CINCINNATI GOES
GOLF-MINDED

By TAM DEERING
Director of Recreation,
Cincinnati Recr. Commission

IN Cincinnati’s municipal golf, under the direction of the local Public Recreation Commission, the most phenomenal increase has taken place. During 1936 11,500 different persons registered on the two municipal golf courses. This was in contrast to 4,000 different players in 1934. In 1930 there were 14,000 greens fees sold at Avon Fields—the only municipal course at that time. In 1935, the new California municipal course was open, with the first nine holes in play. By 1936 the number of greens fees at the two courses had reached the total of 37,000.

Analysis of the situation as it exists today, indicates that the new policies and new methods applied to municipal golf in Cincinnati have succeeded to such high degree that several additional courses will be required to take care of the new demand on the part of people for golf facilities. The two municipal golf courses in Cincinnati are now over-crowded to the point of discomfort. Players are delighted with the facilities, but a great many of them give up playing on the municipal courses, and go on to private courses because at the week-end and holidays there is no room to play.

The new interest in golf at Cincinnati is not due to any one thing. It is due to a combination of many things. Above all, it is due to the decision of the Recreation Commission not to operate municipal golf with the object of deriving an excess of receipts over expenditures, which receipts could be applied to playgrounds and other recreational activities.

It is also due to the earnest efforts which have been made by the Commission to transform the thinking of the people of Cincinnati with reference to golf. The Commission has endeavored in every proper manner to educate the people to a realization of the possibilities of golf as the most universal of all outdoor sports, appealing to the entire population, the old and the young, the rich and the poor.

The attitude in Cincinnati, like the atti-
tude in most parts of America, has been that golf is a rich man's game, a game for a particular class and social group—not a game for the masses. It has not been merely the matter of the cost of the game. It has been the feeling that golf necessitated membership in an exclusive social set; that it involved wearing unusual types of clothes. Golf has been particularly the game of the leisure class. The average American who worships work and whose social traditions necessitated work as a very root of his life, has maintained a deep antagonism toward the game of golf.

Until 1932, the Recreation Commission of Cincinnati operated golf along lines which did not eradicate common citizens' opposition to the game. Since 1932, new policies have largely swept away the old antagonism.

Campaign Changes
Public Opinion

As I have stated, the complete reversal in public opinion toward golf has been brought about not through one thing alone, but as the result of sweeping changes along many lines. Prices were dropped from $1.00 to 35c. High school boys and girls were invited to play at 15c. A bag of golf clubs was available at a rental of 15c. Free group lessons were open to every one in the neighborhood, in the factories, in the department stores, in the physical education classes at high schools. The full cooperation of the newspapers was secured to make a new interpretation of golf and to make known to every one the new policy.

The community has been made to see that not only can any one afford to play golf who can afford to go to the "movies," as the price is no greater, but that one can be sure he will not be embarrassed because of his awkwardness. When we opened the new course at the California Water Works in 1935, 60% of the players were beginners. The word spread about that workingmen, clerks, and those of all ages and groups were taking up municipal golf.

The writer introduced the idea of group golf lessons and group tennis lessons to the Recreation Commission staff in 1932. At that time, the writer did not know that golf and tennis were being taught in group lessons. Since that time, he has learned that other cities have been doing that sort of thing, at least in golf. However, the idea was not original with the writer in any sense. He had observed in the year 1918 how swimming was being taught through group lessons in the city of Seattle, at a time when he was organizing recreation in that city. Group lessons for golf in Cincinnati started with the realization of the necessity for some means of teaching the masses to play, and introducing them to the game.

Lessons to 5,000 Pupils

Starting with a few classes in 1933, registration in the classes has increased until in 1936 there were more than 5,000 different persons taking the group golf lessons.

The Cincinnati Daily Post, a Scripps Howard newspaper, has featured our group golf lessons, following our introduction of the idea in 1933, and has had a large part in popularizing both the golf lessons and municipal golf in Cincinnati.

The city-wide beginners' golf school conducted by the Post and the Recreation Commission is held every spring. Classes are arranged at both private and public courses throughout the city. The Recreation Commission furnishes the executive leadership for the handling of the Post's free golf lessons. Twenty golf professionals volunteer as teachers for this event.

During the large part of the year when these lessons are not being sponsored by the Post, the Commission continues its organization of teaching of classes. Classes are organized in both public and private high schools, in neighborhood centers, in industrial plants, offices, and in department stores. The Commission will furnish leadership for any group of 12 or more persons who have never played golf previously. It will conduct classes in any part of the city, whether in office, factory, or school room.

A series of seven lessons is arranged. Industrial classes meeting in the company's quarters are ordinarily held following the work hours. Neighborhood classes are ordinarily held in the evening at school gymnasiums. High school classes are held during school hours in connection with the regular physical education program. During the summer, golf classes are conducted on the golf courses.

The steps taken in arranging neighborhood classes are as follows: 1. The neighborhood organization is interested in
New clubhouse of Cascade Hills CC, Grand Rapids, to be formally opened early in the summer, replaces clubhouse destroyed by fire. Clifford C. Wendehack, specialist in country clubhouses, is architect. Among distinctive features are a Nineteenth Hole in connection with men's locker-room, and far more space for women than generally is found in older clubhouses. The Nineteenth Hole has a high ceiling of acoustical materials to absorb the din of the whoopee and the moan of the "shoulda hads."

backing the class. 2. The local gymnasium or other facilities are secured for the class. 3. Publicity is given in the daily and neighborhood papers. 4. Mimeoographed circulars describing the classes are distributed in the neighborhood.

Industrial classes are arranged as follows: 1. The personnel manager or other official of the company is interested. 2. An effort is made to create an interest in the lessons on the part of the employees directly, as well as through the management. 3. Some member of the firm is designated to handle the registration. 4. Golf circulars are given out, announcing the class. 5. Publicity, including editorials, pictures and stories, is handled through the papers.

Here Is
Lesson Outline

Robert J. Strauss, golf supervisor for the Recreation Commission, has outlined the instruction procedure as follows:

LESSON 1.—A Lecture on the Game of Golf. Brief outline of the history of the sport and reasons for playing the game. Describe the layout of a course (by use of a blackboard when indoors). An excellent plan is to describe a match from the time a foursome of golfers arrives at the first tee until they return. Golfing Terms, Rules, Etiquette, Etc. Local Facilities For Golf.

LESSON 2.—Chip Shot. Organization of class. If the class is not too large, a circle is the most satisfactory formation. Otherwise, arrange class so that all may have a clear view of the teacher. Procedure—Explanation of shot, demonstration, practice in unison and correct individually: a. Grip; b. Stance and footwork; c. Body position; d. Back-swing; e. Down-swing and follow-through.

Keeping in mind that correct form is the most important factor when learning, do not allow pupils to hit the ball until they have developed a fair swing. Emphasize to the class the value of practice. Give them a clear picture of the use of the particular shot by referring to the first lesson.

The above technique should be followed in all swinging lessons. Each lesson review the previous lesson.

LESSON 3.—Pitch shot using half swing.

LESSON 4.—Full iron swing.

LESSON 5.—Full wood swing.

LESSON 6.—Putting lesson.

LESSON 7.—A review of the six previous lessons.

Plenty for $2,000

It is estimated by Strauss that the cost to the city for the teaching of group golf lessons during a year's period is approximately $2,000. This includes the proper proportion of salaries, the necessary supplies and other costs.

The golf clubs used for the lessons are
the clubs rented during the season. As the Commission's rentals of sets of golf clubs reached a figure in excess of $9,000 during the year 1936, it is obvious that the Commission is obliged to have a considerable supply of equipment and that these are adequate for the golf lessons.

Cotton balls, which are used in place of the regular balls, in order to make it possible to conduct the classes indoors, cost $1.50 per dozen. The Commission uses about fifteen dozen each year. Cocoa mats, another indispensable item in the layout for the lesson, cost about $1.00 apiece.

We have demonstrated in Cincinnati that our group golf lessons are of benefit to the private golf clubs. We do not accept anyone except beginners for golf instruction. Many whom we introduce to the game, on finding two municipal courses crowded, become members of private clubs.

It is self-evident that the free group lessons do not in any way hurt local golf professionals. Rather, these lessons serve to introduce beginners to the game, and arouse the interest in the sport which leads on to the taking of private lessons. We have observed that many private lessons given on both private and public golf courses in Cincinnati have been given to those who have finished the series of group lessons and wanted to learn more.

When we first launched the group lessons, many professionals objected to the Commission's policy. Since that time, their attitude has changed to one of approval. The fact that so many of them are assisting in connection with the group lessons evidences their support.

We have noted that the semi-public courses in and around Cincinnati are being played much more heavily now than during previous years. We believe that some of the play is due to the municipal promotion of the game.

**Michigan Golf Organizations Hold Good-Will Meeting in Detroit**

A GOOD-WILL dinner attended by officials of nine organizations of golf interests in Michigan was held April 26 at Hotel Statler. Detroit District Golf assn. was the host.

The dinner, over which Jimmy Standish, DDGA president presided, was a rather historic occasion inasmuch as it is believed to be the first time that officials of all golf organizations in a metropolitan section have met to discuss their common aim.

Represented, besides the DDGA, were Michigan State Golf league, Michigan GA, Michigan Seniors' GA League of the Lower Lakes, Michigan PGA, Michigan and Border Cities Golf Course Supt.'s, Detroit Club Managers' assn., and the Detroit District Caddymasters' assn. The roster would have been complete had the representative of the Detroit municipal courses been able to attend.

Detroit newspapers were well represented and covered the affair with yarns that ought to stir further the current return of lively golf interest. Harry Taylor, chairman of Oakland Hills for the National Open and Chris Brinke, vice-chairman, told of the Open plans.

Plans of the various organizations represented were presented briefly. Judge Charles C. Simmons made a terse and penetrating address on the part that golf should play in the developing social scheme. Fred Wardell, E. L. Warner, Sr., and Kenneth A. Moore related details of the caddie welfare work in which Detroit has an edge on other districts of the country.

Plans were announced by Standish for financing the Detroit team to the National Public links tournament by a team match in which the teams are to be composed of a pro, a private club amateur, a public links player and a junior. The event is a novel one that ought to draw.

**Chicago DGA to Push Ticket Campaign for $10,000 Chicago Open**

The Chicago District GA $10,000 Open, which will be played at Medinah CC, July 23-25, is putting on an energetic preliminary ticket selling campaign with the idea of showing a substantial net profit which can be devoted to caddie welfare.

Idea behind the CDGA plan is that with better times returning more attention should be given to caddie selection, training and assistance so the caddying careers of the youngsters will be planned preliminaries to the right start in business life.

Chicago's centennial as an incorporated city is one of the angles of the tournament promotion, which is being ably managed for the CDGA by Howard Roberts and Bob Harlow.
Soil as a Medium for Growth and a Source of Plant Food

The soil framework consists of mineral particles derived from the disintegration of rocks (excepting peat and muck). In a productive soil, water films charged with carbonic acid and small quantities of soluble nutrients surround the soil granules; the intervening voids are occupied by air. By volume, a cubic foot of fertile soil contains about 50% solid matter, 25% moisture, and 25% air. Approximately 85% of the solid mass is mineral and 15% is organic.

The extensive system of grass roots which permeates the soil, absorbs moisture and dissolved nutrients from the water films. The myriad of root cells all breathe and obtain the necessary oxygen from the soil air. During respiration carbon dioxide is expelled, some of which dissolves in the soil water. The resulting carbonic acid exerts a definite solvent action and thus aids in the solution of insoluble soil minerals.

Grass roots rarely extend below the surface few inches, so that portion of the soil deserves major attention. Yet subsoil may indirectly affect the water and air relationship of the surface soil. If the subsoil is too heavy, it prevents or retards downward movement of surplus water, and, if coarse, unduly accelerates percolation so the soil dries out too rapidly.

Surface Soil Factors: There is a distinction between the surface soil, to a depth of 6 to 8 inches, and the underlying subsoil. Humus, or organic matter, is the distinguishing characteristic of the surface soil. Because microscopic soil organisms obtain their energy requirements from organic matter, they are most abundant in the surface soil, and their numbers are roughly proportional to the amount of decomposable organic matter. These ceaseless workers play an important part in the conversion of organic nitrogen, and difficulty soluble nutrient materials, into forms which the growing plant can utilize. Due to their activity and the play of inter-related chemical forces, soil undergoes constant change. In this respect it is never static, but constantly dynamic; hence soil is more than just so much dirt.

Since the soil must furnish a continuous and adequate supply of water, mineral plant food elements, and oxygen, it is apparent that a favorable soil environment is absolutely essential for the performance of these multiple functions. Some of these deserve detailed treatment.

Favorable Physical Soil Conditions: Failure to provide suitable soil from the physical standpoint is responsible for many turf failures, especially in shady locations and on areas subject to excessive wear. The logical time to modify the soil is before seeding, for turf is a permanent crop.

The size and arrangement of the individual soil particles determine physical condition. Together they affect water-holding capacity and amount of air space; determine rate at which water passes down through the soil; and the influence capacity to supply available soil nutrients.

The term texture refers to the size of the mineral grains. Soils may be coarse, medium, or fine textured, depending upon the predominating or important soil particles. Sand is the main constituent in coarse soils, but clay is most important in those of fine texture.

Soil particles are grouped into three main classes designated as sand, silt, and clay, but sand is further subdivided into fine gravel, coarse, medium, fine, and very fine sand. Each of these seven classes is called a "soil separate", because soil is a mixture of the various sized particles. The limits in size for each separate depend upon the relative value of the various particles in affecting the physical properties, and the producing power of the soil. Silt and clay are exceedingly small as compared to sand. The immense difference is seldom appreciated. In one gram (454 grams equal 1 pound) there are only 2,000 coarse sand grains, but the staggering total of 45 billion clay particles. Is it little wonder that slight variations in texture often exert profound differences in soil properties?

Basis of Soil Classification: Since soil is a mixture of various soil separates, the relative amounts of sand, silt, and clay serve as a basis of classification. In a sand soil, sand particles predominate; loams consist of a mixture in which none of the separates predominate; silt is the main constituent in silt loam; and clay is the important separate in clay loam and clay soils. The proportion of clay is not necessarily larger than other fractions; because a given amount of clay exerts a greater modifying effect than the same amount of sand.
Based on texture, soils are grouped into the following classes: sand, sandy loam, loam, silt loam, clay loam, and clay. Sand and sandy loam may be coarse, medium, fine, or very fine, depending upon the size of the predominating sand separate.

With experience it is easy to place a soil in its proper class by simple inspection in the field. Texture is judged by rubbing moist soil between the thumb and forefinger. Sands are recognized by their lack of coherence; sandy loams contain large amounts of sand, but have definite cohesiveness due to the presence of some silt and clay. Loams have a gritty feel due to the presence of sand, but have distinct cohesive properties due to the larger content of silt and clay. Silt loams have a smooth, floury feel, and differ from the clays by the absence of a slick, shiny surface when quickly rubbed as suggested.

All things considered, the medium sandy loams and loams approach the ideal for turf production, especially if they contain organic matter. They possess sufficient coarse particles to facilitate downward removal of surplus water, yet have enough clay and silt to provide adequate water-holding capacity.

Necessary changes in soil texture should be made prior to seeding, for this is the only time that supplementary sand, clay, or organic matter can be incorporated into the soil. Very little clay or heavy soil is needed to completely change the physical characteristics of a sand, but large quantities of sand are required to appreciably change a heavy soil. The use of uniform textured fine sands should be avoided for they tend to pack and cement the soil. Better results will be obtained with sand consisting of various sized particles.

On areas already in grass, applications of pure sand, peat, or clay produce pronounced layers which invariably cause trouble in hot weather by seriously interfering with free movement of soil water. Frequent light topdressing with a soil mixture of proper texture is the only safe procedure. This eventually builds a desirable surface soil.

SUPPLY OF ORGANIC MATTER: The difficulty experienced in attempts at turf growth on areas from which the surface soil has been stripped is due to the absence of organic matter in the exposed subsoil. Such areas are said to be dead, because lack of organic matter prevents the existence of essential soil micro-organisms.

From the standpoint of turf management the effect of organic matter on soil structure is most important. It tends to lighten heavy soils, and by binding sand grains, effects marked improvement in sandy soils. Although organic matter has an enormous water-holding capacity, this fact is often over-emphasized.

In building greens, or in the preparation of topdressing, it is often impossible to prepare soil of suitable texture by the use of soil and sand only. Any combination produces a mixture which tends to consolidate. This can be overcome by supplementing the soil-sand mixture with suitable organic material. Where manure is not available peat can be substituted, but should not constitute more than one-third by volume of the final mixture.

Logically, needed organic matter should be introduced prior to seeding. On greens and other areas of limited size, this can be accomplished by the liberal use of manure or other humus materials, such as peat moss, reed or sedge peat.

WHEN TO USE SUPPLEMENTARY FERTILIZERS: Where humus substitutes replace manure, supplementary fertilizer should be used because peat does not supply appreciable quantities of plant food. In fact somewhat more generous use of nitrogen is warranted, because more abundant development of cellulose decomposing organisms tends to deplete the supply of soluble nitrogen and thus deprives grass of needed food.

If time permits, green manure crops can be used on fairways and other large areas. Legumes because of their nitrogen-gathering power are preferred crops. Soy beans are an excellent crop for northern latitudes and should be seeded around Decoration Day. They can be plowed under in early August. Sudan grass seeded with the soy bean increases the amount of organic matter and is desirable because of its more complete root penetration. Although not a legume, rye is excellent for fall seeding, and growth continues in the spring. The soy bean-sudan grass combination can follow this crop.

Soil for topdressing mixtures can be prepared by this same procedure, except that green manure cropping should extend over a period of several years.

(To be continued)
SOIL TEEMS WITH LIFE

By J. W. WHITE
Penn. State College

The soil, far from being sterile and lifeless, has millions of organisms to the gram.

How many of us, do you suppose, really understand the true significance and nature of this universal thing we so familiarly refer to as the soil? So far as I am concerned my thirty years to the conclusion that in reality the soil is the most profound and mysterious creation of nature.

Most of us think of the soil as an inanimate mass of ground rocks and minerals mixed with organic matter in various stages of decay. If this be true then you will be surprised to hear that in reality a fertile soil is the most animated thing known to man. One gram of such soil, about the quantity that could be held on the end of a jack knife, contains millions of living micro-organisms, minute one cell plants which are organized more or less into various groups or families each performing a fairly definite function in the role of soil fertility.

Nature of Soil Micro-organisms

The micro-organisms of the soil are divided into two groups including both the plant (flora) and animal fauna kingdoms. The plant kingdom includes algae, fungi and bacteria. The animal kingdom includes protozoa, nematodes, rotifers, earthworms and also other worms and insects. Our discussion at this time will be confined to the important microflora known as bacteria and will be discussed under the name bacteria, soil organisms or soil micro-organisms (visible only under a microscope).

Size and Weight of Micro-organisms

It takes 100 million bacteria to equal the weight of one small grain or crystal of cane sugar. The next time you dump several spoonfuls of sugar into your coffee, stop for a moment and single out a grain and see how small it is. Now that we have settled this matter of weight, what say you we find out the significance of such a figure as 100 million. Let us now place this one crystal of sugar on the pan of a delicate laboratory balance. Now let us assume that we can pick up these organisms from the soil, one by one, and each second place one upon the opposite pan of the balance; it would require over 11 years working 8 hours a day and 6 days a week to transfer these 100 million bacteria to balance the grain of sugar. Pretty small, aren't they? But I forgot to say that during these 11 years the living bacteria would lose their water content, in which case it would require 460 million dry bacteria to equal the weight of this now famous grain of sugar!

Now we know the weight of these invisible plants, how about their dimensions? My answer is that many of them are less than one micron in length. But a micron also has no meaning to us. Let us again simplify matters. Take an ordinary filing card and see if you can really see its edge or width. Well, I will assume that you can, though I doubt it. A filing card is 250 microns thick. Many organisms are about one-half a micron in width or length. So it follows that 500 bacteria could stand, sit or lie side by side on the edge of your filing card; pretty small, aren't they?

Number of Organisms in Soils

The number of micro-organisms in a soil depends upon many factors. Energy material such as organic substances, including especially animal and green manures (crop residues), chemical and physical properties, all plan an important role in this respect. Normal field soils may vary from five to one hundred or more millions per gram (454 grams represent one pound).

Micro-organisms In Frozen Soils

A few years ago the writer was interested in determining the number of micro-organisms in our experimental greens which were made up of peat, sand and field soil. In January, 1934, when the soil was frozen to a depth of about 18 inches, samples were taken by means of a pick to a depth of 6 inches. The soil was thawed and
the number of organisms determined. The results were so astounding and unbelievable that the determination was repeated several times. We actually found over five billion per gram of soil. The writer took up the matter with a soil bacteriologist of note and learned that he classified them, for want of a better name, as pin point organisms, which were able to withstand the frozen conditions of this soil. Just how many of these extremely minute organisms would be required to equal the weight of a grain of sugar—I'll leave the answer to you.

Functions of Soil Micro-organisms

A great variety of functions are ascribed to the soil organisms. The most important is their ability to render plant-food both organic and inorganic, available for use of crops. One group may be busy enriching the soil with nitrogen by fixing nitrogen from the atmosphere; another, converting organic nitrogen into soluble nitrates while other groups are rendering available the insoluble minerals of the soil. Now these minute or microscopic plants, concerning which so little thought is given in regard to their vast importance, are extremely sensitive to soil changes, both physical and chemical, brought about by the farmer, the gardener and last, but by no means least, the greenkeeper.

The ideal soil conditions for the most beneficial effect of these invisible plants below the soil surface, is also the ideal condition for the growth of your turf grasses and vice versa. The soil must be well aerated, and supplied with a liberal amount of plant food of the proper ratio. Excess of water, physical packing of the soil surface by walking upon the greens when too wet shuts off the supply of oxygen and brings about at least temporary stagnation.

Under such adverse conditions compounds may be produced entirely different from those of a beneficial nature. In other words, anything that you may do to your green or fairway soil by design or otherwise that may prove beneficial to the soil micro-organisms will immediately benefit your turf. From this statement it follows that a study of the requirements of the soil micro-organisms becomes a new method of studying soil fertility.

For several years the writer and his associates have been studying the relationship between the activity of soil micro-organisms and the yields of crops on the 55-year-old soil fertility plots at Penn State. Studies just completed have proved conclusively that a close correlation exists between these two factors. This activity is measured by the rate of decay of cellulose (a form of organic matter) brought about on each of the 36 plots of these organisms.

Effect of Soil Acidity

As the soil becomes acid as the result of excessive and continuous applications of such a material as sulfate of ammonia, rapid changes take place resulting in greatly decreased numbers of beneficial micro-organisms and their activity. Unless this very undesirable soil condition is checked with moderate applications of lime, preferably limestone, the soil will become sterile, under which conditions your turf grasses will cease to thrive.

In order to emphasize the effect of acidity upon the number of soil micro-organisms, perhaps it will be of interest to you if I bring to your attention the results of an experiment conducted by the author and his associates dealing with the subject under discussion. As a means of studying the effect of soil acidity upon various soil properties a series of small field plots were treated with different amounts of sulfur, including also two plots which received no sulfur but were limed.

Studies of each plot soil at the end of two years brought to light some valuable information concerning the changes that had taken place as the result of varied degrees of soil acidity. After completion of these studies a portion of each acid plot soil was treated with lime in amounts sufficient to overcome the excess of acidity. This gave us an opportunity to determine both the effects of acidity and the value of lime in restoring the soils to their original condition. The table on this page shows what happened to the soil micro-organisms of the various plots.

### Soil Micro-organisms per Gram of Soil

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*Above two soils were limed in the field.*
This summary brings out clearly the destructive effect of soil acidity upon soil micro-organisms and also the value of lime in overcoming the sad plight of these acid soils. Soils of plots 5 and 6 supported no vegetation in the field and plot number 4 permitted only a scattered growth of native vegetation. The greatly increased number of micro-organisms of the plot 6 soil after liming (from 2 to 116 millions) is due to the fact that on this extremely acid soil there remained more energy material which was rendered available when lime was applied.

I have purposely confined this article to a discussion of the living matter of the soil with the hope that its true significance may impress you as it has me, and if I have been successful then you too will realize that the soil is an exceedingly complex and mysterious body of matter, extremely sensitive to the changes we bring about within it each day. When failure comes then, let us blame ourselves and not the soil.

Exchange of Club Information Is Profiting Westchester County Clubs

CLUBS in Westchester County (New York) have been exchanging menus, wine lists, data on course labor wages, caddie fees, locker-prices, etc., with such good effect that the suggestion comes for an extension of such circulation of facts and figures concerning golf club operation.

A professional who has had considerable close-up association with all departments of club operation, related to a member of GOLFDOM's staff numerous incidents of profit from the Westchester practice. Not enough of this sort of work is done by sectional golf associations, according to his observation. He is right.

Exchange of bulletins issued by the various sectional associations undoubtedly would give wide and helpful circulation to ideas that the various sections have found valuable.

THOUSANDS DISTRIBUTED

These three lessons sheets have been supplied free in any required quantity for high school or other public golf class instruction as part of the PRO-motion plan. The lessons were originated by Elmer Biggs and Art Andrews for highly successful use in group teaching at Peoria (Ill.) high school. Sheets in the above group constitute the first series and were worked out by PGA publicity committee, Frank Sprogell, chairman. More than 50,000 of the sheets have been applied for.
In some uninformed quarters there still exists the erroneous idea that a major tournament results in heavy, long-lasting damage to a golf course. The idea has been allowed to stick, and even has received some promotion from fellows who are not acquainted with the actual condition. The result has been to discourage officials and members of clubs that might otherwise be logical avenues for fast-field events.

The truth of the matter is that, with the exception of some spots on the winter circuit, whatever damage results from tournament reception vanishes in approximately two weeks time. Restricting practice rounds to a reasonable limit so the club members will have the minimum of inconvenience, and the course will suffer no undue hacking, means that a club can take one of the biggest events and suffer no course injury that will be evident three weeks after the tournament concludes.

**Baltusrol OK After Two Weeks**

Expert testimony from those who have been hosts to major tournaments can be led off by a statement from Major R. A. Jones, general manager at Baltusrol, scene of the 1936 National Open.

Says the Major:

"On the Sunday morning following the Open championship at Baltusrol in 1936, the course and particularly the lawns about the clubhouse looked terrible. Thousands of people milling over the turf for three days of the tournament, plus small galleries following the players during practice rounds, did cause a lot of temporary damage to the turf, but in less than two weeks the turf was fully restored, except in a few places about the first tee where resodding was necessary. It was a natural recovery and the expense involved was negligible.

"Preparing a golf course for a National championship is not an expensive undertaking. Most of the work done is in the nature of permanent improvement, and a well laid-out course needs few structural changes; a few extra tees perhaps, extra sand in the traps and care in greenkeeping methods months prior to the tournament in order to provide the best possible playing conditions.

"Prior to a tournament, members take a particular interest in their course, are careful about replacing divots and the staff gives of its best. The fine condition in which we find a championship course is due to more to this pride and interest than to a lavish expenditure of money, unless the club goes out of its way to add problems with the idea of having its course regarded as tough.

"Since everybody concerned has done his best to produce the most perfect playing conditions, it seems reasonable enough to expect that the contestants themselves will cooperate, but many don't.

"Some players are quite satisfied with three or four practice rounds; others would like to play the course daily for two weeks or more and play under all or any conditions of weather. Most players try to anticipate the position of the tee discs, consequently the tournament tees are severely punished prior to the tournament.

**Short Hole Tees Take Most Punishment**

"On the short holes, it is not unusual for contestants to play three or four iron shots on each round, particularly when practicing alone, as many do. This practice goes on from early morning to dusk every day right up to the tournament and there isn't the time in which to effectively repair all this unnecessary damage, for the greens staff is taxed to the limit with other extra tournament jobs. We roped off sections of our tees, but the ropes were removed and we finally resorted to stakes and wire.

"If there is wet weather prior to a large tournament such as the National Open, the greens suffer most during the practice rounds. For in addition to the normal wear, there are so many deep ball holes and here again contestants will practice putting for a long time in addition to playing numerous pitch shots.

"If there is heavy rain during the ten days prior to a championship, the course