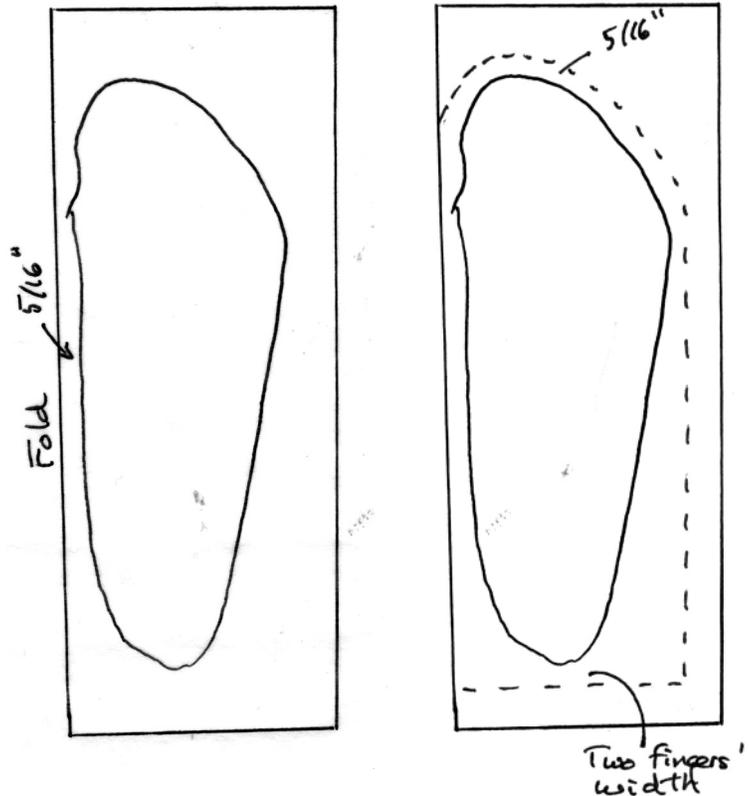


ONE PIECE MOCCASIN MANUFACTURE

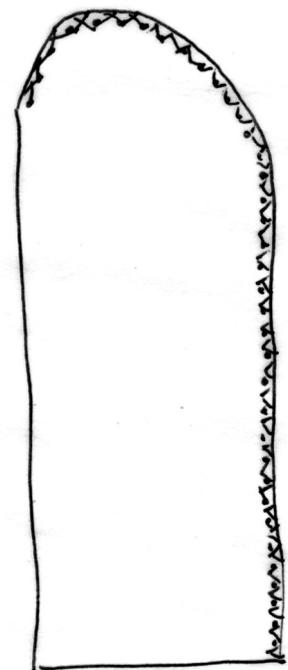
Jim Lowery, Earth Skills, 08-24-13

Use thick cowhide (suede), elk, moose, etc. Stitching is left on the outside so it can be watched and repaired when necessary; that is the moccasin is not turned inside-out after it's made. The diagram indicates that all seams are welted; however we did not do that.

1. Trace your foot onto a piece of paper that's folded over. Place the inside of the foot at the fold, about $\frac{5}{16}$ of an inch away from it as shown in the diagram. Make sure the pencil is pointed straight up and down right next to the foot. Traditionally moccasins are worn without socks, so trace the bare foot, but if you prefer you can make them for wear with socks. Then, mark the pattern about $\frac{5}{16}$ inch away from your tracing at the front of the foot, going straight down parallel to the fold after you reach the outside ball of the foot (see diagram). At the heel, leave two fingers' width. Do a separate pattern for left and right feet as they will be different in size! And mark the patterns so you know which is left and right. Then, place the patterns on the hide, trace them and cut the hide pieces.

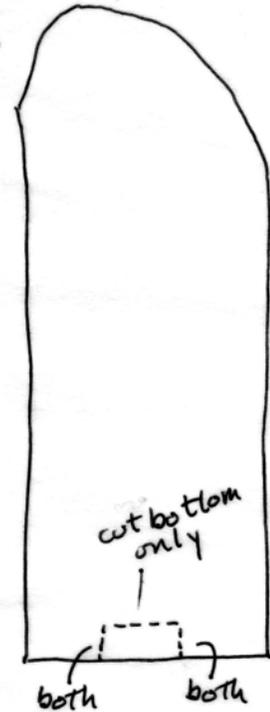


2. Fold the hide over and stitch the seam together from toe to heel, of course leaving the heel open. [Note: a thread six and a half to seven times the distance you will stitch should suffice.] If you're using artificial sinew, you'll probably want to split the sinew strand and use only half. First, use an awl and poke holes through the two layers of leather pretty close to the edge. A good way to keep the doubled-over leather aligned well is to clamp on two or three metal binder clips or clothespins.) Rather than punch all the holes at once, you could also punch about ten to fifteen holes at a time, sew that section, move the clips, punch more holes, etc. Before you sew, knot the end of the sinew several times and begin sewing with a whip stitch, pulling the thread tight each time. At the end of the seam, loop the thread through the last couple of holes an extra time or two. Then, begin sewing back through the same holes toward the toe so there's a double stitch, again looping the thread through the last couple of holes a second time. This second

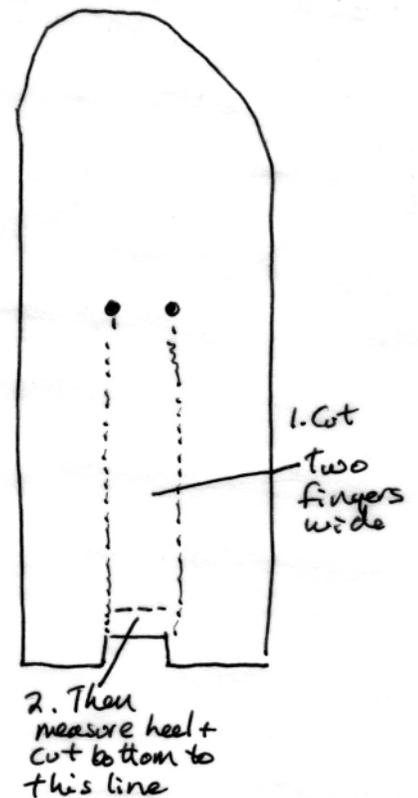


stitching is done the same way, that is, you go through the holes from the same side as you did originally.

3. Cut the heel notch. With the moccasin's top facing up, measure two fingers wide and one finger deep in the middle of the moccasin (see "heel notch" on diagram). Cut slits through **both** top and bottom layers of leather going from the heel toward the toe, again the slits are one finger width long. Then, from the **bottom layer only**, make another horizontal cut to remove the flap leaving a notch.

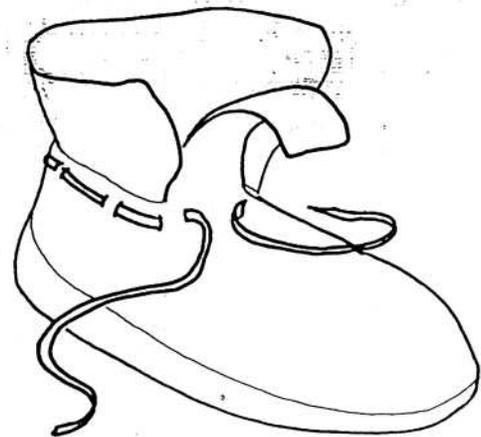


4. On the top layer only, then continue cutting these slits parallel to one another and two fingers wide, toward the middle of the moccasin, leaving the tongue. Bit by bit, try the moccasin on your foot and keep cutting the slits a little deeper until you can fit your toes to the front of the moccasin. Do not force your foot in too much or you will rip the slits, and do not cut the slits too deeply at first.
5. When the moccasin fits, then make a hole using a leather hole punch at the very end of each tongue slit. This will keep the slits from ripping in the future.
6. Put your foot in the moccasin and on the bottom leather piece mark where your heel comes down. Make a mark there and cut slits following the sides of the existing notch to just before your mark. This will form a flap that will be eventually folded up over the heel.



7. Bring the two sides together at the heel, overlapping them with the stitched side outside of the other one. They will overlap basically the width of the heel notch, but you should measure with your foot in the moccasin to make it fit. Stitch the outside seam (the one that's visible from the outside) from bottom to top using a running stitch, i.e. in from the outside through both layers, and back from the inside to the outside. When you've finished this one vertical seam, test the fit before you go on; you may have to do this seam over again if the moccasin is too loose or too tight. When it fits, then continue with the running stitch across the top and down the other seam that's hidden. Double stitch these seams going back to your starting point. By the way, the heel stitching cannot be done by punching holes beforehand. It's best to use a leather push pad and a pair of pliers for this stitching.
8. Then, bring the heel flap up and stitch it.
9. When you're done, you can use a Bic lighter to seal the artificial sinew knots by melting them.

10. You will be sewing a cuff or ankle flap onto your moccasin. It can be a couple of inches high to way up your ankle or calf depending on your preference. (In the design for this class, the cuff is about 3 ½ inches high.) This design makes the cuff to fold in front of the ankle, in which case *you will* make holes in the cuff itself in step #13 below.



(Alternatively, you may make a short cuff that folds down to hang below the moccasin's top edge. If this is the case, before you sew the cuff on, make six holes on each side of the moccasin just below the top to accommodate the lacing. On each side, the first hole is just on the outside of the heel flap, the last one just at the base of the tongue so that the lace can come from the inside to tie on the outside of the tongue. Make these holes before sewing the cuff.)

11. Sewing the cuff on. Begin with a rectangular piece of the preferred height; if you want the cuff to cover the front of the ankle, it should extend 1 to 1 ½ inches longer than the moccasin's opening on each side. Sew the cuff on the outside of the moccasin using the same whip stitch you used before. Because you will be turning the cuff up (in the main design alternative described in #10 above) up after sewing, pay attention to which side of the leather will be visible after you do this. If you want the cuff to drape around the front of the ankle, it's convenient to begin sewing at the middle of the heel, proceed along one side toward the front of the ankle, sew back the other direction all the way to the front, and double stitch back to the starting point at the heel. This allows you to position the cuff with equal sides, and the front edges can then be trimmed to fit after sewing.

Note that for a cuff that closes over the front of the ankle, you will need to sew each side a few stitches *past* the tongue, so that they close completely, and these stitches will have to be a running stitch not a whip stitch (i.e. in from one side, back out through the other).

12. Lacing can be cut from a circle of leather spiraling inward, or from a long strip of leather.

13. In the main design for the cuff, punch holes in the ankle flap, two holes in the back above the flap at the heel (about 1 ½ inches apart), and a pair of holes on each side of the ankle flap about midway from the heel to the tongue base. See diagram.

