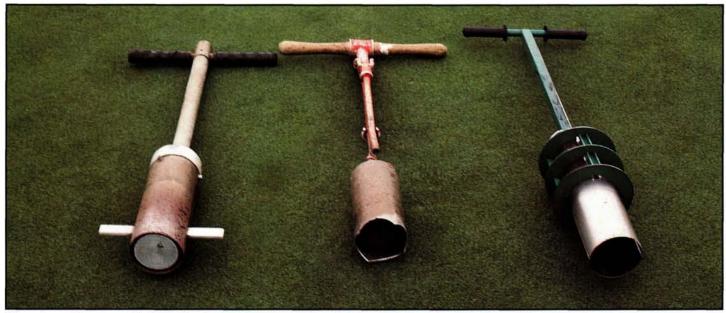
HOLE PLACEMENT

The art of cutting the hole.

by KEITH A. HAPP



There is a wide array of hole-cutting tools. The manner in which the task is performed is as important as properly preparing the tools before the first hole is cut.

ANY TOOLS are available to cut a new hole in a putting green surface. However, the manner in which this task is performed may be as important (if not more) as the equipment used. Although a great deal of effort goes into conditioning a putting green for play, arguably no element of putting green preparation may be as critical or as well scrutinized as the placement and installation of the hole. The fact that this task is performed so frequently places even more significance on the technique used. Although "practice makes perfect," there is, unfortunately, not much room for error on the putting green. Employing proper technique produces satisfactory results. This article will highlight the entire procedure by discussing each step.

Preparation

Before attempting to cut a new hole in a putting green, the tools must be prepared. For example, the hole-cutting tool *must* have sharp edges and the outer surfaces should be clean. This allows a sharp edge to be maintained when the hole plug is removed. Clean-

ing the outside edge of the hole-cutting tool also will help minimize heaving when the soil plug is removed. The diameter of the hole will be consistent from surface to surface, and the "volcano effect," which is often blamed for missed putts, can be avoided.

It is beneficial to have a working knowledge of the game of golf when identifying potential hole locations. Although there is no such thing as an illegal hole location, at times placement can be unfair. The slope of the location and the speed of the green often determine if a site is usable. A quick check can be performed by starting a golf ball rolling from above the hole. If the ball accelerates (due to gravitational force) as it passes the hole, the location may be unsuitable for use.

Å rule of thumb is to position the hole in the center of a 3-foot diameter area that is on the same plane. As stated in Decision 16/6 of the Rules of Golf, when cutting a hole on a slope, the hole should be cut vertically, regardless of slope. It is not required that all points of the rim of the hole liner be equidistant from the surface of the green, but they should be at least one inch below the surface.

Cutting the Hole

When the hole location is determined, the cutting process can begin. A clean towel should be used throughout the entire hole-changing process. Positioning the towel on the turf and placing the tools on the towel will greatly reduce the potential for turf damage from oil, dirt, or other debris.

The hole shall be 4.25 inches in diameter and at least 4 inches deep. If a liner is used, it shall be sunk at least one inch below the putting green surface unless the nature of the soil makes it impractical to do so. Fitting the holecutting tool with a level indicator will help to ensure that the hole is cut properly. A level indicator becomes increasingly more important when holes are cut in heavy soils. Several cuts may be needed to obtain the necessary hole depth. Depending on the tool used, the plug can be removed in sections or all at once.

Inserting the Liner

Once the hole is cut, the hole liner can be inserted. Exercise caution when this is performed. First, wipe the outer side of the hole liner clean of debris. As the liner is inserted, do not damage



Resist the temptation to exert abnormal force when setting the hole liner. The area near the new hole location can be easily damaged.

the edges of the new hole. Insert the liner halfway into the hole and then place the liner-setting tool into the top of the liner. Before the liner is pressed into the hole, turn the setting tool at least 180 degrees to make sure it fits properly. Then, slowly but firmly press the liner into the freshly cut hole until the setting device contacts the putting surface. There is no need to exert abnormal or excessive force when setting the hole liner. Hammering or jumping on the device many only serve to damage the immediate area around the new hole location. Once the liner is properly positioned, remove the setting device by first twisting it 180 degrees and then lifting vertically.

Replacing the Hole Plug

The next step is to fill the old hole with the freshly removed sod/soil plug. Consistent hole depth is key to the easy replacement of the plug. If hole depth varies, the replaced plugs can be scalped or else sink below the surface of the green.

Begin by examining the root depth of the sod/soil plug. Many times, especially at the end of the summer, turf roots become weak and do not hold the soil profile together. Soil must then be placed in the old hole and repacked prior to inserting the sod plug. Many times, turf managers opt to completely replace poor soils with a modified mix of sand and organic matter.

Once the soil is packed, the sod plug can be inserted into the hole. Prior to pressing the sod plug level with the surface, determine if soil must be added or removed. If the plug appears to be too high, remove some soil from the bottom of the hole. Resist the temptation to shave soil from the bottom of the sod plug. This can cause damage to the sod plug by removing viable roots. When the sod plug is fit properly into the hole, fold the outer edges of the plug under slightly so that when the plug is pressed into the soil profile the seams (the interface of the plug and the hole wall) will match. An ice pick, a long-bladed knife, or other piercing type of tool then can be used to knit the edges of the hole and the plug together.

The final step in the hole placement process is to moisten the plug and immediate area around the old hole with water. Moistening the plug minimizes shrinkage during harsh environmental conditions. Rewetting the plug also stimulates root growth, which is critical to the healing process. Another important aspect of using water to seal the plug is to help ensure that a level playing surface is created when the hole plug is reinserted. Wetting the plug

creates a swelling effect. The plug can be leveled with little fear of it being scalped during the mowing process.

A towel or small cloth can be used to clean the flagpole before it is inserted into the hole liner. For special events, the interior edge of the soil profile above the hole liner can be painted so that it is more visible to the players as well as spectators. This is often performed for televised golf events. Specialized tools are available to complete this task.

Conclusion

Cutting a hole in a green is often looked upon as a menial task. However, in the game of golf the hole is the final destination, and if there is a flaw it will be noticed by all those who play the course. Those who consider cutting a hole in a green to be an art as well as a true science designate this element of daily course preparation to key employees. The science of this procedure comes when soils, water content, and root health are examined. For example, changing the hole on a daily basis provides the opportunity to implement integrated pest management strategies, if necessary. As with all facets of course preparation, attention to detail must be keen. Positioning and cutting the hole well is an essential ingredient to offer consistency from day to day.

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Wetting the plug will allow it to be leveled with a reduced chance of shrinkage or swelling. Moistening the plug greatly reduces the potential for scalping when mowing is performed.