

The Gourd Water Bottle or Canteen

The more common type of gourd (multi colored) that we see in the markets in the fall is a type of Cucurbita, related to pumpkins and squashes. It has a yellow or orange flower and blooms during the day. They have a woody shell but are far too thin to consider for any type of container for utilitarian use. These are used for decorations and are disposed of.

The type of gourds that were most used for lasting containers were of the type Lagenaria whose white blossoms open towards evening and grow on aggressive vines. They require a long growing season to mature and are extremely cold-sensitive. They are mostly light green with sometimes some white mottling, never brightly colored. They have a woody sub-surface that can range from 1/8 to 3/4 inches in thickness. When the gourd is in the green condition it is fragile but as it cures (which can take upwards of two years) the woody sub surface matures into a very hard and durable material. It is my experience that the slowest curing process is the best, although the most messy. I have heard all types of instructions from all over the country on how to cure them fast. I have never had success in coming up with a durable container by any of these methods.

At this point I will not go into the growing information on the Lagenaria gourds which I can provide for those who are interested by request.

Well, we'll take up here "after harvest". The green and fully mature gourds are picked after a growing season of between 120 and 150 days. Now begins the long curing process. I will wash them down to remove any dirt that may be attached to them and then they are spread out (so they don't touch each other) on newspaper in a warm dry place like an attic, loft or in the basement near a heat source. They can be left outside if they won't freeze but I have always had problems with animals stealing them to get the seeds during the winter months and up north they are far too precious to lose any to forest critters. They should be turned often, at least once a week. During the curing process they will develop a heavy mold which is normal and this will not cause them to rot. If the gourds are to be used for something other than food or drink containers they could be wiped down every two weeks with a solution of a bit of disinfectant liquid in some warm water to retard mold growth, since the mold has a tendency to discolor the outer surfaces. **THIS SHOULD NOT BE DONE FOR FOOD OR DRINKING CONTAINERS!** The mold is a natural process and although it looks horrible it is very natural and harmless. I have to admit that they start looking pretty funky about three to four months into the drying /curing process but I don't believe I've ever had them smell worse than a fresh mushroom. They have very little flesh inside so they won't spoil like a pumpkin or the like. Actually, if they were on the vine a long enough time they may even feel lighter than you would think, because some of the curing had begun outside at the end of their growing season. These lighter ones will cure the fastest but sometimes their shells are too thin and will collapse. This was not due to the molding. They were destined for failure from the start: they never matured to begin with. The very heavy ones may take up to two years to dry and cure. I grew Giant African gourds and Indonesian bottle gourds that were nearly two feet in diameter and required a

little over two years for them to cure and become light weight. I made a giant water bottle as a present for my good friend George Rogers in 1990 and he was still using it this season (1999).

When the curing process is complete you will notice that the gourd is now light in weight, the mold has dried to dust coating (I must mention here that mold spores and dust can affect sensitive individuals so please take care) and many times the seeds will rattle inside.

Selecting a gourd:

Select a cured gourd by the firmness of the shell. A good shell is at least 1/4 inch in thickness and shows no signs of collapse. There are many styles available and I'm sorry to say that I have not done any investigating into historical documentation of what was used and where. However, I can make an educated guess based on climate. If your persona lived in a warm climate with long growing seasons they may have had access to larger and heavier gourds; so you could have a full range of sizes and styles. If you were from the north, depending on the climate, your choices would be more limited to smaller styles capable of maturing in less time; such as, dipper gourds and small bottle styles. I don't know if any types were imported or traded during Colonial times, but different styles could have moved around under these circumstances.

Until I got my metal canteen I used two types of styles for Rev War Reenacting. One style that would be authentic is the small bottle which is round on the bottom, constricts at its neck then has a little bulb in the top. I think they sell this style nowadays as a bird house gourd. This would be easily grown in northern climates and near the coasts in New England. The other style I have used, which is shaped like a real canteen (round and flat), is what is now called a tobacco box gourd. I found that these grow well in the northeast. This style can be fashioned to hang in a leather strap/ pouch and is very easily carried. My son still uses the one I made for him in 1988. It is a good strong container. Besides canteens I have made many bowls and boxes out of this style and it seems to have the most utilitarian use.

Construction Phase:

The dried and cured gourd is soaked in water or a cloth is applied to its surface, warm water is placed over the cloth and remains that way until the dry skin can be easily scraped off with a dull knife. This may take some time. This exposes the hard wood shell. Let the gourd dry for a couple of hours after scraping. Now, depending on what type of gourd you have, you will either saw off the tip (as in a water bottle style) or drill a sizeable hole in the side (as in the case of a tobacco box style). Make the hole the size of the cork you intend to use.(I have found a 3/4 in. hole is adequate for a small bottle). This is achieved by sawing (use a fine tooth saw such as a hacksaw) the top off about 1/2 in. down. The tobacco box can have a smaller 5/8 inch hole drilled in its side for the cork. For other types and styles use your discretion or contact me and I can suggest what type of opening is best.

With the hole made, you take whatever is necessary to scrape out the seeds and fluff. Spoons work well, just don't damage the opening so the cork will not make a tight seal. Next, get a few handfuls of gravel, the sharper the better (don't use sand or very fine gravel which could stick inside). Pour them into the gourd and shake for a few minutes then pour out. This may have to be done a few times. This

gets the fluff out.

Now we are ready to make the canteen capable of holding liquid without it tasting like swamp sludge. In this procedure I use paraffin wax and a heat source. As you all should know paraffin is extremely flammable and it can be dangerous if used carelessly so I'm not responsible if you flame your gourd, kitty or your humble abode in this next step.

I use pure canning paraffin as opposed to beeswax because beeswax can make the water sort of taste well, like beeswax. Gourds I have waxed with this method have held out over ten years with its original application, however the larger, more often used storage bottles I usually rewax every few years until they get too heavy from all the wax coatings.

The initial waxing is the most important since this can never be undone or redone. So take care - be careful - take your time and you will have success. I use an electric stove and oven in this process so there is no open flame. If you choose to do this on a gas stove it could be dangerous, so please take care.

Get your gourd, a coffee can and a cork that fits the gourd. Also, some towels or rags to handle the hot gourd will be necessary. I set my oven on 250-275 degrees and place the dry and cleaned gourd on the middle rack. Then I take a coffee can which is clean and bend a spout in its side to use as a pouring aid. In this can I carefully melt down two hunks or slabs of wax. When melting wax watch it carefully. Melt at low heat and just as the last solid bit disappears it is ready. If you leave wax to heat too long you may lose track of how hot it is getting and it could burst into flames. As soon as the last traces of wax just disappear in the can take it off the heat. From here on in this must be done quickly and without hesitation to achieve the initial coating in the gourd.

The gourd is removed from the oven and quickly you will pour the melted wax inside it (not near a source of flame). Put the cork in the hole and start vigorously shaking it for a few minutes until the liquid wax starts to "feel different" as it starts to solidify. Then quickly take out the cork and pour the excess back into the can. Set the gourd aside to cool slowly. Don't touch until fully cool. If you did this initial step correctly all of the pores inside the gourd, including whatever fluff remained, are encapsulated in wax. You can do up to two more applications of wax but do not put the gourd back in the oven because you will undo all your hard work. Just melt the wax in the can as before and pour in the gourd, shake vigorously and pour out. Let the gourd cool thoroughly each time; otherwise, you will remove the previous wax.

All you need now is a new clean cork and a method of carrying it and you have a fine water container. I never used this type of container for spirits because they may adversely affect the wax.

Gourds done this way should be fine holding water during events. My big supply bottle gets filled when I leave home for an event and is not emptied until I return home. The water always tastes fine. There is some maintenance however. For storage after an event you must drain and dry (no heat) the container thoroughly. Do not put the cork back in unless it has dried for a few weeks. I leave my corks out while in storage. Store in a clean dry area. A damp gourd can form a bit of mold on its exterior while drying in storage (not detrimental). Never expose an

empty or partially full container to the sun or leave in a hot tent for any length of time as the wax will melt. Keep containers full and in the shade and this will be no problem. I also have found that some hot paraffin rubbed into the exterior of the gourd during the initial waxing process protects the gourd's exterior as well. If at any time the water in the gourd starts to taste foul this would indicate that it is time to reapply a wax coating on the inside. (Follow the instructions for repeated applications of wax).

Well this is my system. I have tried many ways but in my opinion this method will produce the best results. Quick drying methods never have produced a quality item for me.

Much success!

Jim W. Filipski

JWFilipski@aol.com