

# Students Get Basic Training In Course Architecture

By WALTER M. KEITH

**S**teadily growing interest in golf persists despite acute lack of facilities warranted by the demand and market possibilities. There now are approximately 3,315,000 golfers in the U. S. playing ten or more rounds a year. It is impossible to estimate how many golfers there are playing fewer than 10 rounds annually. And how many have given up the game because of limitations of course facilities and inconvenience of waiting for starting time there's no telling.

Heavy pressure for more courses is coming from the promotion the game gets among juniors, in high schools and colleges, in military installations and in industrial recreation. One element already having considerable influence is the large group of young business women earning good salaries and wanting Saturday, Sunday and other holiday golf at public and semi-public courses.

Another factor is the shift of industrial population. It has been repeatedly proved that pleasant moderate-rate golf facilities are highly important in attracting and satisfying a most desirable class of employees and their families.

The birth rate increase also points to a much larger need for courses.

Golf courses, unlike other sports areas of standard specifications, require specialized knowledge and ability in design and construction. The golf architect is responsible not only for the degree of appeal and skill testing capacity of the course but for design that keeps maintenance costs within bounds for the extent and financial capacities of the golfers.

Anyone experienced in golf has seen in low cost locations in or near small towns that ability in architecture and construction has accounted for developing surprisingly large amount of play where previous uninteresting cow-pasture courses had been abandoned because of lack of use.

Although the most often expressed concern of men in the golf business has been about the loss of courses in metropolitan areas due to courses being sold for expensive home or business developments, there also is a great deal of

attention being given to development of golf facilities in smaller communities.

## Number, Size, of Courses

Few realize that there were 2,974 9-hole courses and 2,052 18-hole or larger golf establishments operating as of Nov. 1, 1952. The total has been increased to 5,057 courses in play as of June 15, 1953 and others are being built to be in operation in 1954.

There has been so much uninformed talk about the extent of golf facilities that it is not generally known that the private clubs are only a few more than 1800 with 9-hole courses and 1,229 with 18-or-more holes. The other installations are 768 9-hole and 478 18-hole-or-larger semi-public courses, and 406 9-hole and 345 18-hole-or-larger municipal courses.

This factual background has been, and will be keeping, established golf course architects busy and accounted for colleges and universities offering courses in landscape architecture and city planning giving students basic training in golf architecture and construction.

## U of Illinois Teaches

At the University of Illinois, in the Department of City Planning and Landscape Architecture, golf course design has been a part of the training program for several years. Two graduates of this department are prominent in the field of golf course architecture. They are Robert Bruce Harris and C. D. Wagstaff.

Last year the department developed an integrated program of training with the School of Physical Education in their new curriculum in Recreation.

A new course was formed, called "The Design and Layout of Recreation Areas and Facilities". This is a collaborative course bringing together in the classroom students and faculty of the School of Physical Education and of the Department of City Planning and Landscape Architecture. Lectures and design problems considered the theoretical and practical aspects of planning and design of such areas as small playgrounds, neighborhood and community recreation centers, parks and reservations. As the

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—Clarence Plein, Lakeside Country Club, Overland, Mo.



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—August Schnatzmeyer, Bellerive Country Club, Normandy, Mo.

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—Ralph Guyer, Westborough Country Club, Glendale, Mo.

These reports from golf course superintendents at courses in the St. Louis area are another in a continuing series of "experience reports" from leading courses across the country.

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—Walter Ragan, Greenbriar Hills C. C., Kirkwood, Mo.



## *Best on the market!*

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—Oscar Bowman, Old Warson Rd. Country Club, Ladue, Mo.



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course develops we hope to study sculptural playgrounds, and all phases of recreation area planning, design, and construction, including golf courses.

The growing interest in golf course design is reflected in the part that it played in last year's training program at the University of Illinois.

In the sophomore year we have developed a standard problem for the design and construction of a golf green. In this problem the student must become familiar with the game and its principles if he has not already done so. He prepares a technical report dealing with construction, drainage and turf problems. By cross sectioning, and moulding contours, in clay, sand or graphically, on paper, he designs the green, and specifies the materials used, in the construction of this green. He then prepares a scale model. We find

that, in addition to acquainting the student with the problems of golf course design, this exercise ties together an appreciation of moulding ground forms which is a basic technique of the trained landscape architect.

One senior, and one graduate student selected golf courses as the subject of very comprehensive reports and design problems.

#### **Pitch-and-Putt Studied**

Two juniors studied the development of a pitch-and-putt golf course. The writer believes that these shorter distance courses, requiring less total acreage, deserve attention in the future planning for municipal recreation areas.

One objection to playing on the standard length golf course that comes from those who are new to the game, is the length of time that it takes to play



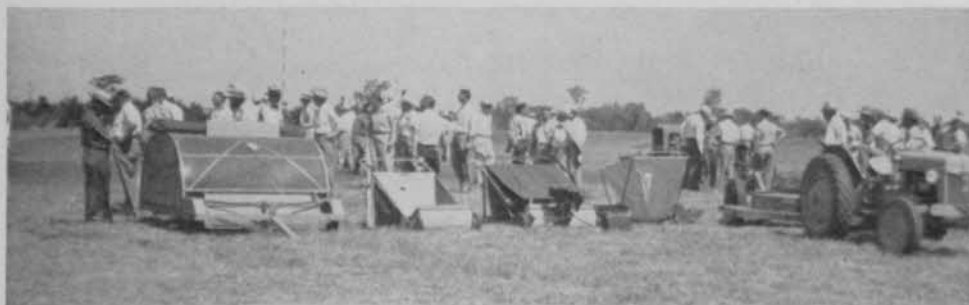
### **CENTRAL PLAINS STAGES FIELD DAY**

Central Plains Turf Foundation's third annual Field Day, at Wichita (Ks.) CC, June 8, drew 120 superintendents, turf research and equipment men, and others concerned with large fine turf areas.

Display and demonstrations of considerable equipment and a great deal of informal expert discussion of turf problems and successful maintenance operations made the day highly profitable to golf clubs whose superintendents were present.

The new clubhouse of the Wichita CC is in the background of the view showing a mower and tractor demonstration. Wes Updegraff, who was co-chairman with Ross McCausland of the Field Day, is Wichita CC supt.

Chester Mendenhall, supt., Mission Hills CC, Kansas City, Mo., is pres., Central Plains Turf Foundation.





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a complete round. This attitude is regretted, for to those who play the game regularly, the long playing time is an advantage in that it forces you to get away from the hurried pace that we live by long enough to really relax. This time factor is now longer due to the crowded conditions that we find on most courses.

In areas where land costs are very high, the shorter distances found on pitch-and-putt golf courses reduce the total acreage required. The maintenance costs for the short course would be only slightly less. The prime factor in maintenance is the greens.

The writer was stationed in England during World War II, and was for a time, in Taunton, Somerset. With the restricted use of transportation facilities, it was difficult to get to a regular golf course on the limited time allowed for a pass.

In the center of town, within easy reach of the business district and the bus stop, was a pitch-and-putt course. Even without the wood shot distances, many pleasurable hours were spent on this course. The greens were well maintained, and it took less than one hour to play 9 holes. The scoring skill in the iron play was still offered as a test with holes ranging from 100 to 190 yards.

American communities, industrial plants, and hospitals could easily develop such courses on limited acreage.

Pitch-and-putt golf courses shall be a subject for research and development study in the classroom at the University of Illinois.

We are not offering complete training for golf course architects. We feel that this field is too highly specialized to warrant a college training program. We shall, however, make every effort to offer assistance to all students interested in this phase of professional practice. We shall look to the American Society of Golf Course Architects as a source of post-graduate training, employment, and experience for these students. It has been observed that there is a growing interest in this field.

In the development of our present training program in the Department of City Planning and Landscape Architecture, we are grateful to the National Golf Foundation for assistance in assembling reference data. We shall maintain close contact with the Foundation in the future as our courses develop.

Until just a few years ago, very little

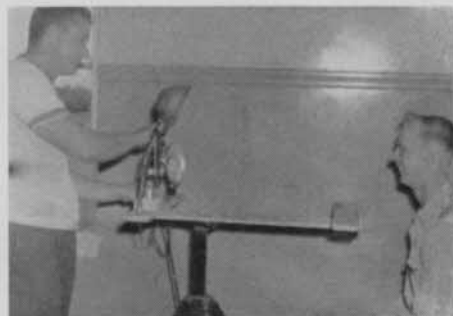
had been written on golf course architecture, and on golf course design. We now have several fine books and magazine articles on these subjects which have been added to our library.

With the assistance of such authoritative information, and with the feeling that there remains much to be done in the development of adequate facilities, golf has entered the university classroom. It is fitting that it should do so for golf is a game with a philosophy that is comparable only to that of life itself.

### Identification Photos Taken at Public Courses

AS all applicants for an official identification card at the newly opened public Ash Brook Golf Course in Scotch Plains, N. J. must pose for a photograph at the clubhouse, an improvised open studio has been set up back of the registration counter. Rates at the course are lower for county residents than for others.

Joseph McElwee, club manager, obtained a .33 mm. Argus camera, put up a



flood lamp and mounted the whole apparatus on a home-made stand of iron frame with a wooden step. The prospective player poses, is quickly snapped, and is assured that he will get the photo mailed to his home in about two weeks.

McElwee takes the finished rolls to his home where he has a developing laboratory, gives the prints to a clerk in the offices of the Union County Park Commission in Elizabeth, which maintains the course, from where prints are mailed after being pasted on identification card.

Regulations call for a new photo to be taken every five years. Exactly the same service is rendered at another links under the county system, that of Galloping Hill Golf Course, where the photos are taken either by McElwee when he is on duty there, or his assistant. The same photo equipment is also installed there.

# New Method Speeds Coverage with Bermuda Plugs

By O. J. NOER

**T**HE performance of U-3 Bermudagrass turf has been outstanding in Southern California — once it became established. U-3 has done well in many other parts of the country for use on tees, in fairways, and on athletic fields. Its behavior has been best in the transition belt between North and South and along the northern fringe of the Bermuda grass section of the country.

In California vegetative plantings of U-3 Bermuda grass plugs in existing turf have been slow to spread due to competition from other grasses. This has restricted the use of U-3 there and might happen elsewhere.

Z. Mahdi, an Egyptian graduate student in the Department of Floriculture and Ornamental Horticulture at the University of California, Los Angeles, was impressed with the U-3 strain of Bermudagrass and became interested in its propagation. He found a way to speed cover with the plug method of planting.

The accompanying pictures show the method devised by Mahdi and the growth



2. — 4-in. West Point plugger in place to remove plug for planting.

response from plugs set out in early summer. The pictures were taken October 5, 1952 on the trial plots at UCLA Turf Garden.

## Key to Fast Growth

By using fertilizer to stimulate growth of the U-3 Bermudagrass, and a maleic



1. — Mahdi takes 2 in. core from U-3 Bermuda turf from nursery of pure U-3.



3. — Mahdi shows 4 in. U-3 Bermudagrass plug ready for planting.



4.—After setting 4-in. Bermuda plug in plot Mahdi pours fertilizer in center hole. One plot was sprayed with maleic hydrazide before plugging to check growth of other vegetation.

hydrazide spray to check growth of the existing vegetation, Mahdi found an effective way to convert a turf area quickly into U-3 Bermudagrass by planting plugs.

The U-3 Bermudagrass plugs were taken from a nursery of pure U-3 turf. The plugs were 4 in. in diameter with a 2-in. hole in the center. When the plugs were collected, the 2-in. center core was removed first with a 2-in. West Point plugger.

Then the 4-in. plugger, made by the same firm, cut and removed the plug for planting. The area into which the U-3 Bermudagrass plugs were to be planted was sprayed with a solution of maleic hydrazide at the rate recommended to check vegetative growth. The plugs were set on 12 to 24 in. centers and the center holes were filled with a bland type fertilizer to stimulate growth without burning.

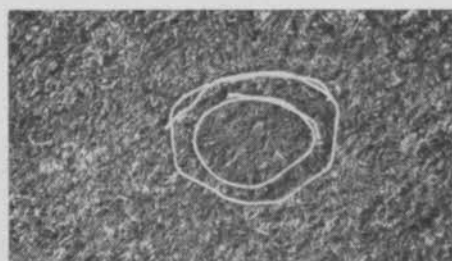
In order to test the method's effectiveness, plugs were placed in one strip without maleic hydrazide treatment or fertilizer. On the second strip maleic hydrazide only was used, and fertilizer only on the third. The fourth strip received both. By fall the spread of the fertilized plugs in the maleic hydrazide plot was most remarkable.

The results indicate that fertilized plugs set on 18 to 24 in. centers will

make solid turf in a single season or less, provided growth of existing vegetation is checked first by spraying with maleic hydrazide.



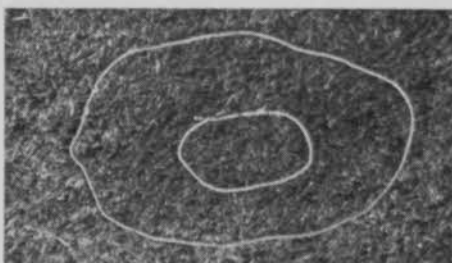
5.— Without fertilizer or maleic hydrazide spray plug made no appreciable growth. Plugs in this and following photos planted in June. Photographed in October.



6.— This plot sprayed with maleic hydrazide before planting but plugs were not fertilized.



7.— Fertilizer was used on this plot but no maleic hydrazide.



8.— Exceptional growth where maleic hydrazide was used before planting and plugs were fertilized at planting time. Inner circle represents size of original plug.



# Talk about "DISTANCE"



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# Basic Business Training In Pro Shop Operation

**A**L. W. DUBBS of the National Cash Register staff gave pros at the PGA annual convention what the smart pro business men who heard him said was the classic presentation of the fundamentals of successful operation of the pro department.

Al's talk was accompanied by easel illustrations of the type that NCR has found most effective in training their own salesmen and salesmen of retailing establishments. Almost every pro who saw the pictures, their concise story and who heard Dubbs apply the basic training to conditions in the pro shop said they'd like to have those pictures so they could do some thinking at length about how the material fitted their own operations.

So through the cooperation of Leigh Metcalfe, asst. adv. mgr., Dubbs and other NCR fellows the picture story appears on following pages.

Dubbs explained that the basic lessons show why some pros make a dollar go farther and yield more net profit than others do, and reminded the pros that now with higher operating costs the pro who doesn't run his business with a sharp eye on protecting himself against leaks hasn't got much of a chance to keep out of the red.

He emphasized that the greatest portion of the dollar that comes into the pro shop must go out to pay for cost of merchandise. What's left needs vigilant management to yield a profit.

He stressed watching the personal element to protect against leaks. Lack of simple system that leaves holes open for dollar losses, the human weaknesses that practically invite theft, and putting off accounting so the pro doesn't know until too late actually where he stands financially, Dubbs said are major factors in reducing pro profits.

He showed an illustration on a National cash register that has paid for itself quickly at courses where pros have responsibility for collection of green fees as well as having to watch shop merchandising, frequently when there's a rush that may get the accounting snafued.

From the illustrations Al showed most

pros can make a check-up on their own business operations and decide for themselves whether they're risking profit leaks and guessing instead of knowing accurately what money is theirs and how they might make more net.

## THERE'S NO RUBBER IN A DOLLAR BILL



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DO YOU KNOW OR DO YOU  
GUESS ?

IF YOU GUESS ---

You may be losing part of the  
profit portion of the dollar...or

YOU MAY LOSE THE ENTIRE  
DOLLAR !