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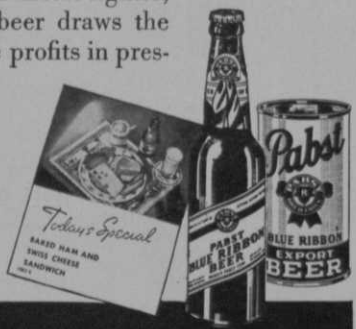

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Golfdom
The Business Journal of Golf
APRIL 1939

Students Have Bargain Golf

Students at Louisiana State University pay a dime to play 18-hole course with complete private club facilities

By M. A. McCalip

LOUISIANA State University is proud owner of one of the country's fine golf courses. It is one of the best 18-hole university-owned courses in the United States, and conspicuous because of the complete country club affiliation it offers the students. The L. S. U. G&CC presents a pleasant picture of management and operation efficiency to the rest of the golfing world.

The course, built in 1922 for the Westdale G&CC, was purchased by the university in October, 1936, for $25,000. Located approximately four miles from the university campus and one mile from the city of Baton Rouge, the plot includes 100 acres and is completely outlined with moss-draped magnolia trees and pin oaks, the trees being arranged alternately and 50 feet apart. The club is managed by John H. Sanchez, who supervised the construction of the course under the original owners.

Dime Fee for Students

The university purchased the layout to round out the school's athletic facilities and to make golfing possible for the students at about one tenth the cost students had been paying. This original purpose has been preserved through the cooperation of the university athletic dept. and the numerous non-university patrons. (The club has 486 outside members, each paying annual dues of $25 for the use of the course and the club facilities.) Resident non-members pay a green fee of $1.00 while out-of-towners pay 50c. L.S.U. students pay a green fee of 10c. Rent charged students for a bag of clubs is 25c.

Instruction in golf is a regular part of the curriculum at the university. This training, embracing both the theoretical

John H. Sanchez is in charge of the entire LSU layout.

The clubhouse at the LSU course is more commodious than many an 18-hole metropolitan club can boast.

and practical, is conducted by the physical education department and is attended by over 400 students. The practice on the campus is carefully supervised by Mike Donahue of the athletic department, who is assisted by a number of able student golfers.

At the conclusion of the preliminary training on the campus, the class is transferred to the golf course where further instruction proceeds under the tutorship of the club professional, Jimmie Cole. While undergoing instruction on the golf course the student pays only the regular green fee of 10c.

Cushion Greens With Bagasse

The course is kept well groomed at all times. All holes have two tees. The greens, of Bermuda, are topdressed once each month. Finely chopped Bagasse (the pulp and fiber remaining after the removal of the juices from sugar cane) which has been allowed to dry and undergo deterioration to a point where it is about half rotten, is sprinkled rather heavily on the greens before the topdressing is added. The Bagasse, being pithy and porous, tends to cushion the green and prevents rapid loss of moisture under a hot Louisiana sun. This method of treatment was developed by the club manager after several years of experimentation.

The course has a yardage of 6,321, par being 72. The longest hole is 585 yards, while the shortest is 122. The course includes three water hazards and numerous sand traps. On the front lawn of the clubhouse is a 9-hole putting course. The daily average of play throughout the year is 130.

Intramural and interfraternity athletics induce hundreds of students to participate in golf at L.S.U. each year.

Since the purchasing of the golf course, the university golf team has taken a most prominent position in tournaments throughout the country. Having won the Southeastern conference title numerous times, the team is also proud of the fact that its captain of a few years ago won the national intercollegiate meet. Other titles won by team members since the purchasing of the course include: runner-up in the national intercollegiate, Louisiana state championship, Canadian Amateur and Western Amateur championships. The prominence gained in the past few years has, no doubt, been due to a great extent to the excellent golfing facilities offered by the university.

In January of this year the physical education and athletic departments secured the services of Miss Joy McCann, well known in Southern golfing circles, to aid in the organization of a women's intercollegiate golf team.

Other Sport Facilities

Besides golf, the club facilities include six badminton courts with lights, two asphalt tennis courts with lights, and a concrete outdoor swimming pool. These facilities are open to students and members at no cost. The clubhouse is used for fraternity and sorority dances and banquets. A flat rate of $15 is charged for any university function. Meals and sandwiches are served in the clubhouse at all times.

The club is free of debt and operates on a paying basis despite the fact that some 8,000 university students are able to play golf at low cost.

Lime's Role in Fine Turf

By O. J. Noer
Agronomist, Turf Service Bureau
Milwaukee Sewerage Comm.

TO most laymen moss indicates acidity, and soil in damp locations is considered "sour." These notions do not fit the soil chemist's conception. To him, prevalence of moss is indicative of impoverished soil and not sure proof of acidity. From tests he knows that soil in damp or wet spots is not necessarily "sour" or acid. Furthermore, even though lime is needed he emphasizes improved drainage as even more important.

Soils may be acid, neutral or alkaline. Modern practice is to express reaction in terms of pH. By that method the figure 7 represents a neutral soil, lower figures denote increasing acidity, and higher figures increasing alkalinity. Since each figure differs by a multiple of 10, pH 6 is ten times, pH 5 is 100 times, and pH 4 is 1,000 times, etc., more acid than neutral (pH 7). Similar differences apply in the alkaline range also. Soils usually fall in the range pH 4 to 8.5, but more commonly within the narrower limit pH 5 to 7.5.

Most plants grow best at pH6 to 8. However, some continue normal growth below or above these limits, and a very few require a more acid medium.

Among the commonly used grasses, Kentucky bluegrass, the rye grasses, and Bermuda grass are classed as lime lovers; whereas the fescues, red top and the bent grasses, can withstand appreciably more acidity.

Heavy Rains Acidify Soil

Acid soils develop in humid regions; that is, where rainfall exceeds 20-25 inches per annum. As surplus rain water passes down through the soil it dissolves and carries away some of the mineral soil constituents. Calcium is the principal basic element lost in this manner, so unless offset by applications of lime the tendency is for soil in humid sections to become acid.

The so-called physiologically acid fertilizers (sulphate of ammonia, etc.) accelerate the leaching loss of calcium and thus accentuate this natural tendency of soil to become acid.

During most of the decade preceding 1928, the use of lime on fine turf was frowned upon. Grass authorities attributed clover and weed invasion to its use, and a few went so far as to claim that bent prefers an acid medium. Following that disastrous summer it was realized that soils may become too acid, even for the more acid tolerant fescues and bent grasses, so the acid theory was no longer tenable and lime regained favor.

According to the present concept, the judicious use of lime is advised on acid soil. Although slight acidity is deemed helpful for clover and weed control, grass density is considered even more important. Weeds struggle to survive when faced with competition of dense vigorous turf.

One cannot judge need for lime solely by immediate stimulating effects on growth. Lime may help grass withstand drought and other unfavorable summer conditions, and tends to minimize some types of winter kill in the north.

By stimulating bacterial activity lime helps prevent accumulation of partially decomposed stems and leaves which may cause serious trouble in periods of hot weather when allowed to accumulate as distinct layers. Extreme acidity seems to have an adverse effect on the soil water relationship.

Soil reaction affects supply of available phosphorus. On acid soils applied phosphates gradually revert to relatively insoluble compounds. According to Truog the critical point is pH 6.2 to 6.5. Above this figure phosphates remain relatively available, but at lower reactions gradual reversion occurs. At reactions above pH 8.0 availability of phosphate is depressed also, but to lesser degree.

On very acid soil it is not necessary to apply sufficient lime all at one time to

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American Fork & Hoe Co. does a good job of taking its own medicine in golf promotion. It pays the country club at Geneva, O., an annual subscription toward green-fees for company employees. The arrangement results in giving AF&H workers golf at half the usual fee cost inasmuch as the company assumes the other half.

About 50 of the company boys got in on the deal.

An interesting exhibit of tees is that on display at the Passaic County GC, Paterson, N. J. The collection was begun as a hobby by a member of the course maintenance staff and after receiving a good start, got additions from the course's players. It makes a bulletin board, locker-room or lobby display that causes considerable comment.

raise soil reaction up to pH 6, or above. This may unduly favor clover, and actually depress rather than improve turf growth. The better and safer course is to apply a lesser quantity of lime, or at most twice a year until reaction reaches the desired point. After that use lime on greens annually at minimum rate, but the labor saving scheme on fairways is to apply enough lime at one time to last two to four years.

As a rule, finely ground limestone is cheaper than hydrate, and is the safer material to use. It can be applied all at one time without danger of burning the grass. Hydrate is caustic and hence may scorch the grass, so when rate exceeds 1,000 lbs. per acre it is safer to split the quantity and make two equal applications at intervals of 7 to 14 days. Heavier rates are permissible in late fall or early spring than during warm weather. In neutralizing value 70 lbs. hydrated lime are equivalent to 100 lbs. ground limestone.

Two Types of Lime

Based on chemical composition, there are two types of lime, so-called calcite and dolomite. The calcite type contains calcium only, whereas dolomite possesses both calcium and magnesium. The latter should be used where soil content of available magnesium is low. A dolomite containing 15 to 20% magnesium oxide, or its equivalent, should be selected. If not stated on bag this information can be procured from the producer.

Lime should be applied in fall or early spring. One advantage of fall is the fact that deeper penetration is likely because of more plentiful moisture, and the heaving action of alternate freezes and thaws. When used in spring, applications should be as early in the season as possible.

Where lead arsenate is used for grub control, it is best to apply needed lime several months before the arsenate. Lime tends to convert arsenate into a less effective basic compound. Likewise when phosphate is needed, best practice is to apply lime first, and the phosphate several months later.

For all practical purposes, need for lime on fairways and lawns is indicated when soil reaction falls below the following limits: Kentucky bluegrass, pH 5.5 to 6.0; fescues and bent grasses, pH 5.0 to 5.5; Bermuda grass, pH 5.5 to 6.0.

Soil type affects quantity required because less lime is needed on a sandy soil than on a heavy soil to produce the same change in reaction, even though acidity is the same at the start. All these factors are taken into account in the following table. Suggested rates are based on high quality finely ground limestone. If hydrate is substituted rate can be reduced one-fourth to one-third.

Suggested Rates for Ground Limestone on Fairways and Lawns

		POUNDS PER ACRE	
Soil Texture	*Degree Acidity*	*Kentucky bluegrass and Bermuda*	*Fescue and Bent*
Sands and sandy loams	slight	1,000	None
	medium	2,000	1,000
	strong	3,000	2,000
Loams, silt loams, clay Loams, clays	slight	2,000	None
	medium	3,000	2,000
	strong	4,000	3,000

On greens need for lime is clearly indicated when reaction falls below the following limits: bent grasses pH 5.0 to 5.5; Bermuda and winter rye, pH 5.5 to 6.0.

When pH readings lie between these limits and neutrality, pH 7, the effect of lime should be tested on portions of one or more greens. Besides its direct effect on growth, enhanced ability to withstand drought and hot weather, increased immunity to disease, etc., are possible secondary benefits not to be overlooked.

Aside from soil pH, there are two other important indicators of need for lime on greens. When growth response to applications of ammonium sulphate ceases, need for lime is strongly indicated. Likewise, when disease is severe and control not easily obtained, lime may prove beneficial. This applies only when the growth factors are favorable and does not follow when greens are over-fertilized or over-watered,