Carving a Traditional Burl Kuksa

Kuksa, kasa, guksi, noggin – the hand-carved wooden cup has for centuries been a mainstay of the boreal woodsman. Even in these times of modern, indestructible materials, many outdoor enthusiasts are so steeped in the kuksa tradition that they wouldn't think of venturing out with anything but the classic wooden cup toggled to their belt or pack. Somehow, sitting by the campfire with that steaming, warm piece of figured wood nestled in both hands brings the natural world around you just a little bit closer.

As with so many other items of aesthetic value, there is always someone who will try to make a dollar by producing cheap imitations of the real thing. Not long ago hundreds of protesters in Finland took to the streets to expose companies who had moved kuksa production to China, closing cottage woodenware industries that had been operating in that country for many generations. In contrast, long-standing Scandinavian tradition has it that the only "real" kuksa is one that you either make for yourself, or one you receive as a gift. In keeping with that wonderful, high standard, our purpose here is to make a REAL kuksa, so let's get started.

Woah now, put the knife back in the sheath. There are a few other things to do before we start carving. As with any major craft project, a little study time is time well spent. A good long look at time-honored kuksa design can result in a carving you will be satisfied with for a lifetime. A poorly researched project, on the other hand, can result in dissatisfaction before it is even completed. Research old books (a personal favorite) old photos and the internet. Many of the world's museums have digitized collections. A word of caution though – If you want to make a piece that is truly authentic, study historical items, not items made for the tourist industry. For instance, there are no historical examples of kuksas made with finger holes. Finger holes were added to the wooden cups in the late 1980's to appeal to American tourists. They are not historically authentic. Also, all modern tourist kuksas are made with perfectly round bowls that have the widest opening at the top. The reason for this is that the machine used to hollow the cups can do nothing else but cut a perfect half sphere. The vast majority of historical kuksas had an inward lip at the top of the opening to keep liquid from spilling, with the widest part of

the cup cavity being about an inch below the rim. You can accomplish that with a crooked knife, but the machine cannot. Again, study time is time well spent and will lead you to an authentic, satisfying completed project.

This photo from a century-old book shows woodenware design from a region of northern Finland in the 1800's.

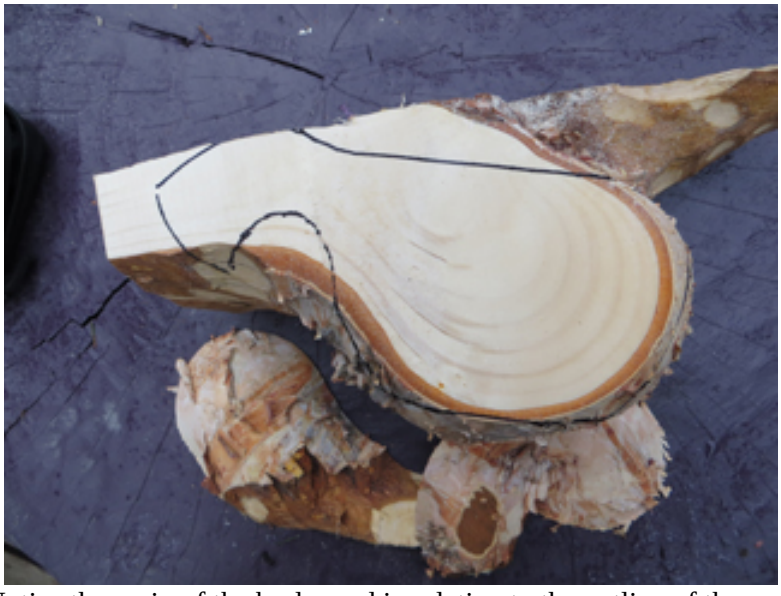
Once you have in mind the kuksa you would like to carve – nope, don't start carving just yet – you need to draw it from every angle. Drawing can solve problems and tweak design to insure that you will be completely satisfied with your finished carving. Many times carving students will think they know exactly what they want – then when they draw their idea, they don't really like it. Much better to adjust design on paper than to ruin a prime piece of carving wood. Once you are satisfied with your drawing, you can transfer the outline to a piece of stiff paper to use as a pattern for your cup.

Selecting Wood. The wood you choose should be carvable and should have a close grain pattern. Avoid woods that have an open grain because they are impossible to clean. Oak for instance is quite hard and durable, but has an extremely open grain that can trap foods and liquid. Birch is an ideal kuksa wood and is historically the most common wood used for this purpose. The ultimate kuksa wood is a birch burl that has the same curvature as the cup you are going to carve, but other woods can be used as well. As with any carving project, your block of wood should be cut so that the center of the tree is completely eliminated. Cut your block as far from the center of the tree as is practical. This will minimize checking / cracking in the final product. If at all possible, try to cut your kuksa block from a piece of figured grain. This of course will make the piece more attractive, but more importantly, the figured wood will minimize the amount of end grain on the thin wall of the cup. The end grain is where the wood will likely crack when repeatedly filled with hot water and then dried. I have carved several kuksas that cracked the first time they were used, but have never had that problem with figured wood. The following photo is a cup made of figured wood from the crotch of a black birch tree where the main trunk separated into two smaller trunks. This cup has had hundreds of uses with no hint of checking.

Using figured wood from the crotch of a black birch tree eliminated the danger of cracking in this kuksa.

Roughing Out the Project. Sometimes commercial kuksa makers will cut a very large birch burl and cut a dozen or so cups from the same burl. This works quite well, but as mentioned above, the ideal cup project follows the grain of the burl itself. This completely eliminates the troublesome end grain and of course makes the strongest cup possible. You can saw out the rough shape of your project with a large, deep-throat coping saw (use the coarsest blade available). My favorite saw is a traditional frame saw with a narrow blade. Work your wood green and wet. Green wood is so easy to carve that you don't even have to use a saw. You can rough shape with an axe and then shape the handle with a carving knife. If you must leave the project for even a short while, dampen the wood and cover it with plastic. If you must leave the project for days or weeks, double wrap in plastic and put in the freezer. Once you have sawed or axed the side profile, draw the outline on the top and shape to the line.

The shape of the final cup will be carefully planned into the natural shape of the burl. This will make the strongest cup possible.



Notice the grain of the burl wood in relation to the outline of the cup.

After sawing out the side profile, saw out the top profile as well. Again, notice that the shape of the cup is designed to follow the natural grain and shape of the burl.

The Carving Begins. With the sawing and / or axe work complete, now the fun begins. Get a cup of your favorite beverage, go sit on the deck and start to whittle. Keeping the wood moist with a sprayer or by dipping in a bucket, round the outside to the basic shape you want. Turn the piece frequently to make sure you have good symmetry. Follow the old carvers' adage that you should use the largest tool suitable for the job. If you are experienced and competent with a large knife, then a blade of 3 ½" to 4' would be ideal. Working the inside curve of the handle may take a narrower blade such as a Mora 120 or a Mora 106. The carving can be bold and the chips can be large, but be constantly mindful of the final shape.

Carving the basic shape of the outside will be a true pleasure in green wood.
Turn frequently to insure good symmetry.

Once the outside has its basic shape, do not do any finish work.
It is really important at this point to start hollowing.

Hollowing Your Kuksa. The main reason wood cracks is from uneven drying. A round piece of firewood cracks because the outside of the piece dries faster than the inside of the wood near the center. If wood can dry at about the same rate from both the outside and the inside, there will be no cracks from the drying process. Of course that isn't possible with a piece of firewood, but it is possible (and quite necessary) with your kuksa. Waste no time in getting it hollowed so the walls of the cup can dry evenly from the inside and the outside. When hollowing the inside of vessels made of dry, hard wood, I have been guilty of using a drill to start the process. Drilling is a risky venture though and can quickly ruin a project. And with the luxury of carving green wood, it just isn't necessary. I started hollowing this cup with a spoon gouge. The word "spoon" refers to the shape of the tool. The spoon-like shape near the cutting edge allows the tool to reach into the deep rounded bottom of the cup without tearing. The gouging was easy and pleasurable work. The gouge of course leaves deep furrows in the wood so immediately after gouging I started to work with the crooked knife to smooth away the furrows. You will notice in the photo that I use Alaska Native-style crooked knives. They are much, much more difficult to learn to use than Scandinavian type crookeds such as those made by Pinewood Forge. However, they have long handles, they are sharpened on both sides and cut both directions. And they are held in a powerful dagger style with the blade down. This makes them several times faster when hollowing, especially deep hollowing as in this cup. They also leave a smoother finish. However, use what you have. A Scandinavian style spoon knife will do a nice job. Start with a standard spoon bend to smooth the inside of the cup walls, and then if you have one, switch to a more open bend such as those made to hollow large ladles to do the bottom. Extra time spent at this stage will be well worth the effort since carving away green wood with a sharp tool is many times faster and easier than trying to do it later with sandpaper.

Just as soon as you are finished roughing the outside to shape, hollow the inside. Having both inside and outside exposed to the air will minimize chance of the cup walls cracking. Start hollowing with a spoon gouge to move material quickly.

When finished with the spoon gouge, clean up the inside of the cup with a crooked knife. Do the best job you can do here, as time spent smoothing with the crooked knife will save much more time in the less pleasant job of sanding.

Drying the Roughed-Out Cup. Now it is time to dry your cup. There is no use sanding at this stage because the wet wood will fuzz up and will clog your sandpaper. Drying the project SLOWLY is absolutely essential. Rushing the drying process can result in ruining all of your hard work, not to mention the material. My favorite method for drying is to use a plastic bag. I put the piece in the bag and leave the end of the bag unsealed, but mostly closed and put it in a cool place. Over a day or two, moisture will come out of the wood and will appear on the inside of the bag. At this point you must turn the bag inside out a put the cup back in the bag. Failure to turn the bag can result in mold growing on the wood. This mold can actually grow down into the wood and can make ugly blotches on your project.

Once moisture no longer forms on the inside of the bag, take the cup out of the bag and place it in a cool, dry place for a week or so. I put mine on the floor in a back bedroom closet where the temperature rarely goes above 55 – 60 degrees. When the wood feels dry to the touch, gradually move it into warmer areas. I cannot tell you exactly how long the curing process will take, but for the cup in the photos, it took about a month. The last place my project was placed to cure was in the same room with our wood stove. After a week or so there I knew it was dry and ready to finish.

Finish Carving. To finish the carving process, simply take a freshly sharpened knife, lay the bevel flat against the wood, and skim off the bumps created earlier by the rough carving. Again, time spent with the knife will save lots of time in the long run.

Sanding. Once carving is finished you can begin to sand. I usually start with 80 grit paper. Do not skip grades of sandpaper – that will not save time. Typically I will use 80, 100, 120, 180, 220, 280, 320, 400, 800 and 1200. This task is not as daunting as all those numbers might sound. The first sanding with the 80 grit is the most work. After that, all

you are doing is removing the scratches from the previous sandpaper, so the finer grades will go quickly. For the smoothest finish you should "bring up the grain." After you finish with the 320 sandpaper, lightly wet the wood and set it aside to dry. This will cause the grain to fuzz up just a little. Then sand again with the 320 and progress through the other sandpapers.

While sanding, be careful that you preserve the edges around the handle area. They should be rounded slightly to make them more durable, but too much rounding takes away from the clean lines of the design. Take a look at the final photos in this article to see how lines are preserved. Use a sanding block on the top of the handle if you intend to carve any embellishments. The section on sanding after painting will explain the reason for this.

Embellishment. Unlike their commercial counterparts, nearly all hand carved kuksas have some sort of embellishment or decoration added after the sanding is completed. Any design you use should follow tradition, as other figures can look out of place. This again is a time to do some research to see what was used on historical pieces.

Embellishment can be added with a variety of processes. The most classic of these is a polished piece of antler inlaid in the cup handle with carvings on the antler. A less traditional process I have used is to carve voids down into the handle and fill the voids with colored epoxy. To the untrained eye, this simply looks like paint, but it is extremely durable. Another traditional method of ornamentation is to carve classic designs into the surface of the handle with the tip of a knife and fill the resulting grooves with paint. This is what you see on the handle of the pictured cup.

The carving on this handle is only about 1 / 16" deep. That is plenty deep to protect the paint that would otherwise wear off if it were just on the surface. First, lightly draw the pattern you want to carve. It is good to use a fairly soft pencil that is not too sharp, as a sharp pencil can put deep scratches into the surface of the wood. Once you are satisfied with the drawing, take a small carving knife such as a Mora 120, and hold it pencil style with the blade tip down. Start carefully carving the design with the blade held at about a 45 degree angle to the side. Then go back on the other side of the groove at the same angle to release the sliver of wood. You can do finer work if you thin the tip of the blade just a bit on a sharpening stone. If you have not done this before, do yourself a favor and PRACTICE ON A SCRAP PIECE OF WOOD before starting on the cup handle. This has a completely different feel to it than the other carving you have done, and of course if you slip, you can't put wood back on. Patience and practice always pay off. Whether you are going to keep the cup or give it as a gift, the new owner's name carved in the bottom will be a wonderful personal touch.

Painting. Once your embellishment patterns are carved into the handle, use a quality acrylic artists' paint to fill the grooves. Box store paints are mostly filler and don't stick well. Use only the best acrylics that come in a tube. Use a tiny stiff brush to force the paint down into the grooves. If places are too tight for the brush to reach, use the end of a

toothpick to push the paint into crevices. Do not thin the paint – use full strength. Fill the grooves completely with paint, and let the paint spill out over the edge just a little. You will sand off any extra when the paint is cured.

In a few hours the paint will feel dry, but do not sand just yet. If you sand at this point, the paint will still be rubbery. It will ball up in the sandpaper and may pull out of the grooves. Let the paint cure for three days or so before sanding. Once the paint has completely cured, use the sanding block once again to sand excess paint off of the top of the handle. Start with 320 grit sandpaper and progress through the final grits as above. If any spot needs repainting, just paint that spot and go through the same process until you are satisfied.

Carving a traditional embellishment into your kuksa will give it an artistic flair and will make it a truly personal piece of art.

A name carved into the bottom will not only identify the new owner, but will add the ultimate personal touch.

To Toggle or Not to Toggle. At this point there is one final decision to make before putting a finish on the kuksa. Most of the older kuksas had a toggle attached to the handle by a cord. The toggle was tucked under the wearer's belt or sash so the cup would remain handy by being worn on the outside of all clothing. If you decide to make a toggle of some sort for your cup, you will need at this time to drill or carve a hole to attach the cord. This is yet another situation where a solid study of old pieces can help you make a good decision. The toggle on the pictured cup is the outline of a ptarmigan. It is made of a piece off moose antler that was cut out with a coping saw. The edges were rounded with a file, and then the piece was sanded until it had a nice shine to it – 2000 grit sandpaper.

Just as a side note – To me the traditional toggle looks a bit odd when attached with a piece of nylon cord or some other synthetic material. I like to use cordage that was available when the kuksa was standard equipment. The cordage in the photos was made of 22 pieces of grass bark. It is made with a common two-strand twist, but there is a secret. Most natural cordage does not last well when constantly exposed to liquid, and after all, this is a DRINKING cup. ------- To make your natural cordage water resistant, give it a 5 minute soak in a thin, clear acrylic solution. You can use acrylic leather finisher diluted half with water or acrylic floor finish diluted with 2/3 water. The soaking may cause the twist to relax a bit, so when you take it out of the soak, retwist it until it starts to kink and clamp it in place until it dries. The best part of this little trick is that no one will ever know that you have used a modern treatment (except me of course).

The Final Finish. It is necessary to put a final finish on your completed kuksa. If you don't finish it, it will soon look dirty and you will not be able to clean it. Use only a food-safe hardening oil – oil that is manufactured for this purpose. Do not use any sort of cooking oil because it can turn rancid, and every time you put hot liquid in the cup, some of the oil will ooze out. I use Mahoney's Heat Treated Walnut Oil available from Woodcraft Supply. There are also some food safe hardening oils available at the big box home stores. Any of them will be fine as long as it says on the container that it is food safe and that it will harden.

To oil your cup, put it upside down in a cake pan or dish, and brush on the oil until it no longer soaks into the wood. Warming the oil just a bit helps it to soak in. Do not oil the inside because oil inside the cup will break down when you fill it with hot water, giving your beverage an unwelcome taste. Now is the time for patience. Wipe off the excess oil and put the cup, still upside down, in a warm place for the oil to cure. To be sure that air circulates all over the cup, set it on a pair of pencils or something else to hold it up just a little. The oil will feel dry in a few days, but give it a few weeks for it to completely cure.

Nope, not yet. Before using your cup you should minimize any "off" tastes by putting hot water in it several times and rinsing it out. If you do experience a bit of an odd taste when you start to use it, be assured that it is nothing harmful, and that the taste will disappear after a few uses.

Well, now you know everything I know about carving kuksas. You have just run out of excuses and it's time to start carving. As for me, I'm going to put the coffee pot on the campfire and brew a cup to put in my authentic, one-of-a-kind, hand-carved, highly embellished, historically correct burl kuksa.

Keep 'em sharp and strop often, Jim