

Make a Wooden Whistle with Handtools

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Tools used:

crosscut saw, dovetail saw, bench hook & saw bench
#6 fore plane, #4 smoothing plane, #60-1/2 block plane
#71-1/2 router plane with 1/4" blade
#45 combination plane with 1/4" and 1/8" plow blades
1/4", 1/2" and 1" bench chisels
combination square and small try square
pencil & 2-ft folding rule
workbench & face vice, end vice optional
glue (hide glue or PVA)

Material: 4/4 cherry, 5-1/2" wide. But any easily worked wood such as walnut, soft maple, birch, etc will work. Pine will also work but try to use clear material with tight grain structure. All material for this project must be free of knots.



Step 1: Cross cut a blank for whistles about 6" long from the board. Blank will be roughly 7-1/2" long by 5" wide by 3/4" to 1" thick. Strike a line using the combination square, then using a sharp cross cut saw and saw bench it will take 30 seconds or less to cut through the board.

Step 2: True one edge of the blank with the #6 fore plane. A block plane would suffice but the fore plane can take a deeper cut, speeding up the process. Hold the blank lengthwise in the face vice. If the blank does not have a reasonably true face, use the #6 to true up one face for later referencing. Clean up any tearout with a finer set plane such as the #4 or block plane.





Step 3: Ripping small pieces straight and true can be difficult. An alternative is to use a plow plane with a narrow blade. Using the 1/8" plow blade in the #45 combination plane, set the depth stop to cut to a depth just shy of half the blank thickness. Set the fence of the plow plane just proud of 1/4" from the edge of the blade. Begin working along the trued edge of the blank. The blank can be clamped between dogs on the bench or held upright in the face vice and the #45 used on its side instead of its usual orientation.



Step 4: After completing the 1/8" groove on one side of the blank, turn it over and make a second groove, almost meeting the first in the center of the board. Snap off the 1/4" thick tablet. Clean up the feather edge with chisels (bevel down) and planes at the bench hook. Alternatively, the block plane can be clamped upside down in the face



vice and the 1/4" thick tablet slid across it to smooth and square the cut side. Set this piece aside for later use.

Step 5: Return to the larger blank and again smooth & square the edge again using the #6, #4 or block plane. Mark across the edge approximately 1" to 1-1/2" from the end. This will be the starting point for a groove centered on the edge of the blank.

Step 6: Change to a 1/4" blade in the #45 and set the fence to center the blade. Set the depth stop to cut a very shallow groove approximately deep.



Step 7: Cut the groove in the edge of the blank with the #45. Begin the groove at the pencil mark but let it run all the way to the far end of the blank. The groove will be slightly tapered in depth near the pencil mark but this is of no concern.

Step 8: Make a second pencil mark 1" from the open end of the groove. Use the 1/4" chisel to stake in across the groove, making a stopping cut. Stake-in at the original pencil

mark in the same way. If necessary, stake in along the sides of the groove with the 1" chisel.

Step 9: Use the #71-1/2 router plane and 1/4" blade to deepen the groove to a depth of 1/4". When finished, the blank will have a single groove starting at one end with a depth of 1/16" for the first 1" then dropping to a depth of 1/4" and stopping 1" to 1-1/2" from the opposite end.



Step 10: Return the 1/8" blade to the #45 and again set the depth stop for just under half the thickness of the blank. Set the fence for approximately 3/4" from the blade.

Step 11: As with Steps 3 & 4 above, cut free the body of the whistle. The body will be approximately 3/4" thick.

Step 12: Remove the feather edge from the whistle body and clean up with planes.

Step 13: Return to the 1/4" thick tablet and cut from it a 1" length. For best grain match in the finished whistle, cut this from the end that matches the shallow portion of the whistle groove.



Step 14: Square up the cut edges of the 1" length and burnish the cut edge with the back of a chisel.

Step 15: Glue the 1" length over the shallow portion of the whistle groove. It is important that the groove not be filled with glue and that the end of the 1" piece line up with the stepped portion of the groove. The mouthpiece end of the whistle will be shaped and cleaned up later so minor miss-match is of no concern. Use a rub-joint instead of clamping.

Step 16: With the remaining portion of the 1/4" tablet, begin to cut a bevel. The bevel slopes from the top of the tablet to the bottom starting approximately 1/2" back from the cut edge. The end of the bevel must be sharp and crisp.

Step 17: Holding the newly made bevel piece tightly to the whistle (bevel up), experiment with its position starting about 1/4" back from the step in the groove. Blow sharply through the open end and slide the bevel until you get a piercing and annoying tone from the whistle. Make note of the location so that the beveled cap can be glued onto the whistle. Again, do not get excess glue into the groove.



Step 18: After the glue has fully dried, scrape away excess glue on the outside of the whistle and smooth the body with the block plane.



Step 19: Cut the body to length anywhere in the un-grooved 1” portion of the whistle. Use the chisels and plane to round and shape the end of the whistle.

Step 20: Cut across the mouth piece area to make the cap and body even.

Step 21: Mark an angle along the edge of the whistle so that the mouth piece will be nicely tapered. Use the dovetail saw to cut the taper and the chisels and block plane to even the mouth.



Step 22: Perform any final beveling, shaping and smoothing of the body with the chisels and planes. Do not apply any finish. You can burnish the wood by rubbing it against the remaining chunk of cherry.

Step 23: Annoy those closest to you with your finished whistle.



Postscript:

The #45 combination plane and #71-1/2 router planes make this project easier but are not absolutely necessary. Any fenced plow plane with 1/4" and 1/8" irons can be substituted, such as the Record 043, 044, 050 or Stanley 50. The plow plane can be eliminated altogether as the pieces can be sawn free instead. The grooves can be cut and established entirely with bench chisels working bevel down to deepen the groove and using a 1" or wider chisel to establish the side walls of the groove.

Any PVA glue (Elmer's, Tightbond, Gorilla Wood glue, etc) can be used as well as liquid hide glue or hot hide glue. The key is to make the glue joint of these small pieces using a rub joint. Apply just enough glue to wet the two mating surfaces and while holding them tightly together also rub them back and forth slightly. After two or three short strokes the glue will begin to grab. Carefully position the piece in its final location and continue to hold with hand pressure for an additional few minutes. A successful rub joint requires very smooth mating surfaces and just enough glue to wet those surfaces.