Period Drinking Horns : Being a synopsis on how drinking horns were made and carved with period tools and how similarily can be done in modern times

"Prompt in his office, the man who held the horn of bright mead poured out its sweetness."
From the story of Beowulf 5th to 6th century

Possessing a drinking horn is more than just having a container for your drink, it is a important accessory in defining yourself. This article will provide you with some useful information on what drinking horns are, how they were made and how they can be made now.

The horns of cows are a rigid growth of hair and can be compared to your own fingernails. They have a straight layered grain from the wide part to the point, are a little translucent if thin, layered, and flexible. Cow horns can be found in many colours ranging from white to brown to black and many thicknesses (I've heard steer produce thin horns and cows produce a thicker horn). The horn itself is just a fibrous cone around a solidish marrow of blood and bone. Cow horns grow with the cow for its lifetime and are removed physically by man during the life of the cow or after the cow is deceased. Horns come in many sizes depending on the age of the cow at which the horn was removed and the breed of cow.

A domestic cow and calf

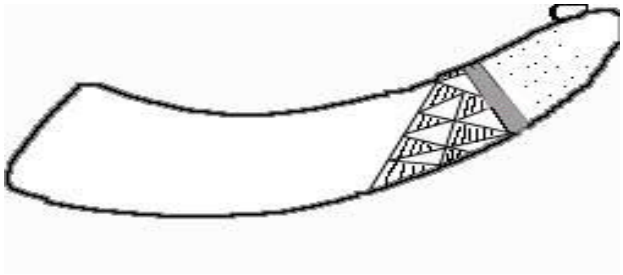
Drinking horns were a cheap drinking vessel for lower classes, yet in some periods, maintained a significant symbolism. Size had a lot to do with it. Large horns represented communal sharing, welcoming, toasting, boasting and wealth. Larger horns would sometimes be ornamented with gold and stones. Horn has been called the plastic of the middle ages since it was easily accessible, versatile and easy to work with by both peasant and craftsman.

Section from bayeaux tapestry

Horn fittings found in Sutton Hoo burial site

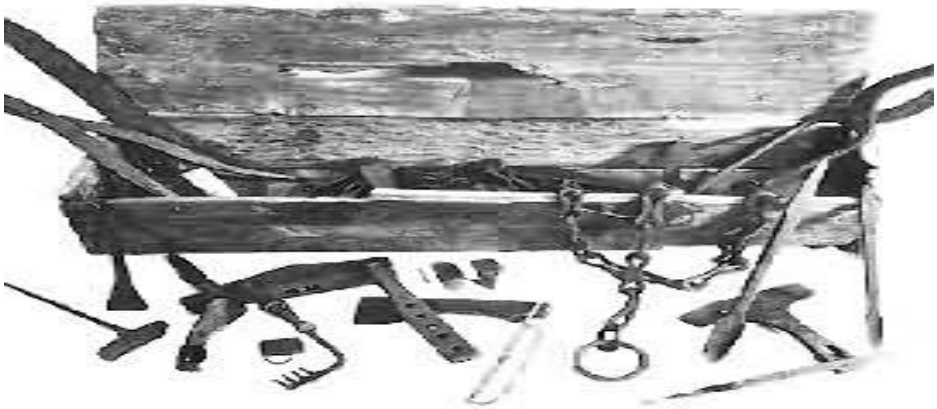
image from Viking picture stone (Valkarie with horn)

There are not a great deal of drinking horns that have survived the ages except in special circumstances. Aside from fragments, most evidence comes from the recovered metal mountings, mouths and finials. Horn, being organic does degrade in soil and few examples exist of carved horns and their ornamentation. One early example shows only geometric patterns.



Sketch example of Frankish carved drinking horn with lozenges , found in Cologne

Tools most likely to have been used to work horn would have been similar and the same as wood working tools ;.including knives, saws, drills, axes. To polish a horn one would use files, riverbed sand wrapped in linen (coarse grit from the middle of the river, medium from the sides, fine from the edge) ,and, I've heard sharkskin.



Mastermyr find including hacksaw, files, saws, hammers, etc…

As indicated above, there is little evidence to support elaborately carved drinking horns. There is evidence of simple geometric designs. Scrimshaw (etching on horn surface and then rubbed with ink, paint, stain) was possible. Knowing man's general desire to ornament, it is possible to believe more ornately carved cow horns did exist, but simply have not survived. One can compare the carved ivory blow horns (Oliphants) of the middle ages to drinking horns as an example of the potential elaborateness of carved drinking horns.

Borradaile Oliphant, 11th century

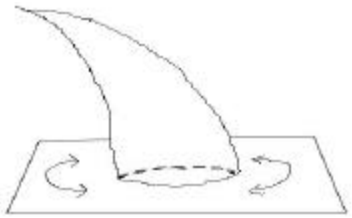
Making the horn

In modern times one can still get a cow horn in the traditional way if you own your own cattle ranch or know someone who does. It appears that many cattle ranchers either discard the cow horns or keep them in bulk to sell to wholesalers. However most cattle ranchers remove the horns of cattle while very young. Cows have a tendency to hurt themselves or each other with their horns while in close captivity. In most cases, however, one must look towards shops that provide cow horn for hobby purposes Tandy Leather Goods is an example. Dixie Gunworks (a mail-order) another. Some merchants in the SCA carry both unfinished and finished horns, Pennsic being the best example. Other places to find horns include garage sales, junk and/or antique markets and relatives who have visited Texas and returned with horn souveniers. Unfortunately prices are as variable as what you are willing to pay. Generally the uglier the horn looks, the cheaper it is.

As it rare to actually obtain a horn fresh from the cow or a horn still holding its core, I will not discuss the removing of its core.

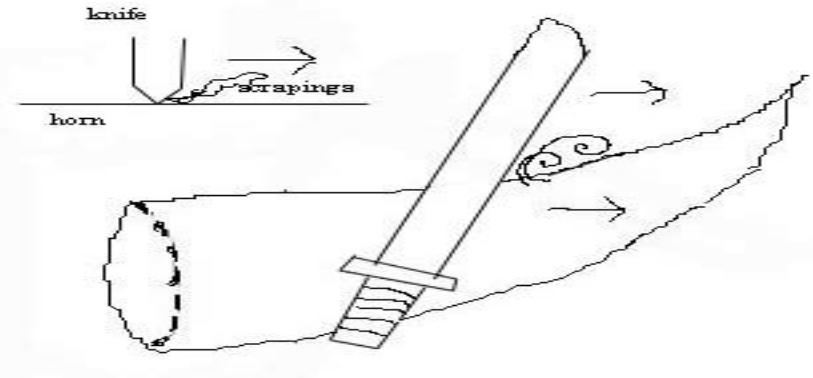
These days you can work horn with the same tools as in old, but the use of power tools (drills to dremmels) speeds up the process. Sandpaper and steelwool are also useful in the finishing of horns. It is important to remember that in using power tools they do create a very fine dust from the horn which is harmful in the long term to your lungs. Take some care to use a dust filter mask when carving with power tools.

The wide part of the horn may be quite jagged when you purchase it, or the horn might be too long, or it might be attached to a cow. To even the mouth of the horn, you can cut it with a fine toothed saw such as a hack saw, band saw or coping saw. A wood saw can be too aggressive on the horn and the wide spaced teeth can cause a lot of chipping and or cracking. Either hold the horn firm or tighten it in a vice to cut it. After this cut, there may still be a degree of uneveness to the lip of the horn. It can be made even by rubbing the horn mouth around on a large piece of sandpaper affixed to a flat surface.



The inside of the horn is likely going to be a little dirty, dusty or have odd things stuck to the inside wall. This can be removed with a bottle brush, wire brush, scraping stick, mixture of gravel and sand or any abrasive tool that you can shove into the horn. Be careful not to sand or rub too excessively as to go through the horn.

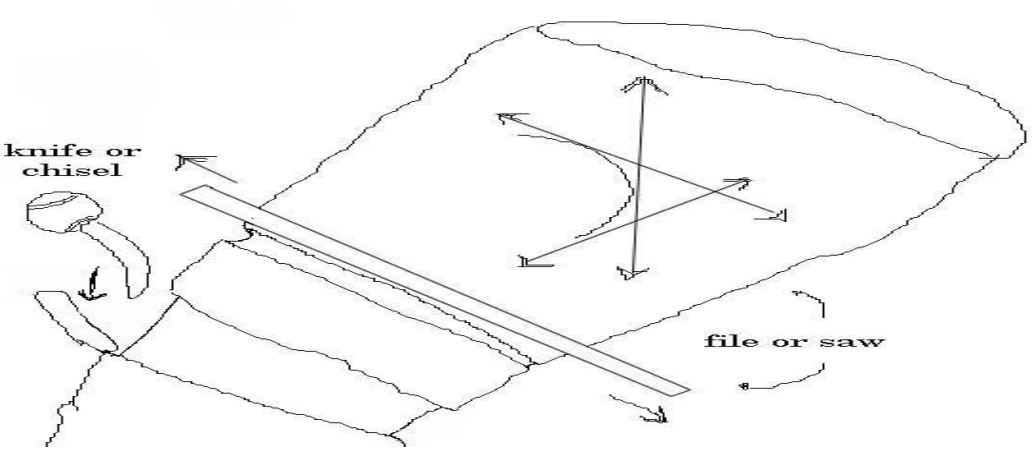
Depending on how rough the horn is, determines what you will need to smooth its sides. A very rough horn can require an axe to chop away loose layers of the horn. A rasp can be used to even out gouges, dips and cuts. Secure the horn firmly, in a vice or such. After this sort of treatment, you will likely have a horn that looks a little hairy or fuzzy. To smooth the sides of the horn further it is best to scrape it with a sharp edge, such as a knife, broken glass, flint etc… In scraping the horn with a sharp edge, keep the edge perpendicular (90 degrees) to the horn. It is best to go with the grain from the mouth to the point. The scrapings will be long and whitish. Continue this all around the horn as necessary. Once complete, this will leave your horn with a dull matte finish.



Of course much of this manual labour can be bypassed in using a wire brush and buffing wheel and or belt sander, though it will produce an enormous amount of fine horn dust, the results are very fast and can leave you with a very smooth and shiny horn.

Finishing the horn

Carving the horn is a personal preference and styles are limitless. A few passes with a saw blade or edge of a file will give you a straight line. The more passes the deeper the line. Repeated passings at different angles can be done to make a curving gouge. A sharp knife can be used to cut out layers. Drill bits and augers can make circles and depression/holes. Sharp chisels can be used to make controlled cuts and gouges. Take care in using knives and chisels on horn. The opportunity to slip on the hard horn surface is much greater than in working on wood.



Lining the inside of the horn

It is of some debate as to whether period drinking horns were either lined with beeswax, oils or left plain. Most people currently prefer to line their horns beeswax. Others use food grade epoxies. If you want to line your horn with wax, you can buy block's of beeswax from Apiary's (honey manufactures), or you can get pure beeswax candles. Some hobby craft shops do carry beeswax aswell, however sometimes it can be blended with other waxes which are much more brittle than pure bee's wax. I melt the wax in a small pot on the stove, careful not to boil! A double boiler is likely a safer method. Not over the stove, I then pour the molten wax into the horn, filling only about 1/3 o the horn. Slowly I rotate the horn while pouring out the wax back into the pot. Try not to get the molten wax on you as you do this. Continue this process until you have coated the entire inside of the horn. It takes some practice to eliminate the wax rivulettes that will form. Practice will reduce this.

References:

On the web:
http://www.angelcynn.org.uk/ (a dig report on West Stow Anglo-Saxon Village)
http://www.regia.org/village.htm (a sca related living village, see the bone and antler worker)
http://moas.atlantia.sca.org/topics/antl.htm (antler, bone and carving links)
http://www.dnaco.net/~arundel/bone_pamplet4.htm (working with horn and skeletal materials)

A good foundation book:
MacGregor, Arthur. Bone, Antler, ivory and Horn: The Technology of skeletal materials since the roman period, Totwa, NJ, 1985

Suppliers:
Tandy Leather Co. for horns and some tools (416-757-1392, Toronto)
Dixie Gun Works for horns (toll free 1-800-238-6785 ,US $5.00 for catalogue)
Lee Valley for carving tools, rotary tool heads
Home Despot for carving tools, abrasives, rotary tools and heads
Canadian Tire for carving tools, abrasives, rotary tools and heads