

# DRUMS

Drum making is a diverse art, even within specific cultural areas. There is also a variety of materials used. While animal hide is used for the actual drum head, the materials and techniques used to attach it vary. Metal tacks or artificial sinew is sometimes used but I prefer to use deer hide.

When choosing your deer hide carefully check for holes and/or thin spots. While the nature of the animal hide is that there are some areas thinner than others, try and avoid too many holes (more than 3). Careful selection of hides will provide maximum useable areas.

## Materials:

- Wood Frame
- Water Source
- Animal Hide - Deer, Elk, Goat, etc.

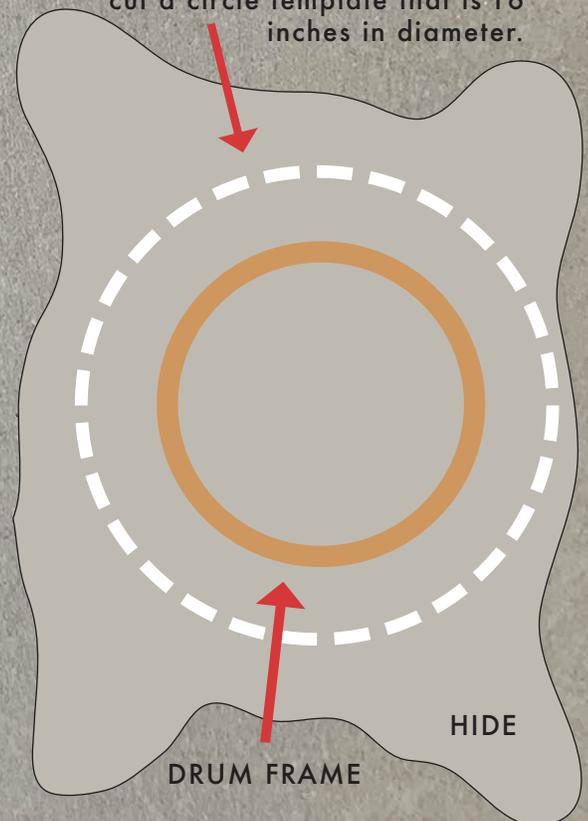
## Tools:

- A soft lead pencil
- Heavy-duty scissors
- Leather Punch
- Bucket
- Pliers
- Awl
- Spray Bottle

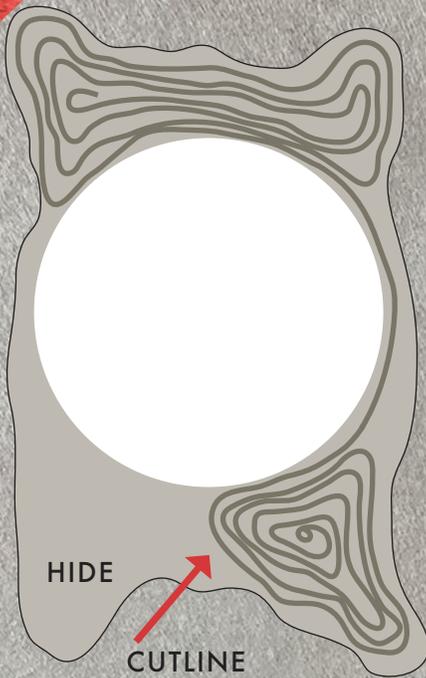
Lay your deer hide out flat and note thickness and thinness to determine how many drum heads can be traced. This varies and it is generally better to have at least 2 hides to work with because you might get 2-3 drum heads/circles out of a thicker hide and use the thinner parts for the stringing strips. For example, if you have 2 deer hides, you could cut 2 drum heads out of one, and 3 out of the other, and also get enough "stringing" material from the edges to string all 5 drums.



14 inch drum frame you will cut a circle template that is 16 inches in diameter.



Your drum circle should be approximately 2 inches in diameter larger than your drum frame. You should create a cardboard or plastic template for your drum head circles. If you are using a 14 inch drum frame you will cut a circle template that is 16 inches in diameter. When you have traced the outline of the drum heads onto your hide (use pencil) do not cut it unless it is on the outermost edge of the hide or until you have cut your stringing from the edges.



After tracing the drum heads, trim all of the hard outer edges from the hide and "round" off the hide in preparation to cut the stringing.

You will need approximately 6 to 8 feet of stringing to make a small inner circle/loop through which the long stringing will go around.

After you have cut your stringing and your drum head circle(s) you can soak them in cool to lukewarm water (never hot water). You can "hole punch" your drum head before it is soaked but I find it easier to do on pre-soaked deer hide. To soften, the deer hide can be soaked from 2 hours - overnight.



The next step involves punching approximately 22-28 holes (for a 14" drum) into the deer hide drum circle. The holes should be punched approximately 1" from the outer edge where the hide is thin and approximately 3/4" from the edge where the hide is thicker.



Once you have completed punching all of the holes around your drum circle put it back in the water to soak with the 2 lengths of stringing. You can now begin to work/soften all 3 pieces. It does not matter which one you start with. All 3 components must be done before you can begin.

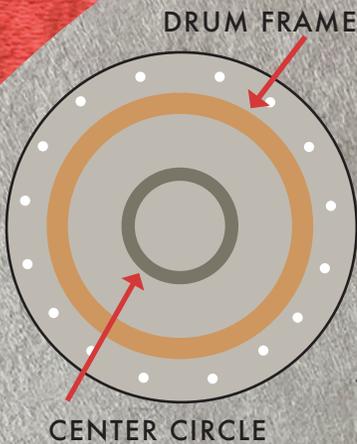
You can use any technique that works to soften the hide but generally the easiest way is to

consistently fold your drum circle in half, then quarters and "wring" it out.

Keep repeating this process until the hide is extremely soft and feels like a chamois. The stringing can be gathered up and it also works to "wring" it

repeatedly. It is also important to "stretch" your length of short and long stringing to prepare it for stringing the drum. Stretch and wring both lengths of stringing until they are like soft ropes.

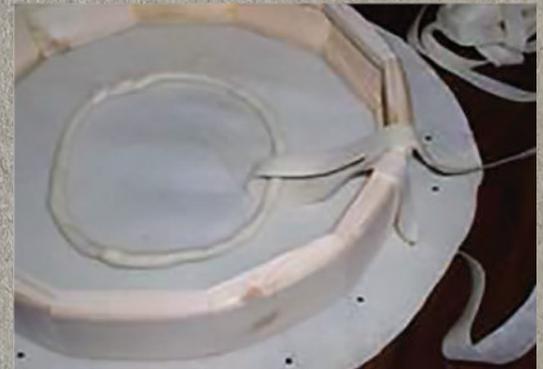




Once you have softened all 3 pieces lay the drum hide circle (rough side up!) on a clean surface (a damp towel works well) and center the drum frame on the circle. To make the small inner loop/circle take the short length of stringing and form a circular loop with a small "tail" left hanging. The loop should be approximately 7" in diameter and with the remaining stringing wrap/coil it around the 7"

loop until you have wrapped it around 3 times. Now you can tie the 2 ends together and weave them into the loop/circle to hide the ends. Place the completed circle inside the drum frame on the rough side of the drum circle.

Now you are ready to "string" your drum. There are several approaches to stringing a drum. You have to thread the deer hide stringing through the hole in the drum head circle and then wrap it around the inner circle loop before you proceed to the next hole. Make sure you are consistent with going under and over the loop and leave the stringing fairly loose while at the same time keeping the inner circle/loop as centered as possible. Also make sure you do not miss any holes.

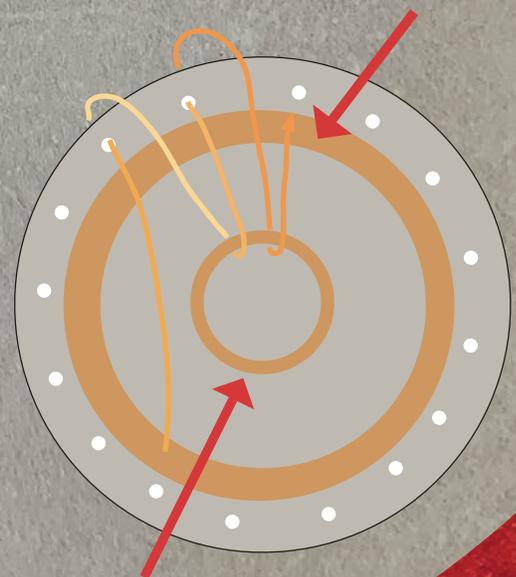


One method is to taper the end of your string and thread it through a hole (leaving approximately a 1 foot long "tail") and then every subsequent hole until you have come around full circle. Another technique is to find the

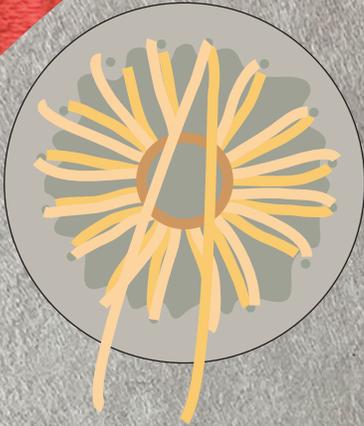
halfway mark on your long string (approximately 9 feet) and tie a loose overhand knot to mark it. Take one end of the stringing and cut a pointed end with scissors so you can "thread" it through the holes easily. You then thread the stringing through each hole until you reach the halfway mark and you untie the knot to mark the halfway measure and thread it through until all the holes are strung. For

beginners this is often the preferred technique because you have more "control" with using the shorter length of stringing by dividing the length in  $\frac{1}{2}$ .

KEEP WORKING YOUR WAY ALONG IN THE MANNER SHOWN IN THIS DIAGRAM



SMALLER INNER CIRCLE



Once you have completed stringing all of the holes you can begin to tighten your drum/stringing. To tighten you should begin at the opposite side of the loose ends. Find the halfway mark and tighten one side first (i.e. to the right) and then return to the halfway mark and tighten the other side (i.e. to the left) which will result in longer lengths of stringing

“tails” after each tightening. The area you are from will determine how much you tighten your drum. For example, drums on the West Coast need to be fairly tight because the damp weather can cause the drum head to “sag” and loosen. Once you achieve the tightness you want you are ready to complete your drum.

The last phase is to create the center cross at the back that serves as the handle for the drum. Often the stringing ends/tails are different lengths so you have to be practical in your approach to making the handle. When you have completed the tightening process you should tie the 2 loose ends together in a knot. Then you should bring the 2 tails to the opposite side and wrap them around the inner loop. You can then wrap them back around the stringing until you reach the middle of the length of stringing in the center of the drum. You can now create a “cross” by wrapping the stringing in the opposite direction. The technique you use will vary according to the length of stringing. Often the 2 ends



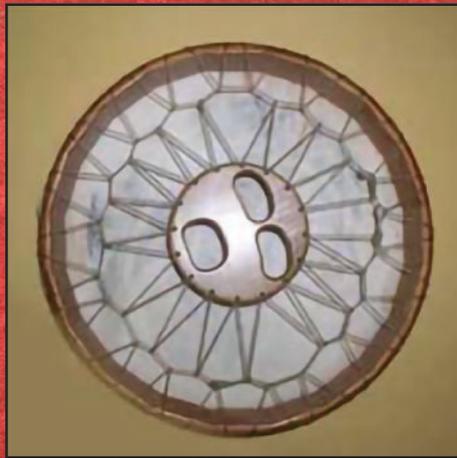
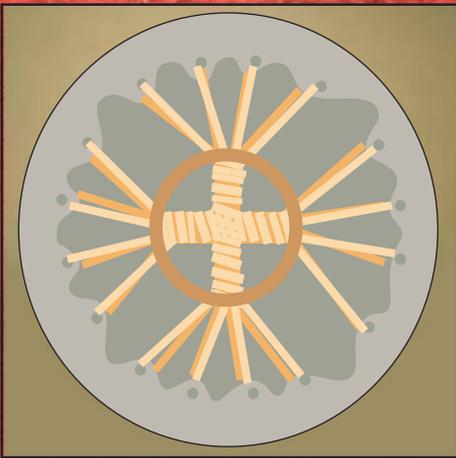
are different lengths because of the variations in stretching during the drum tightening process. Just make the necessary adjustments when creating the “cross” handle and you can even add a small soaked and stretched piece of stringing if you need more. When you have completed the stringing the easiest way to finish is to weave the ends into the handle.



The final step is to flatten the edges of the drum head/circle to the side of the frame. If the hide is too thick or too dry you can dampen it slightly and smooth it down. Another method I often use is to flatten the edges

down and wrap it with masking tape or other materials that can be removed once the drum is dry or near dry.

The drum should be left to dry for a few days. The best method is to lean it on its side so air can circulate around the front and back of the drum.



## PAINTED DRUM EXAMPLES



## CARING FOR YOUR DRUM

Drums should never be placed or stored with the drum face down. Drums are best stored in a drum bag or wrapped with cloth when transporting it. Use a drum stick that has a round end or padded tip to prevent tearing or puncturing your drum.

Drum tone will change with fluctuating humidity and/or temperature. If a drum becomes damp the deer hide will loosen slightly and the tone will become dull. Warming the drum will tighten the drum and improve the tone. Traditionally, drums were often tightened carefully over an open fire but today most drummers use a hairdryer. When a drum needs slight re-tightening it can be gently warmed by rubbing your hand on the drum head in a circular motion from the center outwards for a few minutes. Avoid using any temperature or heat source that is uncomfortably warm to your own skin!

Avoid extreme conditions of heat or humidity and drums should not be stored in direct sunlight.