

## The Goblet and its Relatives



### Introduction & Thoughts on Design:

Goblets can be made from most woods depending upon whether or not it is to be used for drinking or ornamentation. If the intended use is for drinking I would use cherry or maple as both these woods are readily available in large thicknesses and are fairly food safe. The goblet form can be adjusted to look like a long stemmed flower with a few minor design changes as the techniques involved in turning goblets are essentially the same as those used to turn the more challenging long thin stemmed flowers or goblets. The more artistic long thin stemmed goblets or flowers can be made from dry or wet wood. If turning a long thin stemmed goblet, straight grained wood is best for these show pieces, as wild crazy grain may tend to fail more easily. When considering the type of finish to put on the goblet, once again, if it is to be used for consumption a food safe durable finish should be used. If the goblet or flower is of the artistic variety, then the finish should match the artistic statement being made. Sometimes when using greenwood the stem can bend or be bent to give a more natural look to the piece.

### Materials:

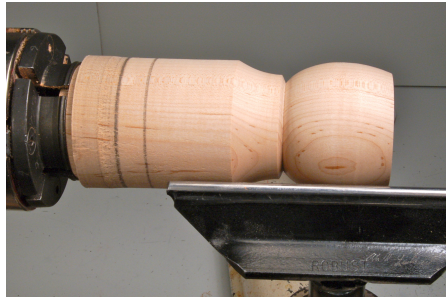
3" x 3" x 6" plus or minus for a drinking goblet dry wood  
2" x 2" x 6" plus or minus for a decorative goblet or flower wet or dry wood  
Paper Towel or Tissue for stabilizing the goblet while turning the stem  
Mike Mahoney's Walnut Oil Finish, Lacquer, Shellac, or your favorite finish  
1 1/4" Spindle Roughing Gouge  
3/8" Spindle Gouge  
Skew  
Round Nose Scraper  
Parting Tool  
Narrow parting Tool Chris Scott Style 1/16" by 2"  
Chuck  
Bearing /Revolving Center

## Procedure:

1. Mount blank between centers
2. Turn blank to a cylinder and turn a foot on the bottom for mounting in the chuck

*Tip: If turning a flower remember to leave the bark on both the top and the bottom of the potential flower.*

3. Mount the blank into the chuck and bring up the tail stock as always for safety
4. True up the blank and mark the blank for the top cup or flower section and for the base.
5. Rough shape the upper section of the bowl part of the goblet just enough to see where the shape of the bowl is eventually going to meet the stem.



*Tip: Do not turn the bottom of the bowl all the way down to the stem. Leave extra wood at the base of the bowl to help provide stability when hollowing the end grain, as end grain hollowing, is very aggressive and the bowl of the goblet will need the extra support.*

6. Remove the tail stock and set it aside.
7. With the tool rest parallel to the bed of the lathe set the height of the rest at a height so that the tip of the 3/8" spindle gouge when the tool is horizontal on the rest touches the center of the blank.
8. Now face off the top of the blank with the flute of the Spindle Gouge in the 3 o'clock position. Try not to put any pressure on the bevel when facing off the top of the goblet
9. Next move the tool rest to a position where it is perpendicular to the bed of the lathe and approximately 1/4" away from the top face of the bowl of the goblet. Once again the height of the rest with the 3/8" spindle gouge held horizontally should be set, so that the tip of the gouge is dead center in the bowl of goblet.



10. With the flute of the gouge in the fully open position, push the tip into the blank approximately  $\frac{1}{4}$ ". Now rotate the flute toward you, to the 11 o'clock position, push the cutting tip toward the outside while pushing the handle down and dragging the cutting edge out. The idea is to remove as much wood as quick as possible. With each cut the hole being created is getting wider as well as deeper.



*Note: Remember the goal here is to open up the bowl area so that a round nose scraper can be used to finish hollowing the inside of the bowl.*

11. Once the bowl has been opened up a round nose scraper can be used to finish shaping the inside of the goblet. Try to keep an even wall thickness on the sides of the bowl and check the thickness often. It is very easy to go through the side of the bowl or to get it too thin to be useful.

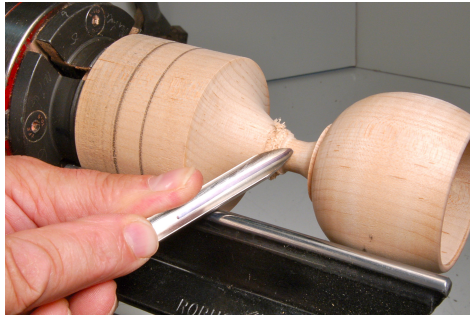
12. Once the cup or bowl section is hollowed go ahead and finish shaping the outside of the bowl down to the intersection of the stem.

13. Finish sand the inside and outside of the bowl.

*Note: Once work has begun on the stem, the piece will be too weak to work the top section with out risking breaking it off.*

14. Mount the tail stock with a bearing center in it onto the lathe. Now carefully pack tissue or a piece of paper towel into the bowl of the goblet and advance the bearing center until it supports the goblet. *The purpose of the tissue is to help prevent the bearing center from marring the inside of the goblet.* Only enough pressure should be applied to hold the goblet steady for the shaping of the stem. Too much pressure and the stem will flex as it is thinned, not enough pressure and the goblet will wobble and vibrate.

15. Now begin shaping the stem working down the stem in 1" to 2" sections. *Remember to sand each section as you go, if this is to be a long thin stemmed goblet or flower.* If it is a functional goblet, the sanding of the stem can be done after the base has been shaped.



16. Shape the base keeping it in proportion to the top of the goblet. The base should be slightly larger than the diameter of the top. To insure that the finished goblet does not look like it will fall over and that the goblet looks well proportioned.

*Note: If turning a long stemmed flower with the bark left on the top remember to leave the bark on the bottom.*

17. Use a parting tool to begin to part off the base, leaving enough wood to hold the goblet in place for finish sanding.

18. Now using the thin parting tool or tool of your choice slightly undercut the bottom and part off the finished goblet or flower.



19. Now apply your chosen finish and admire your work. If a functional goblet, fill with appropriate liquid and enjoy.

**Tips:**

If turning decorative pieces from greenwood with the intent of keeping the bark on it is best to use wood that was cut in late summer to early winter.

Sometimes it helps to use a little CA glue on the bark after the finish has been applied so as to not discolor the wood.

An excellent source of wood for the decorative goblets is tree trimmings and storm damaged shrubs and trees.

Craft Supplies in Provo, Utah sells hand blown glass wine goblet inserts to be attached to a turned base.

Refer to Alan's handout entitled *Tips and Techniques for Using a Detail Spindle Gouge*

Richard Raffan and Ray Key both have excellent books out that have chapters on turning goblets as well as Keith Rowley's book titled *Woodturning Fundamentals*

