

Making Bone Folders Vegan and Non-Vegan options



Photo above showing the tools and materials used to make folders and bone folders: hacksaw, rasps, files, bench dog of r holding materials against while shaping, sand papers, buffing wheel and white diamond polishing compound, bone, bamboo, scrap wood and teflon folders in unfinished and finished states.

Making your own tools can be a fun way to have something exactly as you would like it to be. It is rewarding to use a tool that fits your hands and that you know exactly what went into it, and that has the degree of finishing that you put into it.

Vegan options for ‘bone’ folders

There are many choices of vegan materials to use for bone folders. Some of them have distinct advantages during use as well. Teflon, a synthetic material is preferred when using with book cloth, because when you rub repeatedly and hard onto book cloth, you will not give it an accidental shine as you would if you used real bone or antler bone folder. This is because it is non-protein material. It will

not leave this shine and will crease and fold leaving the original surface of the cloth.



Bamboo can be a little flexible but when polished it has a nice slip along the papers and cloth, and will tear paper but not cloth.

Wood of other types are a little harder to get thin enough to make effective parting tools but will help crease papers and book cloth.

Photo above shows bamboo and wood materials before and after making the folders

To make the Teflon Folders:

Determine how thick you would like your finished bone folder to be. Since the material is a flat sheet and expensive, you will use the flat surface as the finished surface of your folder. You will be working on the point, edges and ends of the piece. If you order the teflon to size from your supplier, you may not even have to cut the teflon. If you get a larger sheet, be sure to sew up the stringy cutoff materials and dust particles and dispose of it. Wear a particle mask, breathing the dust is toxic. To rough shape, use a scribe or sharpie to mark the outline of the

pointy end and mark the rounded or shaped end to eat back side of the folder. Use a rough rasp for the first shaping, if you are cutting much off, use a hack saw or a carpenter's saw to remove the excess. When the shape is how you would like it, switch to a finer cut of file and work the edges. Follow this with 120 grit sandpaper and then 220 grit. When the finish is how you want it, buff the edges and all worked up areas with white diamond on a canvas multi-ply buffing wheel. The best option is to use a motor on a bench with an arbor if you have it. If you do not have a motor to run a buffing wheel, you can mount a wheel on a bolt with a nut and two washers on either side of the hole through the center of the buff. Mount a drill in a vise so that the pistol grip is pointing up and the on trigger is reachable. Carefully test it first before trying to buff the folder. Alternatively, you could clamp the folder in the vise using wood to protect the folder from the vice jaws, and buff with both hands holding the drill with the buffing wheel.



Photo above shows tools to make folders of bamboo and wood; saws, files, bench dog, bamboo section, bamboo split into sections, wood cut into shapes.

To make Bamboo and Wood folders:

Look for growth of bamboo that has thick sided canes, this gives you the best option to shape the folders and have a strong but somewhat flexible folder. If the

material is too thin, it will be trickier to shape the folder to a flattish cross section. Cut the bamboo at the base of the plant, and take the branches and leaves off of it, using a heavy pruning hear or lopping shear. The remaining stubs will be cut off at the knuckles of the largest growth. The largest diameter towards the bottom is what you will be working with. You can save the rest of the stalk for other projects. For now, concentrate on the lowest sections. Cut off the knuckles which look like horizontal rings that close the tube of the bamboo off into sections. You need to end up with an open tube on both ends! When you have this cut the tube in half and then again into quarters or less depending on how wide you want your finished tool to be. Take care that you mount it well in a vice to hold it securely if you are using a hand saw or hack saw.



Photo above shows position of bamboo and chisel when splitting or hand sawing.

Another way to cut the sections is to use a chisel or small axe to split them. Mark the top of the tube on one end to see where you chisel. Cut from the top end of the tube and guide the chisel down through the sides of the tube splitting the tubing one complete cut at a time holding the tube upright in a vise. You may have to shift the tube a little to get the split to work all the way through it. After the first cut the tube will separate easier and then it is easier to hold in the vice also. Bamboo has a very strong vertical grain (it is actually a grass and the cell structure is made up of many parallel tubes), so it will split easily in a parallel to the length of the tube.

If you use an electric powered jig or band saw, take care to feed it carefully in order not to bind the blade or run your hand or fingers into the blade, or snap the bamboo. Power tools can hurl things across the room or towards you, so they are to be used with care! Please! When cutting the bamboo, note the curve of the pipe like section - if it is a fairly large diameter, you can get wider folders and it will be relatively flat, however if you are using thin, small diameter growth, you may have to settle for narrow folders! Ideally you have a thick larger tube that allows you to file the folder on both sides to flatten out the natural curvature of the bamboo. It is very fibrous, so it is flexible and strong material even when worked from both sides - you do not need to leave the tough outer coating completely on it in order to keep its strength. Use a bench dog to hold the bamboo against its fence to file the pointed shape you desire on the top end and the slightly rounded end at the bottom end. The sides will be filed into a slightly tapered edge. Use progressively finer files starting with the rasp, then a coarse and the fine file. Follow this with sandpapers, 120 and then 220 grit finish up the sanding with the white diamond on the buffing wheel, same procedure as done on the Teflon folder above.

Photo above shows bamboo and wood materials before and after making the folders

Wood:



Use woods that are not pine or conifer, as they are too sappy to use and too soft. If possible, use a blond or light colored hardwood, so it will not leave a stain from the color of the wood. Pressing hard and with pressure onto paper or cloth could leave marks if you use darker woods. My samples in the photo are pretty dark, so I will take care what I use them on, I was using some wood from a cracked monkey pod dish that I had from my Mom, and wanted to use the wood in a useful way. If you do use dark woods you need to seal them with some kind of sealer (which will most likely) eventually rub off. Follow the same procedures as above for the bamboo to shape it (splitting woods is best following straight grained wood - this sample was not straight grain so I cut it with a band saw). You may start with a strip of wood following the grain line and you want to make the braided side of the folder running with the grain not against it. (Use side grain not end grain!)

Bone, horn and antler (non-vegan options) for bone folders

Photo above shows tools for bone folder and bones sawn to roughed out width shape.



To make a bone folder is a bit more time consuming to prepare the material.

Obtain a bone - usually a large leg bone section cut in a manner that leaves you with the desired lengths close to the lengths you would like to have with your finished tools. One option is to go to a butcher and ask for a cow leg bone, and have them quarter it lengthwise so that the pieces are stripped into long sections. It is easier for them to pre-saw it for you than taking the whole bone home. Found deer bones are usually too thin walled to be useful. Bones are best if seasoned and left for a while. The best way to do this is to do the doggy trick, and bury it! An easy way to do this is obtain a pail, get dirt either from the garden supply store, back yard, or construction site, you can mix all three sources together if needed.. the point is to have the soil 'live' with organisms that will clean up the bones for you, they will eat off the extra flesh, the marrow etc.. and while they do this the bone will age into a harder material. I leave them out over at least three to four months if not longer. The reason I say use a pail is that if you want to dig up the bone and see how it is coming along you can or just so you can keep track of where it is and keep it in a place that is away from critters who will dig it up if you buried it in the garden. If you do bury it in the garden, bury it deep enough to make it too much work for a critter to unbury it and make off with it!



Photo above shows a bone I found while walking, obviously a dog dropped it or forgot where it was buried or never came back to retrieve it! It eliminated the need to cure it! It did take knocking out the dirt and scrubbing it!

After the bone is cured a while, and dug up, wash it off, removing any dirt that is on it. It will look much like my 'found doggy bone'! (In this case, the doggy did the burying for me, and I found it near a walking pathway in the fields after it had lain there quite a while!). Then, mark out what size you need to cut it to to make your folder. Use a hack saw or band saw to do this making sure you hold it securely and do not slip and injure yourself or split or splinter the bone.

Photo above shows the use of the bench dog - hold the shank of the piece against the back fence of the dog, leaving the point area overhanging the table bench dog and table to give room for filing action. Working outdoors can eliminate the need to clean up the nasty smelling sawdust that occurs when working on bone and horn!



The process is much like the other folders, use a rasp for roughing out the shape desired and make it the thinness you want to end up with. Bones often have quirky things with them - organic twists or other characteristics. Work with them and try to smooth out the surfaces so that the folder will glide across paper and book cloth. Graduate to finer files until you reach your shape, then finish with the sandpapers starting with 120 going to 220 and then finish by buffing with white diamond on a canvas stitched multi-ply wheel. If you are using horn, cut yourself a cylinder (or cone shape as the original material dictates, and then cut in half and quarter pieces treating is very similarly to the bamboo for shaping, eliminating the curvature of the inside of the horn. Finish using the same procedures.