## "Drilling" Large Diameter Holes

I needed to put a 3 inch diameter hole into a 2 inch thick cleat and I have neither a drill bit or hole saw that size. I do have a circle cutter but it won't cut that deep. I could have made it work but I prefer the method explained in this article.

I did use the circle cutter (it should only be used in the drill press) to make a template in a piece of MDF. With a  $\frac{1}{2}$ " bit and  $\frac{3}{4}$ " bushing in the plunge router I'm set to go.





I then locate the center of the hole needed in the workpiece. Using the waste from the template and a ¼" drill I can then line up the template with that center mark.



The template is held down with double stick tape. The disc and drill bit are removed. The router bushing follows the inside of the template while the router bit cuts the hole. Notice the offset between the template and the hole in the workpiece. When using bushings you want to take into account the difference between the bit diameter and the outside diameter of the bushing. In this case, to get a 3 inch hole the template needed to be 3 ¼" in diameter.





With the holes done in the cleats I can now turn my attention to turning the tenons on the pedestals. The base of the table is made of recycled pine and the top is a slab of sinker cypress.





