A SIMPLE WAY TO MEASURE GOLF HOLES

The August issue of the USGA JOURNAL L contained an article outlining a procedure for measuring golf holes. Anyone contemplating the measurement of a course might be interested in a simpler method used recently at the Brook-Lea Country Club, Rochester, N. Y., where I am chairman of the Green and Grounds Committee.

Brook-Lea had not been measured for about 30 years. There was no copy of the original architect's plan. Many tees had been lengthened to the front; some new tees had been built; one or two new greens had been moved slightly; front tees had been created; and the route of play of one hole was altered.

I felt the course required remeasurement and, since we did not have funds available to obtain the services of a professional engineer, decided to do the job myself. When I discovered I could not obtain a tape longer than 100 feet I searched for an easier method.

Walking Wheel

There is a piece of equipment called a walking wheel which is used by contractors and utility companies for measurements. Luckily, I was able to borrow one.

This gadget is like a small bicycle wheel with a handle to push it with and is very light. It includes a reset counter which shows the yardage covered. Each revolution measures one yard. The accuracy was checked against a steel tape's measurements.

The walking wheel, of course, will measure only surface and not air distance. Many of our holes, however, are fairly level with only moderately roll-ing terrain. These I measured with the wheel from front of the tee to front of the green. The tees and greens were measured with a steel tape to determine

the centers. The hole yardage was calculated from the center of the tee and the green.

Surface measurements will not give you the accuracy of a surveyor, but I think it will be about as accurate as dragging a 100-foot tape 400 yards or so.

It takes quite a hill to really affect surface measurements very much. A hill 50 yards long with a drop of 10 yards in the 50 affects measurement less than a yard. I did not attempt to "wheel" measure any surface drops of more than a few feet in 50 to 100 yards.

A few holes still remained that I did not feel could be measured satisfactorily with the wheel. Unable to find a surveyor among the club members and unsuccessful in efforts to borrow a transit and a stadia pole, I again began to ask questions.

Aerial Photos

I discovered that the Farm Bureau has very accurate 40 x 40 inch aerial photographs which scale 400 feet to the inch. Any one can buy one for about \$5. The photos of our property are so good that by using a magnifier you can even see the flagsticks on some of the greens. Tees and greens are easily discernable.

Using a 3½ power magnifier, which clips on glasses and leaves both hands free, and a toolmaker's steel scale, I first checked the photo map's distance by measuring the club swimming pool which came out exactly to the 75 feet in length that it is.

To further check the aerial photograph distances I compared them with the score card distances on holes where there had been no changes since the original survey as well as with the distances calculated on the same holes by tape and wheel.

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They were remarkably close. One hole, in fact, came out to exactly the same yardage with all three measurements. Thus, I felt confident that the measurements I was getting were fairly accurate.

Holes with hilly terrain and with doglegs are easily measured on the photograph with relatively good accuracy.

There are no holes at Brook-Lea which are so close to the maximum yardages of 250 and 470 yards for par 3 and par 4 holes that a yard or two would affect par.

This is a very economical and easy way to remeasure a course on which many changes have been made over the years. It would not be good enough for a USGA competition, but it is certainly sufficient to provide members the yardage needed to judge shots.

Easy to Lose a Yard

While the method used at Brook-Lea does not guarantee complete accuracy, it appears that my figures may not be further off than ones derived from the method recommended in the August JOURNAL. There are several points in it which struck me as possibly not measuring to one-yard accuracy. Among these I include the estimating of playing routes on dog-leg holes and the placing of cups without using a tape to measure. It is easy to be a yard off in a big expanse unless you measure.

The entire job was completed in about eight hours time with another member helping me for about two hours to measure the greens and tees with a steel tape.

ANSWERS TO QUIZ ON PAGE 8

(Parenthetical numbers refer to the pertinent Sections of "USGA Golf Handicap System For Men.")

- 1. Course rating is an evaluation of the playing difficulty of a course compared with other rated courses (2-11a).
- 2. Hole rating is the final evaluation of the playing difficulty of a hole after adjustments for rating factors (2-11b).
- 3. False. It is the difference between a player's gross score and the course rating (2-6).
- 4. The lowest 10 of the last 25 differentials are used (6-1).
- 5. Yes, but he must have a minimum of 5 differentials (6-2b).
- 6. Yes (4-3).
- 7. Yes, but not for more than two holes per round. He should record two over par for a "pick-up" hole if his handicap is 18 or less, three over par if his handicap is 19 or more (4-3).
- 8. Scores must have been made during the current playing season or calendar year and the immediately preceding playing season or calendar year (4-2).
- 9. Yes. He should also report the course rating of those scores (4-4).
- 10. He shall use the lowest handicap (7-8b).
- 11. Revisions should be made regularly, preferably at least once each month during the playing season (8-1a).

- 12. No. USGA Handicaps are continuous, carrying over from one season to the next (8-2b).
- 13. Yes. The committee has that right and should determine whether the reduction is to be one, two or more strokes (8-3b).
- 14. Yes. A temporary exception may be made for a temporary physical disability provided the increased handicap is used only within the player's home club (8-2c).
- 15. No. They should be played off at 18 holes. If that be inexpedient, there may be a shorter play-off which permits the competitors to use an equitable percentage of their handicaps (11-2b).
- 16. No. Courses should be rated by a committee of the men's golf association having jurisdiction in that region (18-1).
- 17. The USGA does not endorse "preferred lies" or "winter rules." However, when a local committee believes that adverse conditions are so general throughout the course that "preferred lies" or "winter rules" would promote fair and pleasant play and help protect the course, it may accept such scores for handicapping (13-1).
- No. Each competitor should use his handicap in effect at the time each round is played (8-4b).