

## **Eagle Cane Adapter**

**From scratch:** Mount 2" x 2" stock (grain aligned with lathe axis) between centers and turn to 1.75" OD. Lengths can be multiples of 2.75" i.e. 5.5" or 11" makes 2 or 4 blanks, respectively. Ash, matching the cane staff, or walnut, offering color contrast, are suitable. Create 1.5" diameter chuck tenons every 2.75" and part/saw off blanks. Proceed as described below.

**From prepared blanks:** Mount tenon in #1 Jaws of chuck; face off, dimple center of face with skew for drill entry point. True up OD with minimal stock removal.

Layout 1" length from outer face and mark with skew long point. Part in 1/4" deep with a parting tool on the chuck side of the 1" skew point mark. The adapter portion of the blank is now outboard of the parting mark.

The chuck end of the adapter blank is the large diameter portion, nominally 1.75", which will have the carved eagle head sit upon it as both items rest upon the 3/4" diameter tenon of the cane staff. The free end of the adapter blank has to visually match the top diameter of the ash staff, which has a diameter of approximately 1.25". Variations in these two diameters will occur due to the "design opportunities" encountered by the carver of the eagle head and by the turner who may have had some difficulty with a gnarly ash tool staff. One approach to accommodating visual diameter mismatches between components is by creating beads at the top and bottom of the adapter, with a flowing curve joining the two elements. Beads can be "set off" with wire-burned v-grooves at the join of a bead and the adjacent surface. The overall design is not fixed other than one hopes that the assembled appearance will be appealing and coherent.

Most of the adapters shown in the photo have top beads at 1.75" diameter and lower beads at 1.375 to 1.5" diameter, with the diameter of the flowing curve matching the staff diameter on either side of the lower bead.

When the exterior form has been defined and sanded, bore a 3/4" hole 1.25" deep in the center of the adapter. A stubby forstner bit seems to drill better (truer) than a long brad-point bit. Part off the adapter, leaving a slight concave surface so that the base of the carved head will sit well on the adapter. Sand any rough edges at the borehole-parted edge. Initial your work on a face that will be hidden during assembly but will be known by the carver who assembles the cane for the recipient veteran. Bring your contribution to the next MWT meeting.

Thanks for helping to acknowledge the past sacrifices made by our veterans!

Peter McCrea