Germany in the work of the Green Section of the United States Golf Association, as well as in the booklets issued by this corporation. For this reason we would beg to ask if it is possible for German clubs or perhaps for the German Golf Association to become a member of this Green Section so as to receive the publications on greenkeeping issued. Should this be possible, we, the publishers of the only German golfing magazine would be grateful to know if you would grant us permission to reprint articles of special importance to German conditions.

We hear that a French club has become a member of your Section, so that it would, perhaps, be possible for Germany likewise to enjoy the results of your researches.

Very faithfully yours,
(Signed) "Deutscher Golf Verlag,"
Limburger, Manager.

The Green Section Appreciated

By Edward J. Poor, Salem Country Club, Salem, Mass.

An appreciation of your efforts to aid golf clubs in establishing better courses and superior turf, with consequent increased pleasure to the members, is decidedly in order as a result of what has been accomplished at our club by strict adherence to a policy of following the advice of the United States Golf Association Green Section, as published in THE BULLETIN.

The Salem Country Club's new 18-hole golf course was constructed during the summer of 1925; fairways were seeded, and creeping bent stolons planted on greens and tees in September of that year. The course was opened for play on August 1, 1926, and has proved very popular—the number of players on some days running up to two hundred.

Naturally, the fairways are not yet covered with seasoned turf, but with the exception of a few holes, they are in very fine condition. We have every right to expect that after topdressing and fertilizing this fall we will have first-class fairways next summer. The greens (the backbone of every course) have been a genuine surprise and delight, and our tees are in every way as good as our greens. We have been told by most every skilled golfer who has played the course that they are superior to any they have played on. We have repeatedly

been asked by those in charge of other courses how we produced and how we care for the greens. Our reply has been that we have simply carried out to the letter the program outlined by the Green Section.

Our most difficult problem was to organize in such a way and with such personnel that your recommendations would be carried out in regard to close, daily cutting at all seasons, frequent topdressing, and the use of ammonium sulfate, only, as a fertilizer. Our observation of other courses having bent greens that are extremely slow, fluffy, rough and with a grain that causes the ball to jump when putted, is that they do not cut closely enough, especially in hot weather, and that they simply will not topdress often enough. Our only trouble has been from chickweed, which we have dug out by hand, and brown-patch, which has not yet harmed the quality of the putting surface, although raising havoc with the uniform green color that we enjoyed at the start of the season. We intend to tackle the brown-patch problem next year with whatever mercury compound you advise is the best, as the result of your experiments.

You will understand from what we have said how eagerly we look forward to the receipt of your Bulletins. The fact that they are conservative, and are written from an engineering viewpoint, containing no half-baked suggestions, gives us great confidence in what you advocate as the best practice. We feel sure that you can not do better than to continue to hammer home the superiority of creeping bent greens, and the necessity of caring for them in the manner that you recommend.

Address at the Atlanta Athletic Club, Atlanta, Ga., by Mr. James D. Standish, Jr., Member of Executive Committee and Chairman of Public Links Section of the United States Golf Association

Mr. Standish's opening remarks touched on the early history of golf and its slow development to its present form, the recent tremendous increase in its popularity among all classes and in all sections of this country, and after referring to the organization in 1920 by the United States Golf Association of its Public Links Section, he continued:

"The last time I was in Atlanta was in 1918. I enjoyed myself very much then. I didn't have any idea then I was going to become connected with municipal golf, because, at that time municipal golf was very little known; it was confined to a very few cities. The principal cities at that time that knew golf in a public course way were Chicago, New York, Boston, and Toledo. The game originated in Boston. Mr. George Wright, whom you know was one of the founders of the sporting goods firm of Wright & Ditson, came from the old country in the 90's. He brought some clubs and a few balls along with him and secured the permission of the city to play the game in Franklin Park and he gathered around him a number of friends who played the game also. After playing two years they were barred from the park because it was dangerous. Later the game became known all over the country and they got permission to play again. That was the origin of the game of golf as a municipal course game in this country. It developed next at Van Courtlandt Park in New York and went on to Chicago. Chicago at the present time has upwards of 20 public courses to my knowledge. There are probably 30 by this

time. I can't keep up with them, but they are building around the outside of the city in the forest reserve system, a series of 25 courses which will stretch all around the city, and will provide facilities for all who want to play, at a moderate fee.

"You have an exceptional opportunity here in the South, it seems to me, to develop the game along these lines. In the first place, the revenue from your courses—and revenue is always important in a city project—is almost double that of the North, because you can play the year around here. There is no let-up in the amount of playing during the year. For that reason you will find the courses will become more than self-supporting. As a matter of fact, in the city of Buffalo they saw fit to float an issue of municipal bonds to the extent of a million dollars for recreational facilities. Eight hundred thousand dollars of that was devoted to the purchase of the country club there. It was a situation similar to Birmingham, Ala., where the city recently paid $700,000.00 for the Birmingham Country Club, their 18-hole course—for a municipal golf course. They realized the fact that the revenue from the course would far exceed the interest charges on these bonds and also take care of the course, and they are making a profit on the proposition on that basis.

"You will find that there is no difficulty whatsoever in inducing players to go to the courses. It has been found advisable in a number of cities to charge different rates according to the time of day. Your fee here on the courses you have are at present nominally 25 cents. It has been found practical to charge as high as a dollar or even a dollar and a half for players who want to go and play in the early part of the afternoon, leaving the twilight hours for the man who comes out after work, in the 25 or 50-cent class. The man who can take an afternoon off is generally able to pay a dollar or a dollar and a half for his recreation, and in that way more revenue still can be brought in. But you will find there is no trouble in keeping your courses crowded.

"Now, there are two ways of going about this proposition of public courses. One is to go out and buy your land and build your course on a permanent basis, building it so extensively that you know it will last for years. That is the way Buffalo has done, as I told you, and Birmingham, also, I understand. The other way is to build on.

"I find that you have a very desirable site here for additional facilities in Candler Park. Mr. Paine, Mr. Keller, Mr. Jennings and myself went out this morning and looked over both courses that you have now, and also Candler Park. You can put in 9 holes at Candler Park, but, gentlemen, I am perfectly satisfied in my own mind that Candler Park and Piedmont Park and the Key Course will never prove adequate for the golf the people will wish to play in Atlanta in the future. If I were in Atlanta I know I should devote all my energy towards urging that the profits from those three courses be set aside and that sometime in the future property be purchased somewhere just outside of Atlanta, or as close as possible, which would provide still further golf facilities. You will find there is plenty of demand for it.

"It is an interesting comparison which some of you perhaps are not familiar with, that you can provide for a great many more people in the space of a golf links than you can by providing an equal number of either tennis courts or baseball fields. You can get foursomes

of players, more of them in 50 acres of a golf course than you can in the same acreage devoted to either tennis or baseball. I spent a little time figuring that out, so I happen to know.

"It might interest you to know a little bit about the type of players who have played in the national championships in the past. The first championship we held was played at Toledo. We didn't limit the entries in any way. We had 160 in all. It would have delighted all your hearts to have seen the crowd of fellows that got together at the first tee. There was every type of man imaginative from the immaculately clothed to the working man who played in his suspenders. I remember one little fellow who came in there in a pair of overalls and he didn't know what some of it was all about, but we have managed these tournaments in such a way as to carry the gospel of good golf and the rules of the game to the men who have played in the tournaments.

"The first championship was won by Eddie Held. Eddie was a boy who was making his way through high school, trying to save enough to go through college, but he thought enough of golf to take the time off from his work to come to Toledo, and he won the championship. Since, he has become a member of a club and is a successful business man.

"The second championship was won by Richard Walsh of New York. Dick held a position then with the Wall Street Journal. He has the same position today. He has played in every championship. He is one of the characters of the championships. I hope he will always remain a public links golfer, because everybody likes to have him there.

"Joe Coble was a waiter in Philadelphia, he was the next champion, and I understand he had to hire a substitute to take his place where he was working, at time and a half fee while he was playing in the championship. Since the championship he has turned professional, and that is one of the desirable results of this public links championship, that it provides players both for the professional ranks and for the private clubs.

"The fourth winner was Ray McAuliffe of Buffalo; he was a salesman for the Mentholatum Company. He has turned professional since. As a matter of fact, he is the professional at their new public course I told you about a little while ago.

"The last champion was Lester Bolstead, of Minneapolis, a high school boy. He intends to enter the University of Minnesota and work his way through, but that shows the class of players in our championships. I am sure you will find that the citizen who uses the public links will be more desirable. It will provide recreation for all in the most desirable form. It is a gentle sort of game; a game that a man has to be a sportsman to play, and it develops all the most desirable qualities in a man.

"You have been very kind to ask me to come down here, and I don't know that I have added anything to the remarks Mr. Keeler and Mr. Maddox have made. There may be something about the cost of upkeep, etc., but I am not familiar enough with your equipment here to know about that.

"If you have any particular questions, I would be very glad to answer them."

QUESTION: "May I ask you a question, Mr. Standish? How, in your judgment, can the municipal golfers of Atlanta best be organized

to express to the city government their sentiment on the question of golf? In other words, how can the opinion of the general public best be expressed? There must be some way of getting organized expression from the municipal golfers that the city government will understand."

MR. STANDISH: "I should suggest that you circulate a petition among the players who use your public links courses. If that petition were circulated and signed by a large number of persons and handed to Mr. Maddox and Mr. Paine, I am sure that they would see that it was presented to the Council in the proper way, and I am sure it would bear weight. I don't know enough about the workings of your city government here to say any more than that.

"I should like to say this; I hope in the future Atlanta will find the opportunity to send players to the national championships. They will come back with a great deal of enthusiasm, and help materially in any plans you may have for the future."

Water Hazards

By Maynard M. Metcalf

Water hazards are of value only as mental hazards. As such they are legitimate, but they should be used sparingly. One or two is enough on any course. It is important to have one so that players may become accustomed to playing over water and may overcome the fear and uncertainty such a hazard causes. Otherwise they would fall down on other courses when playing over water.

One great purpose of hazards is to inspire a player in trouble to rise to super-golf and overcome the difficulty. A playable hazard is a spur to special effort and overcoming it gives a satisfaction that compensates for the initial disappointment of getting into the trouble. Without numerous such hazards a course is a tame affair. But a ball in a water hazard is generally unplayable and must be lifted—a depressing rather than exhilarating thing.

Of course the chief purpose of hazards, as of the rough, is to require accuracy of play in both direction and distance in order to avoid them. The ability to place one's ball with a good degree of accuracy is of the greatest importance whether on the tee or through the fairway and especially in approaching. Hazards, both natural and artificial, are used to emphasize accuracy and as accuracy is of most importance near the green, it is here that one finds hazards most abundantly supplied on well constructed courses.

Of course water hazards are as good as any other from the standpoint of penalizing inaccuracy. But the fact that they are unplayable would properly interdict their use were it not for their value as mental hazards. Their presence in considerable number on any course is a defect, really a serious defect.

Water hazards may often be so treated as to add to the beauty of a course. This is equally true whether the hazard be a pond or a stream. But if the pond or stream is off the fairway, outside the playing area for any but an egregiously bad shot, then it can be used far more effectively to beautify the course. Planting along its edges can be far more free and with thought only of the beauty.

"Those Hillcrest Greens"

"Everybody around Los Angeles is talking about the excellence of the greens at Hillcrest Country Club. They only recently were reopened with their new bent grass covering and now offer as fine a putting surface as one could imagine.

"The splendid improvement was brought about in an unusual way. About two years ago Mr. Baruch, chairman of the green, sent to Washington for a sample of a certain strain of bent. The sample came in a single envelope. It was duly planted. The growth was rapid. The grass on all 18 greens came from this one sample.

"Enough grass for the 18 was developed in one large bed, and then the turf was taken bodily and placed atop the greens. In a very short time it was all connected up and the present perfect surface is the result.

"There seems to be no further doubt that bent is the proper grass for California greens. Wherever it is tried it is giving better results than anything experimented with in the past. There are many different strains. All of them appear to produce a fine surface to begin with, but it is asserted that only one or two varieties will stand up over a period of years. Golf clubs should remember this in selecting seed or stolons, and choose the variety that gives best results over an extended period."—*The Country Club Magazine and Pacific Golf & Motor, November*, 1926.

Activities and Accomplishments of the Green Section

By O. B. Fitts

For some time the green section workers have recognized the necessity of acquainting the golfing public, and especially the supporters of the Green Section, more thoroughly with the various phases of work which it has undertaken in an effort to aid the clubs in the development and maintenance of better golf courses. Many articles discussing the various accomplishments of the Green Section have been published, but as yet nothing has been published that would give any definite idea as to the actual extent of its activities. Consequently there are comparatively few who are familiar with the many phases of work involved or the extent of the efforts put forth in an attempt to solve the numerous golf course problems. It is therefore believed that a brief review of the Green Section's activities and accomplishments will be helpful toward furnishing this information to a greater number of people, and, in turn, probably result in a wider interest in the Green Section.

The activities of the Green Section, as the work has been conducted, are divided into two branches, which will be treated here under the terms "research" and "service."

The research branch involves all the different phases of experimental and investigational work which are being conducted for the purpose of obtaining all the information possible pertaining to golf course construction and maintenance, while the service branch involves the work of dispensing information to the clubs in such a manner as to give them the greatest amount of assistance possible in the solution of golf course problems.

The experimental work with turf has been and gives promise of

continuing to be a very important source of information, as it provides means for a more intensive study of turf problems than is provided under the practical maintenance program on the golf course. The fact that a wide range of turf problems is concentrated under one series of experiments makes it possible to study the relation of the various factors involved in turf maintenance as well as to study singly and work out solutions to many problems which can not be segregated and studied individually on the golf course.

The Green Section, in cooperation with the United States Department of Agriculture, maintains at Arlington, Va., an experimental turf garden consisting of 480 plots of turf, each ½ rod square, and a nursery of about ½ acre in turf grasses. The plots are utilized for the following purposes: To test the different grasses under turf conditions in order to determine their adaptability to or their suitability for the various golf course purposes; to test fertilizers in an effort to determine the best and most practical fertilizers to use on the golf course and the best methods of applying them; to study the various turf diseases and pests and various remedies in an effort to find the most practical and effective preventive and curative treatments; and to study the effect of various turf maintenance methods, such as topdressing, mowing, rolling, watering, etc.

Every experiment on these 480 plots has its individual object, and in order to accomplish these objects each experiment must be systematically or consistently conducted and closely observed at all times, which entails much work and careful study.

The nursery is utilized for growing grasses for identification, for producing planting material for the test plots, and for maintaining a supply of the most satisfactory grasses for distribution to clubs that desire to start their own nurseries.

Since the establishment of this experimental turf garden there have been tested (including those now on the plots) over 150 different grasses. These include practically all the northern turf grasses and a few that are adapted to the South but that can be grown as far north as Washington, such as Bermuda and the Japanese and Korean lawn grasses. Of the northern grasses there have been tested four species of *Poa* or the bluegrass family, six species of *Festuca* or the fescue family, three species of *Lolium* or the rye-grass family, and five species of *Agrostis* or the bent family. The last named includes redtop (*Agrostis alba*), Rhode Island bent (*Agrostis vulgaris*), velvet bent (*Agrostis canina*), seaside bent (*Agrostis maritima*), and creeping bent (*Agrostis stolonifera*). In addition to these pure species of bent considerable work has been done with the South German mixed bent, which usually consists of about 80 percent to 85 percent *Agrostis vulgaris,* 15 percent *Agrostis canina,* and a trace of *Agrostis stolonifera,* and sometimes more or less redtop or *Agrostis alba.*

In an early study of the turf-producing qualities of these bent species it was found that there were many noticeably different strains of the seaside bent, the velvet bent, and the creeping bent. This discovery led to the inception of the idea of selecting and testing the individual strains. By the aid of the vegetative method of propagating these species, the development of which resulted from a careful study of their habits of growth, there have been selected and tested at Arlington five strains of seaside bent, 18 strains of velvet bent, and

over 100 strains of creeping bent. Of course only relatively few of these strains have proved satisfactory for putting greens but such tests were necessary to determine which were satisfactory. Among those that have withstood these tests satisfactorily are the Washington and Metropolitan strains of creeping bent, the Revere strains of seaside bent, and the Highland and Acme strains of velvet bent. There are yet many strains under experiment that have not so far been tested over a sufficient period of time to prove their merits. Among these new strains it is hoped that something will prove equally as good or better than the strains at present available.

The study of the species and strains of turf grass, which has been one of the principal features of this experimental work, has disclosed the fact that many of the grasses such as crested dog's-tail, Canada bluegrass, the fescues, etc., which were commonly included in putting green and fairway mixtures were not suitable for fine turf production under various soil and climatic conditions, and that others were entirely too expensive in proportion to their usefulness. These discoveries have resulted in more sound and economical choices of seeds and seed mixtures for use on the golf course which, in turn has resulted not only in more satisfactory turf but in a saving of money for the clubs as well.

Another investigation which has been carefully conducted is the study of different rates and methods of seeding. This study has disclosed the fact that equally as satisfactory results can be obtained with 3 to 5 pounds per 1,000 square feet, depending upon the kind of seed used, as were formerly obtained where 15 to 20 pounds of the same seed were used. This reduction in the rate of seeding has resulted likewise in a material reduction in the cost of golf course maintenance.

A series of experiments with seeding at different seasons of the year has definitely proved that, for the northern turf grasses, fall seeding is preferable to spring seeding, while for the southern grasses, such as Bermuda and carpet grass, spring seeding is best. This information has been of very helpful and economic value to clubs.

The study of types of soil and materials commonly used in the construction of putting greens has been of economic importance, inasmuch as it has brought out the fact that a fairly fertile loam is the most desirable for putting greens and that the use of enormous quantities of manure, humus, and other similar materials incorporated in the soil is not only a waste of money but in many cases is detrimental to good turf production. Other practices in putting green construction such as the use of cinder layers, peat layers, and many socalled germinating and moisture-holding layers have been found through the agencies of experimentation to be useless and in many cases harmful.

The problems involved in turf maintenance after the turf is established are of equal importance to those involved in golf course construction and turf production; consequently these problems are given equal consideration in the experimental work. For instance: there are 160 turf plots at Arlington which are utilized for fertilizer experiments, on which there are 80 different experiments with various commercial fertilizers and mixtures of commercial products. A study of the effect of these fertilizers has resulted in a great advancement in the knowledge of what fertilizers should be used on

the golf course and how they should be used, as well as those that should not be used. One important feature in this work has been the development of conclusive evidence that an acid-reacting fertilizer such as ammonium sulfate is not only conducive to the desired growth of the turf grasses but is very effective in the control of weeds and earthworms. Another, is the evidence that nitrogen is the principal plant food element needed in fertilizer for turf, and another is the striking indication that lime as topdressing is harmful to turf. There are still other indications of important developments in this work but more time is needed for conclusive results.

The common turf diseases are given careful consideration in the experimental work at Arlington. About 25 plots of different species and strains of grass are utilized for the study of brown-patch and the effect of various remedial treatments, such as the various mercuric compounds, copper compounds and other fungicides. The work so far in this connection has resulted in a very great help to the clubs in the control of this dreaded disease and experiments now under way promise further advancement in the knowledge of its control.

The study of the earthworm and the effectiveness of various eradicators has been very helpful in determining the most practical methods to employ in ridding turf of this very undesirable pest. The experiments with the various worm eradicators have resulted in the conclusion that the very simple method of dissolving 2 to 3 ounces of mercuric chloride in 50 gallons of water and sprinkling over 1,000 square feet of green is a very practical and effective means of ridding putting greens of earthworms.

The study of grubs and insecticidal remedies used for their eradication has been very limited at Arlington owing to the scarcity of grubs in the experimental plots, but some very important experiments have been conducted and others are now under way, at Riverton, N. J., in which lead arsenate and barium silico fluorid have been used very successfully. This work is being done cooperatively by the Green Section and the Japanese Beetle Laboratory at Riverton, N. J. Previous developments of this work have been published from time to time in The Bulletin while the results of the past year's work will be published in an early issue.

Experiments are going on continually during the growing season at Arlington with phases of work involving the more common practices in golf course maintenance, such as the frequency of topdressing, the materials used for topdressing, the methods employed in topdressing, watering at different times of the day, applying different amounts of water at different intervals, methods of mowing and rolling, etc.

Other experimental turf gardens have been established at Gainesville, Fla.; New Brunswick, N. J.; Manhattan, Kans.; St. Paul, Minn.; Madison, Wis., and Lincoln, Nebr. These state agricultural experiment stations are cooperating with the Green Section in this experimental work, the object of which is to supplement the work at Arlington, Va., and Riverton, N. J., in the effort to gain all the information possible pertaining to the handling of local problems, such as determining the best grasses, fertilizers, etc., to use in the various sections of the country.

The information gained through these investigations so far has been of great economic value to the clubs in the construction of

golf courses and the production and maintenance of turf, but there is much yet to be learned in this connection, and the continuation of these experiments may be expected to yield much more valuable information.

In conjunction with the experimental work the Green Section has taken advantage of the limited opportunities to observe and study the results of methods as they are actually employed on golf courses. In speaking of the limited opportunities in this field of investigation, it is meant that the limited number of golf courses which are located conveniently enough to permit frequent visits, the limit in personnel, and funds available for travel, etc., has made it impossible for the Green Section to take full advantage of the possibilities which, otherwise would be available. Regardless, however, of these limitations much valuable information has been gained and much more will be gained in this way as long as the work is continued. Another source of information which has and will continue to be fruitful for the Green Section and in turn for the clubs, is the experience of practical men who have been successful in dealing with golf course problems. The Green Section is constantly on the lookout for such experiences, and it is through this channel that some of the most practical information is obtained.

The service branch of the Green Section's activities involves the publication of THE BULLETIN, the correspondence, the laboratory service, and personal service. In other words, all the information obtained through the research branch is available through the service branch to any one desiring it.

It is the object of the Green Section, in the publication of THE BULLETIN, to give to its readers sound and practical information based on the results of carefully conducted experiments and actual experience, and to do this and present it in readable form requires much thought and vigilance on the part of both the writers and editors. The average reader of THE BULLETIN does not realize the amount of work involved in getting this bulletin out each month. If he realized just how difficult it is to get good material for such a publication he would no doubt, out of pity, if for no other reason, be more liberal in the contribution of articles for publication. The success of THE BULLETIN and its value to the clubs depends largely on the cooperation of men of practical and successful experience in golf course maintenance, and it is the hope of the editors that every one who has had such experience will open up his heart and help to make this periodical more helpful and interesting to the readers by contributing to its pages.

The correspondence handled through the Green Section office requires considerable time, thought and effort. An average of about 375 letters are received monthly and approximately the same number written. Most of the letters received require specific or concise answers, and to be able to answer these letters promptly and intelligently one must keep as well posted as possible on the problems encountered on the golf course.

The laboratory service involves such work as identifying grasses, weeds, grass seeds, insects, and disease organisms, testing grass seed for purity and germination, and analyzing and testing soil and fertilizer samples, etc. An average of approximately 500 seed samples, 200 specimens of grasses and weeds, 100 samples of soil, and

20 samples of fertilizer are handled through this service for the clubs annually. Of course the Green Section hasn't the necessary facilities for doing all this work at the office in Washington, but fortunately there is available, for such work outside, properly equipped laboratories and the services of competent men, and regardless of whether or not the work is done in the Green Section's office, the clubs get the service they request without having to bother further than writing the Green Section, stating what they want and sending in the sample. Much of this work, especially with soils and fertilizers, is done in the United States Department of Agriculture laboratories, while most of the work with fine grass seeds is done by a competent and reliable commercial seed analyst. This phase of the Service Branch alone has saved large sums of money for the clubs that have taken advantage of it inasmuch as it has put them wise to the quality and desirability of seeds, fertilizers, and other materials offered for sale.

The personal service involves the visiting of golf courses by representatives of the Green Section, for the purpose of advising or offering suggestions concerning the problems with which the clubs are confronted. About thirty-five courses were visited during the year 1926 by representatives of the Green Section and these visits were made usually at the request of the chairman of the green committee or some other official of the club. This is an important phase of the Green Section work because it offers opportunities to gain information as well as to render service. The demand for such service has been much greater than the Green Section has been able to supply owing to the limit in its personnel, and indications are that this demand will continue to increase as the work of the Green Section becomes better known.

This report only covers roughly the work of the Green Section, but I hope that this is sufficient to give a general idea of what is being done through the office in Washington.

Some U. S. Golf Association Decisions on the Rules of Golf

In a match play event, after approaching a green, both players find their balls in casual water on the green with a direct stymie resulting. What is the correct action here?

Decision.—We will call the contestants A and B, A being farthest from the hole. A was entitled to lift and replace his ball in accordance with Rule 27 (3). Rule 6 directs that a ball must be played wherever it lies, or the hole be given up, except as otherwise provided for in the Rules. Rule 27 (3) is an exception to Rule 6. As each player has the right to lift in his turn, the stymie could not recur, A's ball being played to the hole from the new position before B's ball is placed in its new position. It is important to note that a ball lifted in accordance with Rule 27 (3) may not be placed on any spot not nearer to the hole, but must be placed on the nearest position to the spot from which it was lifted which affords a putt to the hole without casual water intervening.

One of the players in the President's Cup Tournament in the first flight defaulted and then went into the Consolation, which he won. Some of the members of the club feel that if a player once defaults, he

is out of the tournament and can not enter into another class. Is there a definite ruling covering this?

Decision.—When a player has defaulted in a tournament in which he has qualified, he is not eligible to play in the Consolation or beaten eight division.

After driving a player finds his ball at rest in a pile of brush and leaves left by the groundkeeper near a tree on the right side of the course and nearly out of bounds. He drops the ball according to rule over his shoulder immediately back and within one club's length of the brush pile. The contour of the ground was such that the ball rolled down the hill to the left 8 or 10 feet. Should he play the ball from where it rests or should he place it within a club's length of the brush pile, and in the same relative position as originally found?

Decision.—Rule 8 governs dropping ball. The ball must be played if it did not roll in a hazard unless there was not space to drop it. If there was not space Rule 27, Section 5, applies.

Rules of Golf Translated Into Spanish

The United States Golf Association has just received from the Mexico Golf Association a booklet wherein the entire Rules of Golf have been set up in Spanish. Harry Wright, President of the Mexico Association, advises that the translation has been carefully made, is up to date and entailed a lot of hard work. On account of the growing interest in the game below the Rio Grande these rules in Spanish should be of great interest to the Spanish speaking players and help materially to a better understanding of the fine points in playing the ancient and honorable game. An interesting feature of the book is a picture showing that golf was played for the first time in Mexico at San Pedro de los Pinos in 1899. Also a picture of Willie Smith, one of the famous family of golfing Smiths, who was professional for many years at the Mexico City Country Club and is well remembered by the veteran golfers of Mexico. The Mexico Golf Association was formed in April, 1926, and its membership comprises the leading clubs of the country, namely: Chapultepec Heights, Guadalajara, Monterey, El Oro, Pachuca and Mexico City. The Mexico Association has modeled its constitution and activities along the lines of the U. S. G. A.

That the Green Section is becoming international in its influence is again illustrated by this letter recently received from the Secretary of the Magyar Golf Club of Budapest, Hungary.

Green Section of the United States Golf Association.

Gentlemen: The undersigned Magyar Golf Club of Budapest, Hungary, would be greatly obliged if you would send us your Bulletins on greenkeeping and constructing, not only the present publications but all up till today.

When we can't get them without payment, please let us know on what terms are you ready to send us them?

Thanking you in advance for the kindness,

Cordially yours,
(Signed) BELA DE SZLAVY, *Hon. Sec.*

TREASURY DECISION 3950

TAX ON INITIATION FEES: REFUND OF TAX

Articles 10 and 15 of Regulations 43, Part 2, relating to the Tax on Dues and Initiation Fees (Section 501, Revenue Act of 1926), amended.

TREASURY DEPARTMENT
Office of Commissioner of Internal Revenue
Washington, D. C.

TO COLLECTORS OF INTERNAL REVENUE AND OTHERS CONCERNED:

Article 10 of Regulations 43, Part 2, relating to the tax on dues and initiation fees under the Revenue Act of 1926 is hereby amended by the elimination of the fourth and fifth paragraphs and Example 3 of that Article, and the substitution for the paragraphs eliminated, a paragraph reading as follows:

"The term 'initiation fees,' as used in the statute means the payment of an amount for the purpose of becoming a member of a club and enjoying its privileges, and which when paid is not intended to be returned to the person paying it. The term 'initiation fees' does not include amounts required to be paid by new members for stock, bonds, promissory notes, or certificates representing an interest in the property and assets of the club."

Article 15 is hereby amended to read as follows:

"Article 15—**Refunds.** Where any club or individual member of a club has paid to a collector of internal revenue as a tax on dues or initiation fees, any amount subsequently determined to have been erroneously or illegally assessed or collected, or any amount in excess of the amount of tax actually imposed for the month covered by that payment, or an amount as a penalty for the collection of which there was no authority, a refund of the amount so paid may be obtained by filing with the office of the collector to whom such payment was made a properly prepared claim on Form 843. (See Secs. 3220 and 3228, R. S., as amended.)

"In any case where a club seeks a refund of an amount collected by it from its members and paid to the collector of internal revenue, a claim on Form 843 must be accompanied by a list of the members who paid such tax showing the amount of tax claimed on behalf of each member, and the date on which the amounts claimed were paid to the collector. There should also accompany the claim for refund a sworn statement of an authorized officer of the club to the effect that no prior claim for refund of any amount involved in such claim has been filed with the Bureau by or on behalf of any member, and that in the event a claim is filed by an individual member subsequent to the presentation of the claim filed by the club, the club will assume the liability and satisfy the claim of the individual member to the amount refunded to the club on his behalf.

"In any case where an amount was assessed by the Commissioner against the individual member and by him paid direct to the collector, a claim must be filed on Form 843 by such individual member for a refund of the amount alleged to have been erroneously assessed and paid, accompanied by proper evidence of such payment."

APPROVED: December 28, 1926.
GARRARD B. WINSTON,
Acting Secretary of the Treasury.

D. H. BLAIR,
Commissioner of Internal Revenue.

Annual Green Section Meeting

The Annual Meeting of the Green Section of the United States Golf Association was held in Pittsburgh this year at the Pittsburgh Athletic Association on January 7th and 8th, and the following program conducted by Mr. Findlay S. Douglas, as Chairman. Mr. Douglas is also Vice-President of the U. S. G. A.:

Friday, January 7, 1927, 10.00 A. M.

ROLL CALL

Report of Chairman of the Green Section Committee.....
..... Mr. Rodman E. Griscom, Philadelphia, Pa.
Annual Report of Chairman of Green Section.....
.....Mr. H. L. Westover, Washington, D. C.

BUSINESS MEETING

A Brief Review of the Activities and Accomplishments of the Green Section
.....Mr. O. B. Fitts, Washington, D. C.
Additional Experiments in Grub Proofing of Turf.....
.....Mr. B. R. Leach, Riverton, N. J.

Friday, January 7, 1927, 2.00 P. M.

Parasites of the Japanese Beetle.....Mr. J. L. King, Riverton, N. J.
Why the Green Section?.....
.....Mr. Alex Pirie, President, Professional Golfers Association of America
Course Conditions in the Northern Latitudes.....
.....Major C. A. Tregillus, Green Section of the Royal Canadian Golf Assn.
Some Observations on Construction and Maintenance Problems.....
.....Mr. H. K. Read, Philadelphia, Pa.
Observations on Turf Grass Experiments at Gainsville, Fla...Mr. H. L. Westover

Saturday, January 8, 1927, 10.00 A. M.

Progress in Brown-Patch Control.....Dr. John Monteith, Jr., Washington, D. C.
Southern Conditions.....Dr. Thomas P. Hinman, Atlanta, Ga.

QUESTIONS AND ANSWERS

All questions sent to the Green Section will be answered in a letter to the writer as promptly as possible. The more interesting of these questions, with concise answers, will appear in this column each month. If your experience leads you to disagree with any answer given in this column, it is your privilege and duty to write to the Green Section.

While most of the answers are of general application, please bear in mind that each recommendation is intended specifically for the locality designated at the end of the question.

1. Relative value of commercial humus and other forms of humus.—Our attention has been called to your caution against the use of commercial humus. We have tried humus on our turf for years with great success, and have come to consider that commercial humus of good quality is one of the most valuable fertilizers obtainable. In our judgment it has no superior when mixed with a little ammonium sulfate and used on turf. Will you be kind enough to indicate to us your objections to the use of commercial humus? (Ohio.)

ANSWER.—Our experiments and the experience of golf clubs indicate that one ton of well-rotted manure is worth about five tons of commercial humus, measured by the effect produced on turf. Furthermore, in many cases commercial humus has been found to be injurious to turf. By commercial humus we mean the more or less well-aerated peat such as the surface soil on peat farms. This commercial humus is often reinforced with chemicals. There are various other sources of humus besides peat, namely, decayed sod, decayed roots in the soil, leaf mold and, most important of all, barnyard manure. The only case where we can see that a golf club can afford to use muck or peat is where it has deposits of it on its course then they can well afford to use this material in the making of compost. As for the benefits you have experienced from the combined use of commercial humus and ammonium sulfate, it would of course be impossible to determine whether the benefits were due to the ammonium sulfate or to the humus unless these two materials were used separate from each other and on adjoining pieces of turf.

2. Fertilizers for putting greens and fairways.—Kindly give us your experience, if any, with * * * Fertilizer, made by * * * Co. Their salesman advises that it is far superior to any other fertilizer, being better even than bone meal. (Pennsylvania.)

ANSWER.—There are countless mixed fertilizers on the market and it is simply out of the question for us to experiment with all of them. The net result of an enormous amount of work that we have done on putting greens is that the best of all fertilizers is either ammonium sulfate or ammonium phosphate combined with topdressing. For fairways, barnyard manure, everything considered, is usually the best fertilizer. In the absence of barnyard manure we should prefer organic fertilizers such as bone meal, cottonseed meal, fish scrap, and tankage, although good results may be expected with many of the commercial mixed fertilizers.

3. Can brown-patch be spread by mowers?—From this season's experience with brown-patch I am convinced that it is very contagious and can be carried from one green to another by mowers. Is this true? (Illinois.)

ANSWER—On page 137 of the June, 1926, number of THE BULLETIN there is a diagram of the fungus growing within the leaf tissue. If such an infected grass blade is placed on healthy grass under favorable conditions the fungus will grow out from it and attack near-by grass blades and in this way start a new brown-patch. Such blades are used in our experimental work to make artificial inoculations. Under golf course conditions such infested grass undoubtedly accounts for the spread of the disease to some extent. It may be carried on mowers or other machinery or even on the feet of players. The success of attempts to prevent the spread of the disease by control of these means of inoculation will probably always be difficult. Daily inspection of all greens for evidence of infection is imperative and will not be neglected by any club desiring to reduce damage to a minimum. Delay of even a half day in the application of proper fungicides may be disastrous.

4. Depth of top soil necessary for a sandy subsoil.—Our ground is very sandy. Would you advise building a green over more than 3 inches of top soil? (Minnesota.)

ANSWER.—We think you will get entirely satisfactory results with 3 inches of a moderately heavy loam on top of sandy soil. The sand ought to provide ample drainage, and you can control the fertilizing of the grass entirely from the top.

5 Tile drainage for built-up greens.—A question has arisen as to whether it is necessary to use tile drainage with a built-up green. Our soil is rather heavy. (Louisiana.)

ANSWER.—We do not consider tile drainage necessary for a built up green—that is, a green which is elevated both in front and rear above the surface level. Where the natural soil drainage is ample, it is the best drainage obtainable, even on relatively heavy soil.

MR. SOUTHERN GREEN COMMITTEE CHAIRMAN:

One of the criticisms that the Green Section has met with during past years is that it is not doing much for the South. This criticism, however, is not entirely justified. It is true that, with funds available, the Green Section has not been able to conduct as extensive experiments with Southern turf grasses as it desired, but much of value is being accomplished along this line. So far as The Bulletin is concerned the South has come in for its full share of attention, as indicated by the following statistics:

During the past year 46 signed articles were published. Of these articles 34 were of general interest, 5 of interest to the North only, and 7 of interest to the South only.

Of the 55 short paragraphs, news items, and editorials published, 6 were of interest to the North; 46 of general interest, and 3 of interest to the South.

The Meditations of A Peripatetic Golfer and Letters to Mr. Green Committee Chairman have all contained meat for those who were looking for it.

Four Southerners who are exceptionally able green committee chairmen were asked to deliver addresses at the Annual Meeting of the Green Section.

Of the 86 Questions and Answers published in The Bulletin during the past year, 37 applied to the North; 5 to the South, and 44 to all alike, but as the Green Section has over 800 Northern members and only just over 100 Southern ones, this ratio will be found to be proportionate to the membership figures.

The Green Section has long wished to help you more than it has so far been able to. These statistics from The Bulletin are only the expression of a determination to help you to the fullest extent possible.

It is almost certain that our experimental work in the South will soon be much more extensive and of greater value than in the past.

The South has not been forgotten by the Green Section.

THE GREEN SECTION.