

ART FROM THE BARK

Carving Whimsical Cottonwood Tree Bark Houses

In-the-Round Part 1

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10/10/2010

Instructional guide on carving whimsical cottages and houses in-the-round from Cottonwood tree bark for the James River Woodcarving Club Workshop.

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Overview

Bark Houses Part 1 covers selecting the bark, temporarily binding the bark, roughing out the roof, chimney, gable, foundation, windows, and doors. Once the outside has been roughed out, the bark will be separated and hollowed out, focusing on thinning out the windows and doors. After the doors and windows have been carved, the two pieces are permanently glued together.

Bark Houses Part 2 covers detailing the roof shingles, chimney bricks, foundation, siding, window frames, and door decor. In addition, the walkways, steps and rocks will be carved in. After all the carving is done, the final finish will be applied.

Bark Houses Part 1

Recommended Tools for Part 1

Use tools that you feel comfortable carving with. I prefer to use palm tools when I can. The following is a list of tools that I use to carve most of my houses.

- Besides a carving glove, I use a light weight glove to protect my non-carving hand from the rough bark while doing the rough in. A long sleeve shirt helps to protect my forearm.
- I use a variety of v-tools
 - 12/10 to establish foundation and roof line (Size depends on size of house you will be carving)
 - Smaller v-tools for detail work, normally 45 degree angle.
- I use a variety of U-Gouges and sweeps. I use a large sweep for roughing out the roof and then smaller u-gouges for detail work.
- I also use a scoop to scoop out the inside of the house.
- I use a 1.5" knife blade for roughing and move to detail knives for making stop cuts and detailing.

Bark Preparation

Selecting the bark

Cottonwood bark varies in thickness and shape depending on the age of the tree and location.

Easter Cottonwood Bark: You can find Eastern Cottonwood tree bark in Virginia and Maryland, but it's very thin. Eastern cottonwood is fine if you want to carve some very tiny houses for Christmas tree ornaments.

Black and Plains Cottonwood Bark: I prefer carving with Black or Plains Cottonwood tree bark to carve large in-the-round houses. I can't tell the difference between Plains and Black Cottonwood bark. Both types are solid and thick.

Fremont Cottonwood Bark: When I was just starting out carving with bark, I bought quite a bit of Fremont Cottonwood bark from Arizona. I don't recommend using it for bark houses. I found that Fremont Cottonwood bark is irregularly shaped, thin and contains hidden loose fibers that make it hard to carve.

Finding Cottonwood Bark: My thickest bark comes from the northern states such as North Dakota, Minnesota, Alaska and Montana where both Plains and Black Cottonwood trees grow like weeds. I watch eBay closely to see if I can get some good buys, but shipping is high. I also buy the bark from the James River Woodcarvers Club when Fran Hazelwood has some available. Contact Fran as a good source for bark. Her prices are comparable to what you find on e-bay with the added advantage of actually inspecting the piece before buying.

Selecting the pieces for your house: For an in-the-round house, you'll need two pieces of bark. The colors of the pieces should match as closely as possible. If the shades don't match, when bonding the two pieces together, it will be hard to hide the joined seam. You can carve a small section of bark from the backs of the two pieces to check the color and shade. I usually try to select a long piece of bark and cut it in half for my house. Even using this method, the color can vary from one end to the other. If you can't use the same piece of bark for the house, then try to select two pieces of bark from the same tree that are similar in color.

The piece of bark I'm using for this example is Plains Cottonwood bark. The size of the piece of bark is 14" long, 2.5" wide, and 1.5" thick. This piece of bark will result in a house, including rock base, about 7" long, 2.5" wide, and 3" thick.

Preparing the Bark

I've found that it is best to cut one long piece of bark in half before planing. The pieces don't have to be the same size either. The house looks best if one roof peak (one piece of bark) is slightly higher than the other. In the perfect world, the original piece of bark will have natural ends of the bark. Most of the time, I have to cut the ends or they were already cut when I purchased the pieces.



After cutting the bark in half, plane the back of each piece of bark. I use a jointer to plane my pieces to ensure I get the flattest surface possible. You can also use sandpaper or a sander to flatten the pieces. I've only been successful with the sanding method on small houses. Planing each piece individually will help retain as much thickness as possible, especially if the bark has a slight twist in it or one side has a bad spot.



After the two pieces have been planed, firmly press them together and hold them up to the light to see if there are any light leaks between the two pieces. If there are, continue planing until the pieces fit tight and without any light leakage.

Temporarily Bonding the Bark

We need to temporarily bind the two pieces together so we can establish the roof line, chimney, gable and foundation of the house. Establishing the roofline and foundation is used as a guide to hollow out the inside of the house.

I use two methods to temporarily bond the two pieces together. Gluing the two pieces together with Elmer's School Glue and a thin piece of cardboard is the more secure way of bonding the two pieces together. I also use Adhesive Putty or UGlu to bond the pieces, although if not careful the pieces could come apart during carving.

Gluing Loose Bark:

If there are pieces of loose bark that you want to keep, glue it before handling the piece too much. I keep a bottle of super thin super glue and a bottle of accelerator with whenever I'm carving the bark. I drip some super thin super glue between the cracks, press tightly together and then spray it with the accelerator. If a piece of the exterior bark breaks loose when carving, I determine if it is critical. If it isn't I don't glue it back on.

Gluing Up

Elmer's School Glue (washable) and a thin piece of cardboard will be needed to glue up the bark. The cardboard should be thin like cereal boxes, Coke boxes, USPS priority mailing envelopes, etc.

After the planing has been done, cut out a piece of cardboard about the same size as your bark. The cardboard will be glued in between the two pieces of bark. Notice that I leave a slight gap at the bottom of the bark without any cardboard. Since we won't be carving in this area, I like to leave the slight gap as an entry point for the putty knives. The gap will be used to guide the putty knives between the bark in order to separate the bark without damaging the bottom of the house when we are ready to hollow out the inside of the house.

The cardboard I use, normally has a slick paper surface on one side and regular cardboard surface on the other side. The slick side usually has a picture and information about the product printed on it. The printed side is harder to glue, because when you apply glue to it, it is real slippery. If I put glue on both sides of the

bark to glue in the cardboard at the same time, the bark pieces slip around when trying to apply the clamps. I find it easier to glue one side of the cardboard to one piece of bark, normally the slick side, and let dry before gluing the other side. Since this is a temporary bonding, I just hold the slick side to the bark until it begins to gel. For each side, I clamp the two pieces of bark together to put pressure on the glued area. Let the glue dry for about an hour or more before beginning to carve.



Adhesive

If I can keep from having to use the gluing technique above, I will. Two items I like to use for the temporary binding is Scotch Adhesive Putty (removable) and UGlue. Neither one of these products will leave a residue. The Scotch Adhesive Putty can be reused, where the UGlue cannot. The putty doesn't allow the pieces to shift as much as the UGlue. I've used two sided Duct tape, but it leaves a little bit of a residue that is frustrating to remove.



Place a few pieces of the adhesive on the back of the bark. Smooth out the adhesive on the back of the bark to make it thinner. Align the two pieces of bark together and clamp the pieces together to get a tight fitting. It's normal to have a slight gap between the two pieces of bark. The gap will come in handy when taking the two pieces apart again when ready to hollow out the inside of the house.



Whimsical Carving

Before we start carving the features on our houses, I want to explain what makes a house whimsical. When carving houses, you can add character to your house by exaggerating the house's features. The house can look like a fantasy cottage. Rick Jensen emphasizes carving carved 'S' lines instead of straight lines... "No Straight Lines". All of the features on the house are uneven and exaggerated. Come up with your own fanciful style of windows and doors. The roofs and eaves on the houses are uneven, warped and swayed; posts are crooked and bent; the exterior walls bulge with different widths and lengths of siding; steps are uneven and are different sizes. If it looks architecturally correct, it's not whimsical. The more you exaggerate the features, the more whimsical the house will become.

Outlining the Features

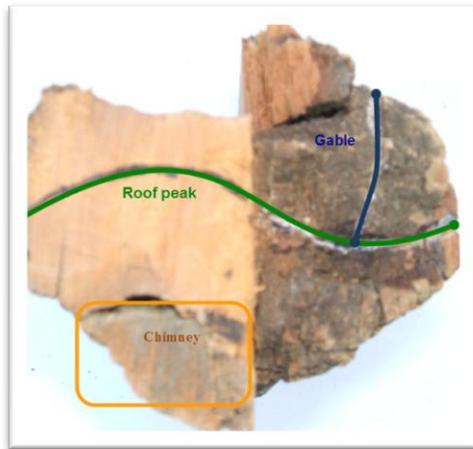
Depending on the bark, I use either a white chalk pencil or black Sharpie pen to outline the house features to carve. You can purchase the white chalk pencils in most fabric/sewing stores and at Michaels. I prefer the white chalk because it is easy to wipe off if I make a mistake or if I'm not planning on carving that part off. The disadvantage of using a Sharpie, is that you need to carve it off or try to blend it into the bark. For the lines to show up in the photo's, I'm using a thick chisel tip Sharpie, although I don't recommend it.



Rough in Roof

Roof Peak, Chimney and Gable

For this project, we will rough in the roof with one chimney and one gable. On the top of the bark, draw a narrow 'S' shape from the top front center of the house to the top



back center. The 'S' shape marks the curvy roof peak (no straight lines). Depending on your piece of bark, identify and mark a place for the chimney and gable. Normally I make sure the chimney is higher than the roof peak and the gable's lower than the roof peak. The height can be adjusted when carving. Usually I put a chimney on one of the concave sides of the 'S' roof peak and the gable on the other concave side of the 'S'. The concave sides provide more room for carving the

chimney and let it stand out away from the roof. In the image, the roof peak is in green, the gable is marked with blue and the chimney is circled in yellow.

Outline the roof line, chimney and gables for the house on the sides of the bark. Only draw in the top of the roof line (top line). The bottom line helps in showing the thickness we want to leave for the bottom of the roof line. If you draw it in now, it will be harder to make adjustments later. We want to retain the bark in between the lines. We'll narrow and stylize the roof line and gables later. Try not to put your eaves and chimney where the two pieces come together (seam). Between the back (B) gable and the side gable, there will be a U shaped valley which narrows to the center roof peak.

Make sure the roof line is not straight. The eaves should be at different heights.

Draw the outline of where the chimney will be. Keep the base of the chimney near the top of the roof line. We'll adjust it once the roof has been carved in. Stand off the chimney at least 1/8th of an inch from where the two pieces come together.



Back gable



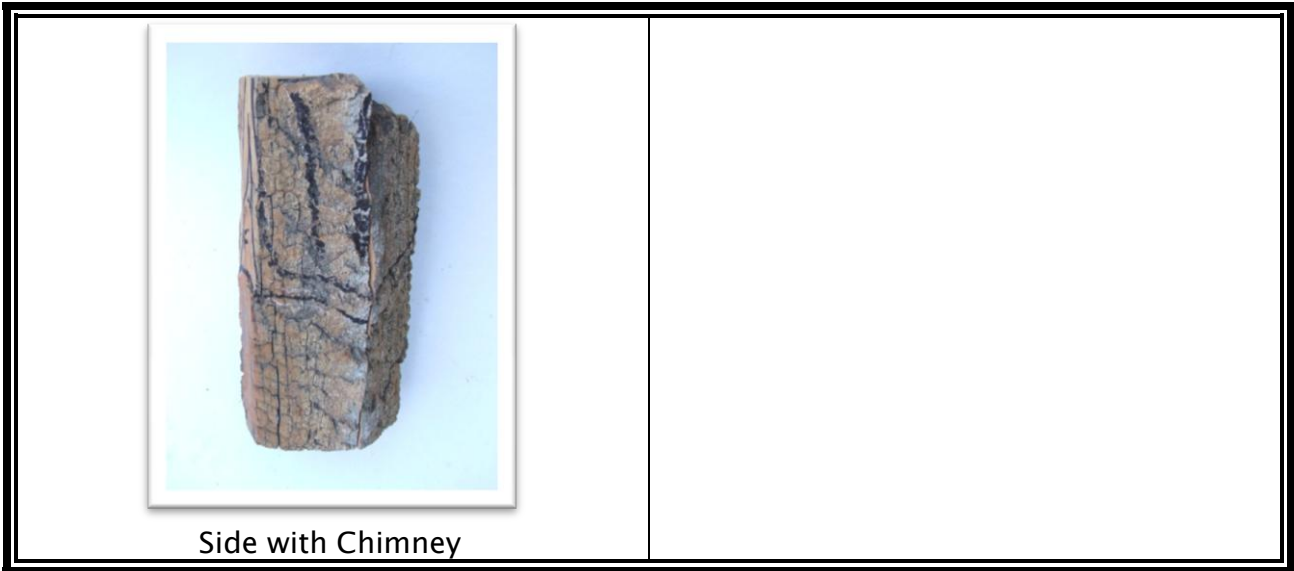
Side gable



Side



Front gable



Roof

Begin carving from the top of the roofline up toward the roof peak using a medium to large U shaped gouge. Although this is still in the rough stages, the roof should have movement (uneven) within it. You need to establish how wavy the roof will be so you can gauge the depth for the gables and chimney. Notice in the first roof image below, I have marked the right hand side of the roof where I will be lowering the rooftop so the chimney will be higher than the rooftop. The last image shows the top of the roof.



Gable

To create the gable use a U shaped gouge and create the gable roofline similar to the main roof. Be careful not to interfere with the angle of the main roofline and eaves. The first image of the roof above is the carved out gable. The last image shows how the gable looks from the top.

Chimney

Carve the chimney a little higher than the rooftop. You may have to bring the rooftop down lower so the chimney is higher. Leave as much bark on the chimney for now. Keep the base of the chimney close to the bottom of the roofline. When carving the chimney leave it wide enough so you can adjust the shape later. The chimney will not be straight up and down when we get finished. I also like a slight twist in the chimney.



Foundation

Use a V-tool to carve the foundation. When carving the foundation, block out any posts you may want. Carve the foundation with varying elevations that will be used for the steps later. The foundation should be carved back as far as possible to support wide steps and doorway landings. As the exterior walls are carved in, the foundation can be cut in deeper. The exterior walls should be rounded toward the foundation and roofline.



Doors

Draw in your door frames and doors using curves if possible. Make sure you start with wide door frames. You can carve them down later. Don't carve the frame completely out, because you may need that area to place the clamps during the final gluing. Details may get crushed if you carve them in during this stage. Use a small v-tool to outline the door frame, keeping to the outside of line you drew. Take a sharp knife and follow the v-cut you just made to create a stop-cut for the door. The v-cut will help to guide your knife and hopefully prevent your knife from veering off course with

the grain. An alternate way of outlining the door frame is to use a wood burner instead of a v-tool. Carve out around the door frame so the frame stands out away from the edge of the house. Carve the door back so that the door is set in from the frame. Draw in any door windows. Think about placing a panel on the door once it is carved in.

Closed Door

Drill a small hole straight through the window. The drill bit should be smaller than the window. Be sure not to drill the hole too deep and pierce through the other side.

Opened Door

If there is a post, carve the opening of the door on the same side as the post. Wait until you have carved the door at an angle before drilling holes for the windows. If you are going to have a window in your door, drill a small hole in the window parallel with the door's angle.



Windows

Draw in the windows with curved lines. Keep the frame on the inside of the window as wide as possible without looking out of place. The narrower the interior window grids are the greater chance of them breaking. The same procedures that were used for the doors will be used for the window frames. Use a v-tool to outline window frame.



Separating the Bark

Splitting apart:

Once the foundation, roofline, windows and doors and been carved in, you can separate the two pieces of bark again in order to hollow out the inside.



Use caution during this stage to not damage the planed surfaces of the bark. Place the putty knife between the two pieces of bark. Use a light weight mallet to hammer the putty knife between the two pieces of bark to separate the cardboard or adhesive putty. Once the cardboard starts splitting, the bark will come loose with a gentle back and forth movement of the putty knife. If it is stubborn, continue to hammer the putty knife in further and gently wobble the putty knife back and forth. For larger pieces, you may need to add a second putty knife along side of the first one to act as a wedge. Use the same process with the second putty knife, until the pieces come loose.

Clean up:

After the pieces are separated, the cardboard and putty must be removed. The putty is pretty easy to remove just by pulling on a piece of it and dabbing it on the other piece of putty. The cardboard takes a little more effort which is the reason that I prefer not to use this method. Float the two pieces of bark, cardboard side down, into very warm water. You only need a couple inches of water to enable the pieces to float. Let the cardboard soak for about 3 minutes. You should be able to pull the cardboard off the

backs with ease. If not pull off what you can, soak it a little longer and try again. In my experience the side of the cardboard that had the writing on it will leave an image on your bark after removing the main piece of cardboard. Use a fingernail brush to lightly scrub off the image and any remaining glue. If you have time, let the piece dry before hollowing out the back.



Inside Out

Hollow the Inside

After separating the two pieces, draw a line on the back of the pieces from the roofline to the foundation. Also, draw the depth of the outside edge to the inside where you will be carving. The edge should be thick enough to glue together and have enough to carve smooth after closing up the piece again. Use a scoop or a u-gouge to scoop out the bark between the roofline and foundation to free up the windows and door.

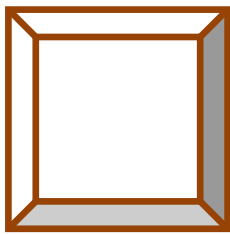


Windows

I usually focus on the windows first. As you scoop out the excess bark from the back of the piece, watch for the drilled holes. Once they are visible, slow down and gauge the thickness of the walls. Keep the thickness of the wall on the outside as thick as

possible. The location of the windows can be thinner by scooping out more of the bark around the windows. Don't make the window too thin.

Opening the Windows: Draw an X across each window pane using the drilled hole as the center of the X. The best way to remove the bark from the window pane is to cut away the window in triangles, similar to chip carving. Start from the center of the hole and cut along one of the lines of the triangle to the corner of the window. Do the same on the other side of the window. Chip out the remaining side. The narrow strips of wood (grids) between the panes are fragile, especially in the center where there is less bark. It's best to leave the grids as thick as possible and angle the grids toward the back. This angling affect will give the window depth at the same time giving it strength. Angle so that the front of the window pane is larger than the back.



Once all the window panes have been cut out, use a miniature wood file or cut emery board to sand down the insides of the windows. From the near the center of each window grid make a slight angle cut to the next grid joint to allow shadows.

Doors

When I can see the hole that I drilled for the door, I start carving slower. I gauge my depth by putting the piece up to the light and seeing how thick the hole is. If the door is open, I start cutting away the door opening from the inside with a narrow thin knife blade and alternating cutting slowly from the back until I can see my knife blade break through the back. Instead of making the door very thin, leave it thick and angle the edges of the door on the back to give it the appearance of being thin. Do the same with the door window opening.

Final Bonding

After roughing out the outside and opening the windows and doors, it's time to put glue it back together. The process below is how Rick Jensen's method of gluing the pieces back together. I don't use this method anymore, but we'll use it for the workshop.

Things you'll need for the final gluing:

- Wood glue
- Two BBs
- Two small pieces of 1/8" round dowel
- Drill
- 5/32" & 1/8" drill bit
- Block guide: Block of wood about an inch thick with 1/8" diameter hole drilled through it using a drill press
- Clamps

When you put your two pieces back together, you will notice that the seams don't quite match up. That is because of the gap we had while roughing out the house. Just remember that when trying to bond the pieces together again.

We'll bond the pieces of bark using glue and dowels. The dowels will give the piece strength and to keep the two pieces from slipping around while applying the clamps. In order to get the dowels positioned properly on both pieces, we'll use BBs to mark

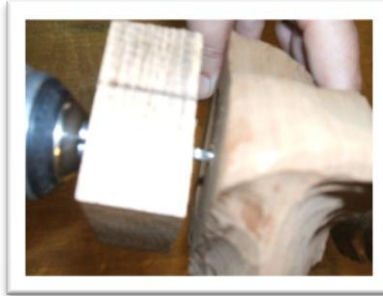
the pieces. You will need a piece of dowel on the top part of the house and the base. Don't put the dowel in a location where you may cut into later while carving the roof or steps and rocks. Put in the thickest part of the bark to prevent cracking or going through your bark.

Mark the locations where the dowel will be inserted by hand drilling out a small amount of bark using a 5/32" drill bit so that the BB will sit in the hole without rolling out. Tap the BBs with a small mallet so they sit snugly in the hole.

Align the other piece of bark with the one that has the BBs in it. Check your alignment and firmly press the two pieces together to cause an indentation with the BBs in the other piece of bark. Remove the BBs. We'll use those indentions as a guide to drill the holes for the dowels.



Place a 1/8" drill bit into the drill. Place the drill block guide on the drill bit and push back as far as it will go. Look at how much drill bit is left. That will be the depth that will be drilled into the bark. If it is too deep, push the drill bit further into the drill or use an alternate method to make sure you don't drill too deep. Allow room to carve out the eaves. Align the drill bit with the indentation of one of the BB holes. Let the block drop flat on the bark. Keeping the drill upright, guided by block of wood drill the hole. Drill the remaining holes.



Cut two pieces of dowel that will fit between the two pieces of bark. Push together with the dowels in place to test the fit. If it doesn't close up properly, trim the dowels. In the image below, after all that work, it didn't align properly. I had to make the holes a little wider so I could pull the piece into proper alignment with the dowels in place.

Apply wood glue to the backs of both pieces and dowels. Spread the glue around to give it an even coating. Be sure that the edges have ample glue. Clamp the bark together as tight as possible and in multiple places. The glue should push out. Don't wipe the glue off. We'll carve it off later. Let the bark dry for at least an hour before removing the clamps.

Detailing your house is covered in "Carving Whimsical Cottonwood Tree Bark Houses – Part 2".