TO BOTH the experienced and casual observer, nothing detracts more from the beauty of a putting green than cup plugs which fail to knit and recover properly. With all due consideration of the many and varied conditions under which greens' turf is grown, and fully realizing that no one set of rules are applicable to all these many and varied conditions, I am convinced that, aside from some mechanical injury, or the inception of some factor beyond the control of the greenkeeper, continued cup plug loss on any golf green is simply the result of faulty or careless technique in changing the cups.

To bear out my conviction, is it not reasonable to conclude that if turf has been successfully established under existing conditions, ideal or otherwise, the very process of cup changing, with particular reference to backfilling before setting the plug, offers an excellent opportunity for modifying or amending the backfill soil thus assuring the plug an ideal rooting medium, and with proper subsequent care cup plugs should certainly be able to hold their own with the neighboring turf?

Scars No Respeciter of Clubs

It has been particularly interesting to note that the occurrence of plug scars is not confined to any one class of club, which would seem to indicate either that plug loss is, on some greens, inevitable, or there exists an urgent need for modifying present technique to suit local conditions. Assuming the latter to be true, there appears to be no particular object in attempting to advocate a definite method or technique to be employed in changing the cups, as local conditions will demand variations.

In enumerating the factors to be considered, I firmly believe the following to be indisputable, namely that each time a cup is changed, the process of resetting the plug becomes a new and individual problem and should be treated as such. This particularly holds true in cases where uniformity in the soil texture is wanting. Later a suggestion regarding backfill mixtures will be set forth, but this does not necessarily imply that a truckload of various soil mixtures need be toted around the course in making the rounds. A small quantity of prepared compost will suffice, as this can be modified as required during the rounds with parent soil from the respective greens. The important thing is to develop a good friable moisture-retaining stock, so compiled that its physical condition surpasses the composite run of topsoil underlying your turf.

Moisture, or rather the lack of it, is undoubtedly responsible for more plug losses than any other single item. At this point many greenkeepers will probably comment that they water the plugs after they are set, perhaps even in excess of the amount considered ample. Where failures under these conditions occur, consider the water holding capacity of your soil, or look for a compacted surface condition which does not allow sufficient percolation to sustain growth.

Do Thorough Job of Watering

There is of course a technique to be observed in applying water. Simply dumping a can of water on the plug and expecting it to percolate down where it will do some good hasn’t much to commend it. In nine cases out of ten practically all of the water applied in this manner runs off the surface. A more practical method and one that gives results is to include a small watering can in the kit, and do a thorough job of watering the plug and a considerable area around it, thus assuring complete percolation and sufficient moisture reaching the roots.

It is obvious that careful watering, to be fully effective, must be correlated with satisfactory water holding capacity of the soil. To insure this, I suggest the following soil medium, to be altered as local conditions dictate as a thoroughly satisfactory backfill material. Select a good quality loam, screened, using two parts, supplemented with two parts humus or leafmold and one part sand, moistening the mixture before using. A small quantity of superphosphate will aid materially in

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United States Golf Assn., 73 E. 57th St., New York City, has begun publication of a club and press information bulletin. Suggestions for Local Rules is one of the features of the first issue that will be of great help to club officials. The bulletin may be secured by non-member clubs for 10 cents. It’s free to USGA clubs.
stimulating root growth and will be found a valuable addition to the above formula.

Just why a specially prepared backfill material is recommended may be explained as follows: During the hole cutting process soil from the lower strata is brought to the surface and is in most cases of rather poor quality, and it is quite essential that a portion of this medium be replaced with soil of better texture. In cutting holes on the average green three cuts are generally required, one to remove the plug and two to finish the cut to the desired depth.

As the respective cuts are made the soil may be transferred to the old cup with the cutting tool, which automatically places the lower and poorer material immediately below the plug. Enough of this old material should be removed to allow a depth equal to or a little greater than the thickness of the plug, then adding a sufficient quantity of the prepared soil to raise the plug approximately \( \frac{3}{8} \)" above the surface, but before letting it in mix the added soil thoroughly with the underlying fill and firm well. This is important for if the plug is let in on loose mulchy soil, air spaces will occur and the capillary movement of the soil moisture will be retarded.

A suggestion may be made at this point regarding depth of cutting the plugs. This is more or less dependent upon local conditions, but as a general rule thickness should not exceed two inches; if shallow cuts are made, root pruning occurs which encourages the development of new roots, and consequently quicker knitting.

**Tamps With Wooden Mallet**

Whether or not plugs should be tamped or merely pressed into place with the foot is a matter of preference. My own practice is to use a light wooden mallet as it gives a smoother appearance to the finished job and insures the plug being set firmly in place.

At a great many golf courses cup plug scars are, to reverse an old axiom, the rule rather than the exception. At a great many of these courses the greenkeepers in charge employ the cubicle maintenance system, under which set-up the cups are changed frequently, if not daily, by members of the greens force. This type greenkeeper will want to defend that system as being efficient and practical, but if constant plug losses are prevalent, he should check upon the technique employed by his men. The greenkeeper who hasn't the time to change his own cups should at any rate make the rounds with his employees frequently, if for no other reason than to get a glimpse of the sub-surface activity of his turf.

**'Appleknocker' Game Is Challenge to Better Play**

S. C. KNILANS of Sheboygan, Wis., has devised an interesting system of recording scores, called "The Old Appleknocker Game," that is proving quite popular among Sheboygan's Pine Hills' membership. Knilans devised the game a few years ago and it has held considerable member interest at his club ever since. The name of the game is taken from the assumption that an Appleknocker is one who can 'hit the old apple around.' Knilans tells about the Appleknocker system and its system of scoring:

The game gets better from year to year, because as best scores are noted, the Appleknocker goal that has been set for the player each year, is placed at a figure that will make the golfer work more than ever to reach it. The Appleknocker scoring sheet is large enough to list all club members, and has columns for ringer scores, best actual scores, handicaps for the current and preceding years, the Appleknocker goal, and finally, the Appleknocker award column.

In order to put the game into operation, someone such as the pro, handicap or sports pastime chairman, should: 1. list players alphabetically; 2. place in Appleknocker column the score each player feels he is capable of making; 3. put down players' handicaps; 4. put down 1940 handicap as it changes from 1939 figure.

After the above information has been charted, the players are pretty much on their own, inasmuch as they put in their own best scores until the Appleknocker goal is made, at which time a sticker is placed for them in the Appleknocker award column. The players who have received stickers, however, continue to list their best scores, because the Appleknocker championship goes to the player who beats his Appleknocker goal by the greatest number of points.

Knilans has copies of the game available for distribution at a moderate cost, and will be glad to send games out on approval. His address is Box 417, Sheboygan, Wis.