Turning Natural Edge Bowls

featuring Gary Gardner

Our demonstrator for the month was Gary Gardner of Morganton, Georgia. Gary described himself as a "sometimes professional, sometimes just hard working" woodturner. He teaches at the John C. Campbell Folk School several times each year as well as instructing in his own studio on a regular basis. He maintains his own gallery in Morganton as well as being a representative for several woodturning tool and equipment manufacturers.

His presentation for the evening focused on turning natural edge bowls. He finds these forms especially satisfying to turn because of the many different shapes that can be produced, including both hollow forms and open bowls. Adding to their versatility in style is that they can be turned either end grain or side grain.

For the evening demonstration he elected to illustrate two different natural edge turning options. The first was what he called turning a concentric or circular shaped bowl and the second was turning an oval shaped bowl which is his preferred approach. The circular shaped bowl is achieved by first cutting the half log in a circular shape on a band saw using a template so that the length is approximately the same as the width. For an oval shaped bowl, he does not round the blank and leaves the length longer than the width. For both shapes he mounted the bark side of the log in the head stock using a two pronged spur center with the prongs aligned with the grain. He uses this center so that he can more easily adjust the position of the log on the tail stock live center to insure that the side and end bark edges are aligned in the same plane.

Gary stressed that he turns all his natural edge bowls wet and to their final shape and thickness. This is because they will inevitably warp when drying and cannot be remounted on the lathe. He typically hand sands his bowls after they have dried.

Before beginning his demonstration he distinguished between a bark edge bowl and a natural edge bowl. In his interpretation, a natural edge bowl is a bowl for which the edge follows the natural contour of the log independent of whether there is bark on the edge. All bark edge bowls are natural edge bowls but not all natural edge bowls include a bark edge. Successfully retaining a bark edge depends on the species of wood being turned and when the tree was cut. Trees cut during the summer months will normally slough their bark when they dry. He also pointed out that bark edges can be successfully simulated on a natural edge bowl by using a burning









tool, a torch or even a magic marker pen.

He did not complete hollowing the round bowl but only turned down the outside including what he called a spigot on the base for subsequent mounting in a head stock chuck. He used a 3/8 spindle gouge ground with a steep bevel exclusively to produce the shape beginning on the base with pull cuts to the upper edge. He did not complete cutting to the top edge initially in this process to prevent throwing off the bark. Instead used push cuts from the top edge down to shape this part of the bowl exterior. He used a skew chisel to produce the final bevel on the spigot for which the tip had been ground to the appropriate angle to match the dovetail on his VicMarc chuck.

He mounted the half log for the oval bowl in the same manner as that for the round bowl, positioning the sawed surface on the tail stock live center so that the bark edges were in the same plane. He used a 5/8th bowl gouge using pull cuts to quickly turn down the outside to shape before moving to a 3/8th gouge for final smoothing. He suggested that a useful "rule of thumb" for setting a maximum lathe speed when turning bowls is to multiply the lathe rpm by the diameter of the bowl. An appropriate RPM setting is when this product is between 6 and 9 thousand. Slower speeds are obviously necessary for off balance stock. After turning a tenon on the base and reversing the mount using a chuck on the head stock, he stressed the importance of truing the outer sides before beginning to hollow to insure that the final wall thickness would be uniform. For this purpose he used light shear cuts.

He began hollowing from the center outward to minimize the amount of end grain cutting. The final wall thickness he attempts to achieve with his natural edge bowls is about 3/16 to 1/4 inch. Thinner walls result in more warping and typically do not sell

well. As he approached the final wall thickness he used a back light to show through the wall. A uniform wall thickness will result in a uniform illumination through the wall. For the final smoothing cut on the inside surface, he used a negative rake scraper. The negative rake prevents the scraper from self-feeding into the wood so that very fine cuts can be made.

To finish the bottom of the bowl he turned a jam chuck that he held in the chuck on the head stock. He cut a concave cavity on the rounded end of the jam chuck so that it would fit tightly against the interior base of the bowl. After again reversing the bowl mount using the jam chuck with a paper towel for padding, he turned a small base that was concave inward. In his opinion, this type of base results in the finished bowl appearing to float on a table surface. The final step was to carefully part off the nib end on the tail stock live center.





